

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT8123127

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT COLLATERAL AGREEMENT - A&R LOAN AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
WESTERN DIGITAL TECHNOLOGIES, INC.	08/18/2023

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A.
Street Address:	10 S. DEARBORN L2
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60603

PROPERTY NUMBERS Total: 7003

Property Type	Number
Application Number:	09618209
Application Number:	09863572
Application Number:	09888275
Application Number:	09918666
Application Number:	09940475
Application Number:	10004100
Application Number:	10080448
Application Number:	10080780
Application Number:	10080784
Application Number:	10080786
Application Number:	10080849
Application Number:	10105493
Application Number:	10125131
Application Number:	10134143
Application Number:	10137227
Application Number:	10160682
Application Number:	10160955
Application Number:	10176016
Application Number:	10176498
Application Number:	10183208

PATENT

Property Type	Number
Application Number:	10209804
Application Number:	10265554
Application Number:	10284811
Application Number:	10286146
Application Number:	10293370
Application Number:	10306974
Application Number:	10328586
Application Number:	10328609
Application Number:	10329127
Application Number:	10329152
Application Number:	10329155
Application Number:	10335884
Application Number:	10352513
Application Number:	10364799
Application Number:	10367022
Application Number:	10368644
Application Number:	10376819
Application Number:	10376821
Application Number:	10376833
Application Number:	10377041
Application Number:	10377078
Application Number:	10377219
Application Number:	10377897
Application Number:	10386259
Application Number:	10404456
Application Number:	10404990
Application Number:	10404997
Application Number:	10405306
Application Number:	10410072
Application Number:	10411594
Application Number:	10425897
Application Number:	10427495
Application Number:	10441176
Application Number:	10446885
Application Number:	10448487
Application Number:	10448488
Application Number:	10452569
Application Number:	10462339

Property Type	Number
Application Number:	10463012
Application Number:	10464254
Application Number:	10576755
Application Number:	10600638
Application Number:	10600882
Application Number:	10602504
Application Number:	10607710
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Application Number:	10621483
Application Number:	10622936
Application Number:	10624656
Application Number:	10629675
Application Number:	10630817
Application Number:	10631396
Application Number:	10632351
Application Number:	10632507
Application Number:	10632880
Application Number:	10633145
Application Number:	10633257
Application Number:	10644706
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Application Number:	10650557
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Application Number:	10656023
Application Number:	10659372
Application Number:	10664295
Application Number:	10671377
Application Number:	10672094
Application Number:	10674155
Application Number:	10674763
Application Number:	10675046
Application Number:	10675065
Application Number:	10675190
Application Number:	10675286

Property Type	Number
Application Number:	10675782
Application Number:	10676537
Application Number:	10676538
Application Number:	10676677
Application Number:	10676735
Application Number:	10676742
Application Number:	10680051
Application Number:	10691742
Application Number:	10698655
Application Number:	10698747
Application Number:	10713289
Application Number:	10724309
Application Number:	10724385
Application Number:	10724410
Application Number:	10727826
Application Number:	10728231
Application Number:	10735541
Application Number:	10735938
Application Number:	10751215
Application Number:	10765222
Application Number:	10769387
Application Number:	10769409
Application Number:	10777424
Application Number:	10778265
Application Number:	10782208
Application Number:	10783692
Application Number:	10787308
Application Number:	10788433
Application Number:	10791186
Application Number:	10791927
Application Number:	10815286
Application Number:	10816158
Application Number:	10816545
Application Number:	10816683
Application Number:	10821417
Application Number:	10821478
Application Number:	10837350
Application Number:	10837471

Property Type	Number
Application Number:	10842937
Application Number:	10845863
Application Number:	10854119
Application Number:	10854256
Application Number:	10856102
Application Number:	10856400
Application Number:	10856403
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Application Number:	10882507
Application Number:	10882882
Application Number:	10882940
Application Number:	10886898
Application Number:	10897454
Application Number:	10903977
Application Number:	10903988
Application Number:	10912114
Application Number:	10913218
Application Number:	10919839
Application Number:	10924403
Application Number:	10926249
Application Number:	10927900
Application Number:	10927926
Application Number:	10928074
Application Number:	10930271
Application Number:	10948711
Application Number:	10955691
Application Number:	10956234
Application Number:	10966543
Application Number:	10974075
Application Number:	10977552
Application Number:	10980676
Application Number:	10981354
Application Number:	10983382
Application Number:	10983982

Property Type	Number
Application Number:	10986631
Application Number:	10988280
Application Number:	10996116
Application Number:	11000486
Application Number:	11002970
Application Number:	11009761
Application Number:	11012460
Application Number:	11030355
Application Number:	11032940
Application Number:	11035295
Application Number:	11035429
Application Number:	11037752
Application Number:	11037906
Application Number:	11046323
Application Number:	11046413
Application Number:	11047400
Application Number:	11047401
Application Number:	11048009
Application Number:	11049403
Application Number:	11057678
Application Number:	11067851
Application Number:	11068206
Application Number:	11083887
Application Number:	11086513
Application Number:	11086814
Application Number:	11097817
Application Number:	11099397
Application Number:	11102330
Application Number:	11104333
Application Number:	11107588
Application Number:	11112112
Application Number:	11116658
Application Number:	11117934
Application Number:	11120218
Application Number:	11122519
Application Number:	11134746
Application Number:	11134916
Application Number:	11143839

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Application Number:	11168274
Application Number:	11185659
Application Number:	11192387
Application Number:	11198945
Application Number:	11200562
Application Number:	11200999
Application Number:	11205808
Application Number:	11208358
Application Number:	11218389
Application Number:	11223603
Application Number:	11238011
Application Number:	11252457
Application Number:	11253400
Application Number:	11255435
Application Number:	11259539
Application Number:	11265752
Application Number:	11269998
Application Number:	11273948
Application Number:	11287723
Application Number:	11289847
Application Number:	11290652
Application Number:	11296735
Application Number:	11297894
Application Number:	11312986
Application Number:	11320425
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Application Number:	11351440
Application Number:	11351768
Application Number:	11351782
Application Number:	11352101
Application Number:	11352654
Application Number:	11356891
Application Number:	11358043

Property Type	Number
Application Number:	11361510
Application Number:	11367819
Application Number:	11380498
Application Number:	11385091
Application Number:	11385266
Application Number:	11388640
Application Number:	11393425
Application Number:	11398144
Application Number:	11398170
Application Number:	11429936
Application Number:	11436845
Application Number:	11449261
Application Number:	11454734
Application Number:	11475281
Application Number:	11475386
Application Number:	11475841
Application Number:	11480040
Application Number:	11480276
Application Number:	11480303
Application Number:	11485775
Application Number:	11499836
Application Number:	11500567
Application Number:	11509972
Application Number:	11515554
Application Number:	11520014
Application Number:	11523184
Application Number:	11532084
Application Number:	11536891
Application Number:	11541354
Application Number:	11542086
Application Number:	11558532
Application Number:	11560719
Application Number:	11566607
Application Number:	11566978
Application Number:	11580542
Application Number:	11582462
Application Number:	11582783
Application Number:	11582794

Property Type	Number
Application Number:	11590575
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Application Number:	11596153
Application Number:	11598886
Application Number:	11599656
Application Number:	11602652
Application Number:	11605635
Application Number:	11612942
Application Number:	11615865
Application Number:	11615885
Application Number:	11635830
Application Number:	11638969
Application Number:	11642277
Application Number:	11643269
Application Number:	11644290
Application Number:	11645462
Application Number:	11651922
Application Number:	11652960
Application Number:	11672435
Application Number:	11672483
Application Number:	11675516
Application Number:	11679794
Application Number:	11680398
Application Number:	11681693
Application Number:	11683972
Application Number:	11694676
Application Number:	11695080
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Application Number:	11703383
Application Number:	11707302
Application Number:	11717299
Application Number:	11717899
Application Number:	11726099
Application Number:	11731454
Application Number:	11732683

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Application Number:	11736428
Application Number:	11736521
Application Number:	11737707
Application Number:	11743140
Application Number:	11751361
Application Number:	11753477
Application Number:	11753502
Application Number:	11759959
Application Number:	11761224
Application Number:	11761266
Application Number:	11764672
Application Number:	11765335
Application Number:	11765662
Application Number:	11767315
Application Number:	11768288
Application Number:	11768883
Application Number:	11771783
Application Number:	11777850
Application Number:	11780110
Application Number:	11781239
Application Number:	11781576
Application Number:	11782664
Application Number:	11784135
Application Number:	11787515
Application Number:	11789190
Application Number:	11799296
Application Number:	11800553
Application Number:	11801502
Application Number:	11803071
Application Number:	11804035
Application Number:	11804819
Application Number:	11805498
Application Number:	11807744
Application Number:	11811383
Application Number:	11824166
Application Number:	11824197
Application Number:	11829023

Property Type	Number
Application Number:	11832491
Application Number:	11837503
Application Number:	11838350
Application Number:	11840113
Application Number:	11840900
Application Number:	11843602
Application Number:	11845239
Application Number:	11848013
Application Number:	11848040
Application Number:	11850165
Application Number:	11850570
Application Number:	11851288
Application Number:	11852252
Application Number:	11855848
Application Number:	11856861
Application Number:	11860667
Application Number:	11862119
Application Number:	11862410
Application Number:	11864860
Application Number:	11870525
Application Number:	11876479
Application Number:	11877570
Application Number:	11877797
Application Number:	11890004
Application Number:	11891530
Application Number:	11897699
Application Number:	11897712
Application Number:	11903010
Application Number:	11904928
Application Number:	11904961
Application Number:	11906612
Application Number:	11923123
Application Number:	11926778
Application Number:	11933662
Application Number:	11934571
Application Number:	11935189
Application Number:	11935224
Application Number:	11935508

Property Type	Number
Application Number:	11939503
Application Number:	11941763
Application Number:	11942113
Application Number:	11944157
Application Number:	11946714
Application Number:	11948789
Application Number:	11948840
Application Number:	11952019
Application Number:	11953782
Application Number:	11955277
Application Number:	11957466
Application Number:	11957476
Application Number:	11957483
Application Number:	11957981
Application Number:	11959293
Application Number:	11959374
Application Number:	11960596
Application Number:	11960658
Application Number:	11964673
Application Number:	11964685
Application Number:	11965532
Application Number:	11966003
Application Number:	11966023
Application Number:	11966086
Application Number:	11973664
Application Number:	11973668
Application Number:	11973822
Application Number:	11974275
Application Number:	11978176
Application Number:	11978177
Application Number:	11978215
Application Number:	11982258
Application Number:	11986245
Application Number:	11998511
Application Number:	11998624
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Application Number:	12004250
Application Number:	12004666

Property Type	Number
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Application Number:	12005557
Application Number:	12005955
Application Number:	12006439
Application Number:	12006642
Application Number:	12008275
Application Number:	12008544
Application Number:	12009376
Application Number:	12011334
Application Number:	12011716
Application Number:	12011904
Application Number:	12012635
Application Number:	12023882
Application Number:	12024011
Application Number:	12024018
Application Number:	12027965
Application Number:	12029370
Application Number:	12030042
Application Number:	12032783
Application Number:	12035036
Application Number:	12036106
Application Number:	12040717
Application Number:	12041759
Application Number:	12041930
Application Number:	12042230
Application Number:	12042691
Application Number:	12046108
Application Number:	12054244
Application Number:	12056178
Application Number:	12056195
Application Number:	12057278
Application Number:	12057611
Application Number:	12058096
Application Number:	12058572
Application Number:	12058601
Application Number:	12060006
Application Number:	12060724

Property Type	Number
Application Number:	12070155
Application Number:	12072004
Application Number:	12075419
Application Number:	12079223
Application Number:	12079496
Application Number:	12079699
Application Number:	12079700
Application Number:	12080631
Application Number:	12098909
Application Number:	12101453
Application Number:	12101761
Application Number:	12101970
Application Number:	12103623
Application Number:	12107625
Application Number:	12108055
Application Number:	12109829
Application Number:	12110681
Application Number:	12117944
Application Number:	12119961
Application Number:	12120176
Application Number:	12122637
Application Number:	12122708
Application Number:	12123932
Application Number:	12124997
Application Number:	12126377
Application Number:	12128512
Application Number:	12129120
Application Number:	12129991
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Application Number:	12136640
Application Number:	12139231
Application Number:	12140211
Application Number:	12141002
Application Number:	12141004
Application Number:	12141062
Application Number:	12144062

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Application Number:	12146678
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Application Number:	12148697
Application Number:	12150147
Application Number:	12150165
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Application Number:	12156317
Application Number:	12156338
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Application Number:	12166126
Application Number:	12172933
Application Number:	12173732
Application Number:	12181175
Application Number:	12181469
Application Number:	12183407
Application Number:	12183845
Application Number:	12186239
Application Number:	12188183
Application Number:	12190377
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Application Number:	12192228
Application Number:	12192344
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Application Number:	12196131
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Application Number:	12198657
Application Number:	12199624
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Application Number:	12201916
Application Number:	12209089
Application Number:	12210603
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Application Number:	12236833
Application Number:	12237220
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Application Number:	12242210
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Application Number:	12268823
Application Number:	12271820
Application Number:	12273339
Application Number:	12273725
Application Number:	12276003
Application Number:	12277142
Application Number:	12277762
Application Number:	12283225
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Application Number:	12288654
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Application Number:	12290361
Application Number:	12290970
Application Number:	12295011
Application Number:	12313291
Application Number:	12313410
Application Number:	12313615

Property Type	Number
Application Number:	12313641
Application Number:	12315523
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Application Number:	12321187
Application Number:	12323072
Application Number:	12323329
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Application Number:	12324778
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Application Number:	12328483
Application Number:	12329484
Application Number:	12330375
Application Number:	12331238
Application Number:	12332010
Application Number:	12332029
Application Number:	12332287
Application Number:	12334753
Application Number:	12335199
Application Number:	12335499
Application Number:	12336758
Application Number:	12337403
Application Number:	12341834
Application Number:	12341908
Application Number:	12341925
Application Number:	12342647
Application Number:	12343378
Application Number:	12343709
Application Number:	12345745
Application Number:	12345760
Application Number:	12346930
Application Number:	12347058
Application Number:	12347084
Application Number:	12347134
Application Number:	12347194
Application Number:	12350180
Application Number:	12354506

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Application Number:	12356070
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Application Number:	12369027
Application Number:	12369040
Application Number:	12369046
Application Number:	12369052
Application Number:	12369076
Application Number:	12369079
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Application Number:	12369728
Application Number:	12369733
Application Number:	12378120
Application Number:	12378777
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Application Number:	12380302
Application Number:	12381879
Application Number:	12384850
Application Number:	12384908
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Application Number:	12386235
Application Number:	12386755
Application Number:	12395071
Application Number:	12398093
Application Number:	12398909
Application Number:	12399654
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Application Number:	12403257
Application Number:	12406830
Application Number:	12407068
Application Number:	12409174
Application Number:	12409378
Application Number:	12410304
Application Number:	12410338
Application Number:	12412403

Property Type	Number
Application Number:	12414880
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Application Number:	12435298
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Application Number:	12470827
Application Number:	12471104
Application Number:	12471265
Application Number:	12472341
Application Number:	12472965
Application Number:	12473223
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Application Number:	12482213
Application Number:	12484032
Application Number:	12484679
Application Number:	12485866
Application Number:	12487502
Application Number:	12488484
Application Number:	12488501

Property Type	Number
Application Number:	12489873
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Application Number:	12491441
Application Number:	12492050
Application Number:	12492103
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Application Number:	12508843
Application Number:	12508860
Application Number:	12511780
Application Number:	12511840
Application Number:	12511990
Application Number:	12511991
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Application Number:	12534052
Application Number:	12534072
Application Number:	12534076
Application Number:	12534083
Application Number:	12534091
Application Number:	12534181
Application Number:	12535645

Property Type	Number
Application Number:	12536255
Application Number:	12537141
Application Number:	12538367
Application Number:	12540397
Application Number:	12542626
Application Number:	12542677
Application Number:	12542682
Application Number:	12543845
Application Number:	12545692
Application Number:	12545776
Application Number:	12545788
Application Number:	12547027
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Application Number:	12563446
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Application Number:	12567277
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Application Number:	12571264
Application Number:	12571330
Application Number:	12572060
Application Number:	12573069

Property Type	Number
Application Number:	12574235
Application Number:	12574621
Application Number:	12575055
Application Number:	12576715
Application Number:	12577344
Application Number:	12578754
Application Number:	12579263
Application Number:	12579854
Application Number:	12581045
Application Number:	12587155
Application Number:	12589038
Application Number:	12589042
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Application Number:	12602446
Application Number:	12603443
Application Number:	12604333
Application Number:	12606819
Application Number:	12607011
Application Number:	12607933
Application Number:	12608918
Application Number:	12610073
Application Number:	12610129
Application Number:	12611078
Application Number:	12611827
Application Number:	12613452
Application Number:	12613459
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Application Number:	12614355
Application Number:	12614598
Application Number:	12615087
Application Number:	12615222
Application Number:	12615544
Application Number:	12616033
Application Number:	12616729
Application Number:	12618667

Property Type	Number
Application Number:	12622064
Application Number:	12622093
Application Number:	12622109
Application Number:	12622400
Application Number:	12623151
Application Number:	12623370
Application Number:	12625504
Application Number:	12628577
Application Number:	12628887
Application Number:	12629573
Application Number:	12629709
Application Number:	12629802
Application Number:	12630707
Application Number:	12630728
Application Number:	12630807
Application Number:	12631295
Application Number:	12632787
Application Number:	12633562
Application Number:	12633588
Application Number:	12634456
Application Number:	12634480
Application Number:	12634490
Application Number:	12634514
Application Number:	12634533
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Application Number:	12634589
Application Number:	12634624
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Application Number:	12635606
Application Number:	12635629
Application Number:	12635664
Application Number:	12636257
Application Number:	12636604
Application Number:	12636614
Application Number:	12636649
Application Number:	12636659
Application Number:	12636667
Application Number:	12636672

Property Type	Number
Application Number:	12637523
Application Number:	12638173
Application Number:	12638627
Application Number:	12638894
Application Number:	12638905
Application Number:	12638911
Application Number:	12639013
Application Number:	12639599
Application Number:	12639794
Application Number:	12639838
Application Number:	12639975
Application Number:	12640081
Application Number:	12640730
Application Number:	12641138
Application Number:	12641242
Application Number:	12641251
Application Number:	12641292
Application Number:	12641362
Application Number:	12641782
Application Number:	12642269
Application Number:	12642332
Application Number:	12642683
Application Number:	12642739
Application Number:	12643935
Application Number:	12643954
Application Number:	12644358
Application Number:	12645026
Application Number:	12645217
Application Number:	12645491
Application Number:	12645498
Application Number:	12645500
Application Number:	12646108
Application Number:	12646612
Application Number:	12646726
Application Number:	12646814
Application Number:	12646848
Application Number:	12646851
Application Number:	12646879

Property Type	Number
Application Number:	12646884
Application Number:	12646896
Application Number:	12648548
Application Number:	12650459
Application Number:	12653862
Application Number:	12653874
Application Number:	12665271
Application Number:	12666255
Application Number:	12666552
Application Number:	12666561
Application Number:	12683364
Application Number:	12683422
Application Number:	12684045
Application Number:	12687187
Application Number:	12688815
Application Number:	12698834
Application Number:	12699501
Application Number:	12699581
Application Number:	12704105
Application Number:	12707402
Application Number:	12707484
Application Number:	12707552
Application Number:	12710101
Application Number:	12710123
Application Number:	12710162
Application Number:	12712085
Application Number:	12714328
Application Number:	12714350
Application Number:	12717090
Application Number:	12718910
Application Number:	12718927
Application Number:	12720556
Application Number:	12720568
Application Number:	12720602
Application Number:	12720843
Application Number:	12722489
Application Number:	12723451
Application Number:	12725139

Property Type	Number
Application Number:	12725730
Application Number:	12726282
Application Number:	12727127
Application Number:	12727154
Application Number:	12727166
Application Number:	12729159
Application Number:	12730078
Application Number:	12732951
Application Number:	12738201
Application Number:	12744611
Application Number:	12744829
Application Number:	12745206
Application Number:	12748182
Application Number:	12749147
Application Number:	12749243
Application Number:	12749279
Application Number:	12749309
Application Number:	12749329
Application Number:	12749854
Application Number:	12751329
Application Number:	12751696
Application Number:	12751815
Application Number:	12751883
Application Number:	12752006
Application Number:	12753683
Application Number:	12756947
Application Number:	12758319
Application Number:	12758469
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Application Number:	12760877
Application Number:	12761340
Application Number:	12762993
Application Number:	12765800
Application Number:	12766764
Application Number:	12766769
Application Number:	12772101
Application Number:	12772179
Application Number:	12774643

Property Type	Number
Application Number:	12777152
Application Number:	12777771
Application Number:	12779001
Application Number:	12779003
Application Number:	12779160
Application Number:	12781365
Application Number:	12782383
Application Number:	12782555
Application Number:	12782681
Application Number:	12784384
Application Number:	12784429
Application Number:	12785150
Application Number:	12786391
Application Number:	12788152
Application Number:	12789394
Application Number:	12789813
Application Number:	12790721
Application Number:	12792873
Application Number:	12793608
Application Number:	12794692
Application Number:	12796585
Application Number:	12796806
Application Number:	12800300
Application Number:	12807296
Application Number:	12814662
Application Number:	12815273
Application Number:	12815934
Application Number:	12816920
Application Number:	12820945
Application Number:	12822120
Application Number:	12822130
Application Number:	12822330
Application Number:	12822452
Application Number:	12823359
Application Number:	12823437
Application Number:	12824036
Application Number:	12824080
Application Number:	12824098

Property Type	Number
Application Number:	12824434
Application Number:	12824538
Application Number:	12824959
Application Number:	12825098
Application Number:	12825232
Application Number:	12825392
Application Number:	12825779
Application Number:	12826371
Application Number:	12826474
Application Number:	12826550
Application Number:	12826561
Application Number:	12826640
Application Number:	12826667
Application Number:	12826671
Application Number:	12827752
Application Number:	12827813
Application Number:	12827931
Application Number:	12827994
Application Number:	12828073
Application Number:	12828086
Application Number:	12828103
Application Number:	12828131
Application Number:	12830263
Application Number:	12831206
Application Number:	12831233
Application Number:	12832409
Application Number:	12839391
Application Number:	12842919
Application Number:	12842930
Application Number:	12842950
Application Number:	12847096
Application Number:	12849783
Application Number:	12850951
Application Number:	12851827
Application Number:	12852417
Application Number:	12853135
Application Number:	12853239
Application Number:	12854115

Property Type	Number
Application Number:	12855441
Application Number:	12860616
Application Number:	12862633
Application Number:	12868610
Application Number:	12870561
Application Number:	12871156
Application Number:	12876802
Application Number:	12880785
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Application Number:	12881017
Application Number:	12881162
Application Number:	12881834
Application Number:	12884080
Application Number:	12884091
Application Number:	12884100
Application Number:	12886999
Application Number:	12887341
Application Number:	12887461
Application Number:	12889130
Application Number:	12892775
Application Number:	12892837
Application Number:	12893987
Application Number:	12894058
Application Number:	12895056
Application Number:	12895115
Application Number:	12895691
Application Number:	12895851
Application Number:	12895854
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Application Number:	12898381
Application Number:	12899709
Application Number:	12902738
Application Number:	12903135
Application Number:	12904060
Application Number:	12904943
Application Number:	12904954
Application Number:	12906414
Application Number:	12906909

Property Type	Number
Application Number:	12908789
Application Number:	12909624
Application Number:	12909694
Application Number:	12910488
Application Number:	12910752
Application Number:	12911413
Application Number:	12911564
Application Number:	12912324
Application Number:	12912662
Application Number:	12914543
Application Number:	12914647
Application Number:	12914883
Application Number:	12914926
Application Number:	12916237
Application Number:	12916256
Application Number:	12917372
Application Number:	12917837
Application Number:	12924880
Application Number:	12924881
Application Number:	12925365
Application Number:	12925934
Application Number:	12930013
Application Number:	12930017
Application Number:	12930019
Application Number:	12930020
Application Number:	12934935
Application Number:	12934953
Application Number:	12934975
Application Number:	12934979
Application Number:	12938214
Application Number:	12938234
Application Number:	12941953
Application Number:	12942010
Application Number:	12942206
Application Number:	12943880
Application Number:	12946420
Application Number:	12946655
Application Number:	12947085

Property Type	Number
Application Number:	12947796
Application Number:	12948072
Application Number:	12948221
Application Number:	12948425
Application Number:	12949680
Application Number:	12953233
Application Number:	12953269
Application Number:	12954422
Application Number:	12954458
Application Number:	12954461
Application Number:	12955746
Application Number:	12955767
Application Number:	12957229
Application Number:	12961421
Application Number:	12961430
Application Number:	12961990
Application Number:	12962545
Application Number:	12963111
Application Number:	12964480
Application Number:	12965277
Application Number:	12966892
Application Number:	12967206
Application Number:	12967228
Application Number:	12968587
Application Number:	12969257
Application Number:	12969307
Application Number:	12969339
Application Number:	12969384
Application Number:	12970423
Application Number:	12970775
Application Number:	12971754
Application Number:	12972091
Application Number:	12972121
Application Number:	12972307
Application Number:	12973032
Application Number:	12973085
Application Number:	12973301
Application Number:	12973328

Property Type	Number
Application Number:	12973745
Application Number:	12973791
Application Number:	12973957
Application Number:	12974234
Application Number:	12975121
Application Number:	12975157
Application Number:	12975184
Application Number:	12975197
Application Number:	12976608
Application Number:	12976770
Application Number:	12976821
Application Number:	12976826
Application Number:	12976916
Application Number:	12976932
Application Number:	12976993
Application Number:	12976998
Application Number:	12977533
Application Number:	12977658
Application Number:	12978145
Application Number:	12978225
Application Number:	12978242
Application Number:	12978320
Application Number:	12978376
Application Number:	12980125
Application Number:	12980192
Application Number:	12987704
Application Number:	12991131
Application Number:	13005727
Application Number:	13010491
Application Number:	13012866
Application Number:	13015844
Application Number:	13019095
Application Number:	13020430
Application Number:	13021456
Application Number:	13025980
Application Number:	13027432
Application Number:	13027504
Application Number:	13027557

Property Type	Number
Application Number:	13027616
Application Number:	13028603
Application Number:	13029143
Application Number:	13033489
Application Number:	13036346
Application Number:	13039216
Application Number:	13042819
Application Number:	13042840
Application Number:	13044400
Application Number:	13044464
Application Number:	13045394
Application Number:	13045416
Application Number:	13045433
Application Number:	13046380
Application Number:	13048012
Application Number:	13048139
Application Number:	13049124
Application Number:	13050675
Application Number:	13052017
Application Number:	13053371
Application Number:	13053466
Application Number:	13053771
Application Number:	13065755
Application Number:	13069023
Application Number:	13070279
Application Number:	13071132
Application Number:	13073588
Application Number:	13073638
Application Number:	13074529
Application Number:	13075070
Application Number:	13076340
Application Number:	13077419
Application Number:	13077815
Application Number:	13078829
Application Number:	13080358
Application Number:	13080800
Application Number:	13082098
Application Number:	13085417

Property Type	Number
Application Number:	13096307
Application Number:	13096775
Application Number:	13097455
Application Number:	13098278
Application Number:	13098356
Application Number:	13098357
Application Number:	13099355
Application Number:	13099865
Application Number:	13100871
Application Number:	13100897
Application Number:	13101005
Application Number:	13102959
Application Number:	13103143
Application Number:	13103872
Application Number:	13104830
Application Number:	13104835
Application Number:	13105785
Application Number:	13105800
Application Number:	13110662
Application Number:	13112323
Application Number:	13112433
Application Number:	13112959
Application Number:	13113931
Application Number:	13115828
Application Number:	13116995
Application Number:	13117300
Application Number:	13117814
Application Number:	13118137
Application Number:	13119057
Application Number:	13121901
Application Number:	13133124
Application Number:	13135235
Application Number:	13135953
Application Number:	13149419
Application Number:	13149540
Application Number:	13149613
Application Number:	13149659
Application Number:	13149703

Property Type	Number
Application Number:	13151981
Application Number:	13152254
Application Number:	13152645
Application Number:	13153282
Application Number:	13153320
Application Number:	13154191
Application Number:	13154343
Application Number:	13155189
Application Number:	13156272
Application Number:	13156813
Application Number:	13157111
Application Number:	13157228
Application Number:	13157676
Application Number:	13157809
Application Number:	13158087
Application Number:	13158421
Application Number:	13159598
Application Number:	13159720
Application Number:	13160752
Application Number:	13161394
Application Number:	13162035
Application Number:	13162095
Application Number:	13162572
Application Number:	13162863
Application Number:	13163273
Application Number:	13163387
Application Number:	13163461
Application Number:	13163481
Application Number:	13163493
Application Number:	13163544
Application Number:	13163561
Application Number:	13163571
Application Number:	13163581
Application Number:	13164259
Application Number:	13164936
Application Number:	13164959
Application Number:	13165017
Application Number:	13166002

Property Type	Number
Application Number:	13166065
Application Number:	13166695
Application Number:	13166728
Application Number:	13166985
Application Number:	13167010
Application Number:	13167032
Application Number:	13167062
Application Number:	13167246
Application Number:	13167532
Application Number:	13167559
Application Number:	13168551
Application Number:	13168903
Application Number:	13169685
Application Number:	13169720
Application Number:	13169938
Application Number:	13170000
Application Number:	13170506
Application Number:	13171150
Application Number:	13172583
Application Number:	13172737
Application Number:	13172772
Application Number:	13173266
Application Number:	13173587
Application Number:	13173780
Application Number:	13174547
Application Number:	13174604
Application Number:	13174619
Application Number:	13174708
Application Number:	13174760
Application Number:	13176378
Application Number:	13176727
Application Number:	13176956
Application Number:	13177396
Application Number:	13177413
Application Number:	13177435
Application Number:	13177445
Application Number:	13177482
Application Number:	13177518

Property Type	Number
Application Number:	13179466
Application Number:	13187370
Application Number:	13188384
Application Number:	13188423
Application Number:	13190410
Application Number:	13190470
Application Number:	13191563
Application Number:	13192437
Application Number:	13193520
Application Number:	13196022
Application Number:	13198448
Application Number:	13199437
Application Number:	13200418
Application Number:	13200458
Application Number:	13200632
Application Number:	13200909
Application Number:	13202255
Application Number:	13204360
Application Number:	13207184
Application Number:	13207264
Application Number:	13207295
Application Number:	13207308
Application Number:	13207740
Application Number:	13207852
Application Number:	13207935
Application Number:	13211748
Application Number:	13211826
Application Number:	13212038
Application Number:	13214132
Application Number:	13216177
Application Number:	13219555
Application Number:	13220508
Application Number:	13221769
Application Number:	13222827
Application Number:	13224118
Application Number:	13226377
Application Number:	13226393
Application Number:	13226418

Property Type	Number
Application Number:	13226435
Application Number:	13226437
Application Number:	13228363
Application Number:	13228429
Application Number:	13229631
Application Number:	13230638
Application Number:	13231685
Application Number:	13234399
Application Number:	13235209
Application Number:	13237727
Application Number:	13238838
Application Number:	13241115
Application Number:	13245708
Application Number:	13246685
Application Number:	13247883
Application Number:	13247931
Application Number:	13248086
Application Number:	13249041
Application Number:	13250204
Application Number:	13250517
Application Number:	13250885
Application Number:	13250996
Application Number:	13251031
Application Number:	13251100
Application Number:	13252962
Application Number:	13253029
Application Number:	13260841
Application Number:	13270130
Application Number:	13270413
Application Number:	13271015
Application Number:	13271555
Application Number:	13271712
Application Number:	13273203
Application Number:	13275208
Application Number:	13275728
Application Number:	13277993
Application Number:	13279105
Application Number:	13282274

Property Type	Number
Application Number:	13283650
Application Number:	13285769
Application Number:	13287230
Application Number:	13287947
Application Number:	13289966
Application Number:	13291702
Application Number:	13291766
Application Number:	13294816
Application Number:	13296970
Application Number:	13297089
Application Number:	13297106
Application Number:	13297204
Application Number:	13298241
Application Number:	13298272
Application Number:	13298979
Application Number:	13301543
Application Number:	13301567
Application Number:	13301581
Application Number:	13301594
Application Number:	13302979
Application Number:	13302994
Application Number:	13303870
Application Number:	13306260
Application Number:	13306552
Application Number:	13306582
Application Number:	13306736
Application Number:	13308189
Application Number:	13308246
Application Number:	13308348
Application Number:	13308403
Application Number:	13308410
Application Number:	13308423
Application Number:	13310428
Application Number:	13310502
Application Number:	13310931
Application Number:	13311397
Application Number:	13311534
Application Number:	13312925

Property Type	Number
Application Number:	13312979
Application Number:	13314029
Application Number:	13314449
Application Number:	13314475
Application Number:	13314962
Application Number:	13315098
Application Number:	13316039
Application Number:	13316128
Application Number:	13316342
Application Number:	13316407
Application Number:	13316419
Application Number:	13316629
Application Number:	13322520
Application Number:	13323704
Application Number:	13324807
Application Number:	13327267
Application Number:	13327326
Application Number:	13327535
Application Number:	13328218
Application Number:	13328267
Application Number:	13328688
Application Number:	13328863
Application Number:	13328869
Application Number:	13329053
Application Number:	13330250
Application Number:	13330325
Application Number:	13330426
Application Number:	13330450
Application Number:	13330461
Application Number:	13330570
Application Number:	13331020
Application Number:	13331208
Application Number:	13331313
Application Number:	13331688
Application Number:	13331889
Application Number:	13332206
Application Number:	13332241
Application Number:	13332275

Property Type	Number
Application Number:	13332290
Application Number:	13332293
Application Number:	13332313
Application Number:	13333518
Application Number:	13333657
Application Number:	13333950
Application Number:	13333972
Application Number:	13333981
Application Number:	13333985
Application Number:	13334541
Application Number:	13335194
Application Number:	13335515
Application Number:	13335642
Application Number:	13335698
Application Number:	13337046
Application Number:	13338658
Application Number:	13339310
Application Number:	13339317
Application Number:	13339812
Application Number:	13340147
Application Number:	13340332
Application Number:	13340586
Application Number:	13341098
Application Number:	13341997
Application Number:	13343684
Application Number:	13344502
Application Number:	13347562
Application Number:	13351385
Application Number:	13353064
Application Number:	13356453
Application Number:	13356542
Application Number:	13358367
Application Number:	13358427
Application Number:	13358742
Application Number:	13358944
Application Number:	13359371
Application Number:	13361896
Application Number:	13361905

Property Type	Number
Application Number:	13361918
Application Number:	13361925
Application Number:	13362510
Application Number:	13363025
Application Number:	13363200
Application Number:	13365232
Application Number:	13366846
Application Number:	13367273
Application Number:	13367981
Application Number:	13369199
Application Number:	13370947
Application Number:	13371252
Application Number:	13372316
Application Number:	13372775
Application Number:	13373970
Application Number:	13396546
Application Number:	13397376
Application Number:	13398578
Application Number:	13399250
Application Number:	13399325
Application Number:	13399907
Application Number:	13401650
Application Number:	13404380
Application Number:	13406778
Application Number:	13406797
Application Number:	13407095
Application Number:	13407984
Application Number:	13408213
Application Number:	13408999
Application Number:	13409008
Application Number:	13410089
Application Number:	13411424
Application Number:	13411503
Application Number:	13411505
Application Number:	13414008
Application Number:	13414568
Application Number:	13415659
Application Number:	13415813

Property Type	Number
Application Number:	13416784
Application Number:	13416992
Application Number:	13417032
Application Number:	13417057
Application Number:	13417930
Application Number:	13418595
Application Number:	13418843
Application Number:	13418904
Application Number:	13418966
Application Number:	13419214
Application Number:	13419283
Application Number:	13419313
Application Number:	13420474
Application Number:	13420849
Application Number:	13420970
Application Number:	13422997
Application Number:	13423177
Application Number:	13423178
Application Number:	13425303
Application Number:	13429094
Application Number:	13429176
Application Number:	13430447
Application Number:	13431660
Application Number:	13433037
Application Number:	13433587
Application Number:	13433856
Application Number:	13434772
Application Number:	13435849
Application Number:	13436327
Application Number:	13436596
Application Number:	13436694
Application Number:	13436712
Application Number:	13436849
Application Number:	13438804
Application Number:	13438811
Application Number:	13439929
Application Number:	13439994
Application Number:	13441663

Property Type	Number
Application Number:	13442419
Application Number:	13443086
Application Number:	13443121
Application Number:	13444723
Application Number:	13448192
Application Number:	13449279
Application Number:	13450290
Application Number:	13451373
Application Number:	13451380
Application Number:	13454752
Application Number:	13455491
Application Number:	13457170
Application Number:	13457328
Application Number:	13458374
Application Number:	13458863
Application Number:	13458949
Application Number:	13460190
Application Number:	13460604
Application Number:	13460616
Application Number:	13460766
Application Number:	13460805
Application Number:	13461696
Application Number:	13465672
Application Number:	13465716
Application Number:	13465717
Application Number:	13465790
Application Number:	13466970
Application Number:	13468919
Application Number:	13468946
Application Number:	13468999
Application Number:	13470190
Application Number:	13470206
Application Number:	13471777
Application Number:	13472326
Application Number:	13472854
Application Number:	13474593
Application Number:	13475668
Application Number:	13475787

Property Type	Number
Application Number:	13476563
Application Number:	13478036
Application Number:	13478058
Application Number:	13479003
Application Number:	13479095
Application Number:	13479208
Application Number:	13479217
Application Number:	13480278
Application Number:	13481158
Application Number:	13482865
Application Number:	13482944
Application Number:	13485350
Application Number:	13485373
Application Number:	13485879
Application Number:	13487310
Application Number:	13488219
Application Number:	13488249
Application Number:	13490214
Application Number:	13490283
Application Number:	13490318
Application Number:	13491491
Application Number:	13492880
Application Number:	13493766
Application Number:	13493903
Application Number:	13495513
Application Number:	13495903
Application Number:	13523657
Application Number:	13525009
Application Number:	13525611
Application Number:	13525731
Application Number:	13525960
Application Number:	13526241
Application Number:	13526418
Application Number:	13526446
Application Number:	13527460
Application Number:	13528007
Application Number:	13528686
Application Number:	13528794

Property Type	Number
Application Number:	13529309
Application Number:	13529861
Application Number:	13529904
Application Number:	13529958
Application Number:	13530026
Application Number:	13530027
Application Number:	13531339
Application Number:	13531380
Application Number:	13532658
Application Number:	13532718
Application Number:	13533040
Application Number:	13533150
Application Number:	13533152
Application Number:	13533529
Application Number:	13535499
Application Number:	13535683
Application Number:	13535828
Application Number:	13536103
Application Number:	13537007
Application Number:	13537018
Application Number:	13537293
Application Number:	13537379
Application Number:	13538650
Application Number:	13538844
Application Number:	13546774
Application Number:	13550149
Application Number:	13553707
Application Number:	13554281
Application Number:	13554994
Application Number:	13555050
Application Number:	13555052
Application Number:	13556132
Application Number:	13557159
Application Number:	13558243
Application Number:	13561156
Application Number:	13564653
Application Number:	13565713
Application Number:	13566772

Property Type	Number
Application Number:	13568001
Application Number:	13568685
Application Number:	13568931
Application Number:	13570118
Application Number:	13571425
Application Number:	13571432
Application Number:	13571438
Application Number:	13585679
Application Number:	13588999
Application Number:	13590489
Application Number:	13592218
Application Number:	13593991
Application Number:	13594696
Application Number:	13596979
Application Number:	13597051
Application Number:	13597091
Application Number:	13597110
Application Number:	13597158
Application Number:	13598102
Application Number:	13605934
Application Number:	13607593
Application Number:	13608937
Application Number:	13610157
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Application Number:	13612704
Application Number:	13614894
Application Number:	13615131
Application Number:	13615422
Application Number:	13617456
Application Number:	13621728
Application Number:	13623839
Application Number:	13624835
Application Number:	13625270
Application Number:	13625692
Application Number:	13626208
Application Number:	13626846
Application Number:	13628793
Application Number:	13629401

Property Type	Number
Application Number:	13631463
Application Number:	13631493
Application Number:	13631588
Application Number:	13631641
Application Number:	13631696
Application Number:	13631756
Application Number:	13631808
Application Number:	13631967
Application Number:	13631970
Application Number:	13635444
Application Number:	13644343
Application Number:	13645309
Application Number:	13645822
Application Number:	13646614
Application Number:	13649007
Application Number:	13649072
Application Number:	13649098
Application Number:	13649245
Application Number:	13651313
Application Number:	13653301
Application Number:	13654288
Application Number:	13655297
Application Number:	13657016
Application Number:	13659099
Application Number:	13659364
Application Number:	13659865
Application Number:	13662183
Application Number:	13662200
Application Number:	13662255
Application Number:	13662353
Application Number:	13664271
Application Number:	13664277
Application Number:	13664335
Application Number:	13664981
Application Number:	13665764
Application Number:	13666883
Application Number:	13667961
Application Number:	13668142

Property Type	Number
Application Number:	13669231
Application Number:	13670228
Application Number:	13672636
Application Number:	13672668
Application Number:	13673956
Application Number:	13675211
Application Number:	13675796
Application Number:	13675836
Application Number:	13675913
Application Number:	13677136
Application Number:	13677704
Application Number:	13677791
Application Number:	13678416
Application Number:	13678495
Application Number:	13680087
Application Number:	13680089
Application Number:	13680091
Application Number:	13680688
Application Number:	13681218
Application Number:	13681371
Application Number:	13682673
Application Number:	13682686
Application Number:	13683974
Application Number:	13684004
Application Number:	13684509
Application Number:	13685665
Application Number:	13688043
Application Number:	13688051
Application Number:	13689074
Application Number:	13689569
Application Number:	13689573
Application Number:	13690255
Application Number:	13690685
Application Number:	13690694
Application Number:	13691492
Application Number:	13691525
Application Number:	13691551
Application Number:	13691712

Property Type	Number
Application Number:	13693318
Application Number:	13708464
Application Number:	13708793
Application Number:	13708873
Application Number:	13708901
Application Number:	13709470
Application Number:	13709654
Application Number:	13710199
Application Number:	13711160
Application Number:	13712057
Application Number:	13712929
Application Number:	13712956
Application Number:	13713561
Application Number:	13714226
Application Number:	13714322
Application Number:	13714385
Application Number:	13714499
Application Number:	13714590
Application Number:	13716014
Application Number:	13716059
Application Number:	13717481
Application Number:	13718278
Application Number:	13719184
Application Number:	13719209
Application Number:	13719809
Application Number:	13719883
Application Number:	13720832
Application Number:	13720903
Application Number:	13720942
Application Number:	13720959
Application Number:	13720969
Application Number:	13720971
Application Number:	13722935
Application Number:	13722978
Application Number:	13723010
Application Number:	13723070
Application Number:	13723079
Application Number:	13723099

Property Type	Number
Application Number:	13724529
Application Number:	13724662
Application Number:	13724875
Application Number:	13724914
Application Number:	13725140
Application Number:	13725219
Application Number:	13725354
Application Number:	13725545
Application Number:	13725593
Application Number:	13725683
Application Number:	13725689
Application Number:	13725731
Application Number:	13725867
Application Number:	13725943
Application Number:	13725965
Application Number:	13726007
Application Number:	13726168
Application Number:	13726207
Application Number:	13727150
Application Number:	13727278
Application Number:	13728944
Application Number:	13733750
Application Number:	13737374
Application Number:	13740010
Application Number:	13740115
Application Number:	13741119
Application Number:	13741299
Application Number:	13742243
Application Number:	13742248
Application Number:	13742286
Application Number:	13745804
Application Number:	13746230
Application Number:	13746991
Application Number:	13752758
Application Number:	13752823
Application Number:	13754685
Application Number:	13754837
Application Number:	13754854

Property Type	Number
Application Number:	13756328
Application Number:	13756379
Application Number:	13756888
Application Number:	13760886
Application Number:	13760945
Application Number:	13762524
Application Number:	13762850
Application Number:	13763972
Application Number:	13764600
Application Number:	13764619
Application Number:	13764649
Application Number:	13765161
Application Number:	13765290
Application Number:	13766470
Application Number:	13767023
Application Number:	13769232
Application Number:	13769951
Application Number:	13770885
Application Number:	13771300
Application Number:	13771486
Application Number:	13772110
Application Number:	13772145
Application Number:	13772295
Application Number:	13772298
Application Number:	13773466
Application Number:	13774926
Application Number:	13775070
Application Number:	13776553
Application Number:	13776590
Application Number:	13776719
Application Number:	13777778
Application Number:	13778464
Application Number:	13779529
Application Number:	13779693
Application Number:	13780847
Application Number:	13781052
Application Number:	13781167
Application Number:	13781374

Property Type	Number
Application Number:	13783660
Application Number:	13784494
Application Number:	13786352
Application Number:	13786374
Application Number:	13787743
Application Number:	13787760
Application Number:	13789071
Application Number:	13789564
Application Number:	13791282
Application Number:	13791818
Application Number:	13791865
Application Number:	13794166
Application Number:	13794263
Application Number:	13794501
Application Number:	13794771
Application Number:	13795333
Application Number:	13797266
Application Number:	13797268
Application Number:	13797529
Application Number:	13797706
Application Number:	13797746
Application Number:	13797893
Application Number:	13797923
Application Number:	13797943
Application Number:	13797953
Application Number:	13799659
Application Number:	13802167
Application Number:	13802183
Application Number:	13802281
Application Number:	13802337
Application Number:	13802380
Application Number:	13802486
Application Number:	13802583
Application Number:	13826244
Application Number:	13827089
Application Number:	13828071
Application Number:	13829438
Application Number:	13829904

Property Type	Number
Application Number:	13829955
Application Number:	13830144
Application Number:	13830776
Application Number:	13830810
Application Number:	13832704
Application Number:	13835395
Application Number:	13837586
Application Number:	13838535
Application Number:	13838699
Application Number:	13839128
Application Number:	13840225
Application Number:	13840513
Application Number:	13841026
Application Number:	13841706
Application Number:	13841789
Application Number:	13842020
Application Number:	13842101
Application Number:	13842771
Application Number:	13842940
Application Number:	13842956
Application Number:	13843218
Application Number:	13843225
Application Number:	13846802
Application Number:	13848353
Application Number:	13849113
Application Number:	13850100
Application Number:	13850582
Application Number:	13851348
Application Number:	13853411
Application Number:	13853989
Application Number:	13854621
Application Number:	13854828
Application Number:	13854898
Application Number:	13858004
Application Number:	13858175
Application Number:	13858280
Application Number:	13858716
Application Number:	13858791

Property Type	Number
Application Number:	13860505
Application Number:	13861663
Application Number:	13862320
Application Number:	13862884
Application Number:	13865071
Application Number:	13866852
Application Number:	13867019
Application Number:	13868615
Application Number:	13868897
Application Number:	13869005
Application Number:	13869820
Application Number:	13870931
Application Number:	13872029
Application Number:	13872807
Application Number:	13873183
Application Number:	13875165
Application Number:	13886088
Application Number:	13887252
Application Number:	13888768
Application Number:	13888840
Application Number:	13890131
Application Number:	13890168
Application Number:	13890937
Application Number:	13891792
Application Number:	13892704
Application Number:	13893188
Application Number:	13893248
Application Number:	13893252
Application Number:	13894240
Application Number:	13894281
Application Number:	13895016
Application Number:	13895357
Application Number:	13895411
Application Number:	13896159
Application Number:	13896209
Application Number:	13897609
Application Number:	13897655
Application Number:	13898288

Property Type	Number
Application Number:	13899260
Application Number:	13899334
Application Number:	13899447
Application Number:	13900085
Application Number:	13902485
Application Number:	13902504
Application Number:	13902722
Application Number:	13902748
Application Number:	13902795
Application Number:	13903121
Application Number:	13903124
Application Number:	13903197
Application Number:	13903464
Application Number:	13903849
Application Number:	13903899
Application Number:	13904992
Application Number:	13905291
Application Number:	13905773
Application Number:	13906106
Application Number:	13906205
Application Number:	13906293
Application Number:	13906648
Application Number:	13906777
Application Number:	13907157
Application Number:	13907347
Application Number:	13907617
Application Number:	13908265
Application Number:	13908968
Application Number:	13909337
Application Number:	13909906
Application Number:	13910909
Application Number:	13911365
Application Number:	13911944
Application Number:	13913068
Application Number:	13914463
Application Number:	13915539
Application Number:	13915581
Application Number:	13917654

Property Type	Number
Application Number:	13918251
Application Number:	13918719
Application Number:	13918847
Application Number:	13918876
Application Number:	13918895
Application Number:	13919782
Application Number:	13919949
Application Number:	13922099
Application Number:	13922417
Application Number:	13922616
Application Number:	13922972
Application Number:	13923024
Application Number:	13923290
Application Number:	13923301
Application Number:	13923518
Application Number:	13923624
Application Number:	13923991
Application Number:	13924791
Application Number:	13925697
Application Number:	13925734
Application Number:	13925746
Application Number:	13927007
Application Number:	13927096
Application Number:	13927100
Application Number:	13927109
Application Number:	13927740
Application Number:	13927871
Application Number:	13927996
Application Number:	13928145
Application Number:	13928156
Application Number:	13928189
Application Number:	13928206
Application Number:	13928318
Application Number:	13928329
Application Number:	13928799
Application Number:	13928845
Application Number:	13929705
Application Number:	13931163

Property Type	Number
Application Number:	13931588
Application Number:	13931610
Application Number:	13931812
Application Number:	13931821
Application Number:	13931825
Application Number:	13932332
Application Number:	13932348
Application Number:	13932370
Application Number:	13932534
Application Number:	13932705
Application Number:	13933321
Application Number:	13935221
Application Number:	13938131
Application Number:	13940132
Application Number:	13941474
Application Number:	13943530
Application Number:	13943556
Application Number:	13947409
Application Number:	13948495
Application Number:	13949126
Application Number:	13950011
Application Number:	13950180
Application Number:	13951387
Application Number:	13952567
Application Number:	13952932
Application Number:	13954620
Application Number:	13954754
Application Number:	13954766
Application Number:	13954791
Application Number:	13957411
Application Number:	13957814
Application Number:	13957898
Application Number:	13958214
Application Number:	13958372
Application Number:	13958949
Application Number:	13959630
Application Number:	13960738
Application Number:	13961799

Property Type	Number
Application Number:	13963172
Application Number:	13965066
Application Number:	13965085
Application Number:	13967292
Application Number:	13968323
Application Number:	13968344
Application Number:	13972002
Application Number:	13972709
Application Number:	13975660
Application Number:	13976055
Application Number:	13976061
Application Number:	14010350
Application Number:	14010458
Application Number:	14011430
Application Number:	14011468
Application Number:	14011687
Application Number:	14011694
Application Number:	14012449
Application Number:	14012595
Application Number:	14012979
Application Number:	14014025
Application Number:	14015716
Application Number:	14015748
Application Number:	14015824
Application Number:	14016202
Application Number:	14016218
Application Number:	14016224
Application Number:	14016235
Application Number:	14016250
Application Number:	14017136
Application Number:	14017715
Application Number:	14018310
Application Number:	14020653
Application Number:	14020686
Application Number:	14023386
Application Number:	14023399
Application Number:	14023402
Application Number:	14023776

Property Type	Number
Application Number:	14024498
Application Number:	14025615
Application Number:	14026017
Application Number:	14026062
Application Number:	14028002
Application Number:	14028295
Application Number:	14028377
Application Number:	14028412
Application Number:	14030991
Application Number:	14031967
Application Number:	14031970
Application Number:	14031989
Application Number:	14032023
Application Number:	14032157
Application Number:	14034427
Application Number:	14034487
Application Number:	14034514
Application Number:	14037235
Application Number:	14037254
Application Number:	14037331
Application Number:	14038733
Application Number:	14040151
Application Number:	14040368
Application Number:	14040426
Application Number:	14040960
Application Number:	14040996
Application Number:	14042199
Application Number:	14042459
Application Number:	14045022
Application Number:	14045349
Application Number:	14045662
Application Number:	14046424
Application Number:	14046771
Application Number:	14046790
Application Number:	14047603
Application Number:	14047627
Application Number:	14047955
Application Number:	14051281

Property Type	Number
Application Number:	14051359
Application Number:	14051372
Application Number:	14051397
Application Number:	14051414
Application Number:	14052648
Application Number:	14052666
Application Number:	14053532
Application Number:	14054738
Application Number:	14054762
Application Number:	14054924
Application Number:	14055769
Application Number:	14055851
Application Number:	14056846
Application Number:	14056893
Application Number:	14057044
Application Number:	14057257
Application Number:	14057641
Application Number:	14058171
Application Number:	14058686
Application Number:	14059653
Application Number:	14060294
Application Number:	14060504
Application Number:	14060547
Application Number:	14061592
Application Number:	14062155
Application Number:	14062800
Application Number:	14063982
Application Number:	14065329
Application Number:	14065354
Application Number:	14065574
Application Number:	14066349
Application Number:	14066523
Application Number:	14067483
Application Number:	14067769
Application Number:	14068879
Application Number:	14069075
Application Number:	14070401
Application Number:	14070408

Property Type	Number
Application Number:	14071430
Application Number:	14072923
Application Number:	14073751
Application Number:	14074408
Application Number:	14074592
Application Number:	14075710
Application Number:	14077042
Application Number:	14078302
Application Number:	14078308
Application Number:	14078410
Application Number:	14078738
Application Number:	14081651
Application Number:	14081872
Application Number:	14081877
Application Number:	14082340
Application Number:	14084483
Application Number:	14084535
Application Number:	14085608
Application Number:	14085734
Application Number:	14086032
Application Number:	14086057
Application Number:	14086197
Application Number:	14086916
Application Number:	14087642
Application Number:	14088215
Application Number:	14088320
Application Number:	14088739
Application Number:	14088811
Application Number:	14089589
Application Number:	14089912
Application Number:	14090117
Application Number:	14090202
Application Number:	14090297
Application Number:	14090426
Application Number:	14090596
Application Number:	14090732
Application Number:	14090873
Application Number:	14090960

Property Type	Number
Application Number:	14091053
Application Number:	14091098
Application Number:	14091131
Application Number:	14091176
Application Number:	14091189
Application Number:	14091211
Application Number:	14094690
Application Number:	14095013
Application Number:	14095819
Application Number:	14095932
Application Number:	14095952
Application Number:	14096332
Application Number:	14096381
Application Number:	14096503
Application Number:	14096606
Application Number:	14096725
Application Number:	14096921
Application Number:	14097137
Application Number:	14097157
Application Number:	14097192
Application Number:	14099720
Application Number:	14099787
Application Number:	14099849
Application Number:	14099863
Application Number:	14099870
Application Number:	14100405
Application Number:	14100435
Application Number:	14100521
Application Number:	14100566
Application Number:	14100646
Application Number:	14100702
Application Number:	14100786
Application Number:	14101671
Application Number:	14102356
Application Number:	14102458
Application Number:	14103719
Application Number:	14104143
Application Number:	14105603

Property Type	Number
Application Number:	14105696
Application Number:	14106308
Application Number:	14106390
Application Number:	14106587
Application Number:	14108671
Application Number:	14109603
Application Number:	14109741
Application Number:	14133003
Application Number:	14133302
Application Number:	14133417
Application Number:	14134164
Application Number:	14134350
Application Number:	14135222
Application Number:	14135250
Application Number:	14135890
Application Number:	14136414
Application Number:	14136830
Application Number:	14137314
Application Number:	14137418
Application Number:	14137537
Application Number:	14137878
Application Number:	14138804
Application Number:	14139762
Application Number:	14139779
Application Number:	14140408
Application Number:	14145200
Application Number:	14146194
Application Number:	14146555
Application Number:	14146710
Application Number:	14148226
Application Number:	14149258
Application Number:	14149565
Application Number:	14149722
Application Number:	14150615
Application Number:	14152129
Application Number:	14152737
Application Number:	14154442
Application Number:	14154974

Property Type	Number
Application Number:	14155595
Application Number:	14156265
Application Number:	14156274
Application Number:	14156354
Application Number:	14156356
Application Number:	14158515
Application Number:	14158552
Application Number:	14158754
Application Number:	14160360
Application Number:	14163845
Application Number:	14164041
Application Number:	14164121
Application Number:	14165052
Application Number:	14165367
Application Number:	14166699
Application Number:	14169255
Application Number:	14169514
Application Number:	14170462
Application Number:	14170487
Application Number:	14173758
Application Number:	14173895
Application Number:	14174084
Application Number:	14174776
Application Number:	14174939
Application Number:	14177216
Application Number:	14177219
Application Number:	14178155
Application Number:	14178179
Application Number:	14179268
Application Number:	14179355
Application Number:	14179358
Application Number:	14181508
Application Number:	14182187
Application Number:	14182628
Application Number:	14183142
Application Number:	14183886
Application Number:	14185032
Application Number:	14185153

Property Type	Number
Application Number:	14185255
Application Number:	14185770
Application Number:	14185909
Application Number:	14188088
Application Number:	14188381
Application Number:	14189954
Application Number:	14194059
Application Number:	14194243
Application Number:	14194488
Application Number:	14194529
Application Number:	14194552
Application Number:	14195079
Application Number:	14196760
Application Number:	14197053
Application Number:	14198386
Application Number:	14199133
Application Number:	14199807
Application Number:	14200666
Application Number:	14203126
Application Number:	14203142
Application Number:	14203358
Application Number:	14205342
Application Number:	14205982
Application Number:	14207323
Application Number:	14208401
Application Number:	14208452
Application Number:	14209909
Application Number:	14210009
Application Number:	14212941
Application Number:	14216285
Application Number:	14216295
Application Number:	14216610
Application Number:	14217157
Application Number:	14218036
Application Number:	14218117
Application Number:	14218591
Application Number:	14218761
Application Number:	14218835

Property Type	Number
Application Number:	14219986
Application Number:	14220012
Application Number:	14221375
Application Number:	14223851
Application Number:	14223957
Application Number:	14225000
Application Number:	14225376
Application Number:	14225418
Application Number:	14226673
Application Number:	14227191
Application Number:	14227340
Application Number:	14227896
Application Number:	14227933
Application Number:	14229297
Application Number:	14229416
Application Number:	14230452
Application Number:	14230753
Application Number:	14230828
Application Number:	14230962
Application Number:	14231032
Application Number:	14231252
Application Number:	14231511
Application Number:	14231531
Application Number:	14242717
Application Number:	14244306
Application Number:	14244672
Application Number:	14244891
Application Number:	14245932
Application Number:	14246401
Application Number:	14246706
Application Number:	14246750
Application Number:	14246821
Application Number:	14247498
Application Number:	14248970
Application Number:	14250000
Application Number:	14250212
Application Number:	14252746
Application Number:	14253358

Property Type	Number
Application Number:	14253491
Application Number:	14253797
Application Number:	14254823
Application Number:	14254828
Application Number:	14255088
Application Number:	14255647
Application Number:	14255752
Application Number:	14256693
Application Number:	14257978
Application Number:	14260426
Application Number:	14260512
Application Number:	14260641
Application Number:	14263132
Application Number:	14263511
Application Number:	14263678
Application Number:	14263895
Application Number:	14264244
Application Number:	14264337
Application Number:	14265161
Application Number:	14265187
Application Number:	14265474
Application Number:	14265567
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Application Number:	14266520
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Application Number:	14271435
Application Number:	14271683
Application Number:	14271743
Application Number:	14271770
Application Number:	14272214
Application Number:	14272381
Application Number:	14273284
Application Number:	14275032
Application Number:	14275363
Application Number:	14275468
Application Number:	14275502
Application Number:	14276111

Property Type	Number
Application Number:	14276192
Application Number:	14277362
Application Number:	14277978
Application Number:	14278316
Application Number:	14278946
Application Number:	14278957
Application Number:	14278969
Application Number:	14279608
Application Number:	14279654
Application Number:	14280208
Application Number:	14280342
Application Number:	14280358
Application Number:	14280452
Application Number:	14281461
Application Number:	14282444
Application Number:	14287421
Application Number:	14287467
Application Number:	14287496
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Application Number:	14287586
Application Number:	14287924
Application Number:	14289345
Application Number:	14289413
Application Number:	14290768
Application Number:	14290932
Application Number:	14290961
Application Number:	14292338
Application Number:	14292622
Application Number:	14292749
Application Number:	14292760
Application Number:	14293846
Application Number:	14293889
Application Number:	14294061
Application Number:	14294075
Application Number:	14294861
Application Number:	14295296
Application Number:	14295475

Property Type	Number
Application Number:	14295497
Application Number:	14296281
Application Number:	14297611
Application Number:	14297617
Application Number:	14297975
Application Number:	14298709
Application Number:	14298734
Application Number:	14299309
Application Number:	14299332
Application Number:	14300415
Application Number:	14300439
Application Number:	14300482
Application Number:	14301326
Application Number:	14302088
Application Number:	14302549
Application Number:	14303481
Application Number:	14303508
Application Number:	14303876
Application Number:	14303910
Application Number:	14303955
Application Number:	14304347
Application Number:	14304718
Application Number:	14305753
Application Number:	14305923
Application Number:	14306070
Application Number:	14306801
Application Number:	14307067
Application Number:	14307174
Application Number:	14307345
Application Number:	14307408
Application Number:	14307451
Application Number:	14308366
Application Number:	14308373
Application Number:	14308421
Application Number:	14308566
Application Number:	14309533
Application Number:	14310222
Application Number:	14310360

Property Type	Number
Application Number:	14310944
Application Number:	14311224
Application Number:	14312144
Application Number:	14312317
Application Number:	14312431
Application Number:	14312592
Application Number:	14312635
Application Number:	14313069
Application Number:	14313550
Application Number:	14313842
Application Number:	14313910
Application Number:	14313971
Application Number:	14314012
Application Number:	14314794
Application Number:	14314942
Application Number:	14315101
Application Number:	14315143
Application Number:	14316256
Application Number:	14316377
Application Number:	14316628
Application Number:	14316732
Application Number:	14316781
Application Number:	14316798
Application Number:	14321786
Application Number:	14322000
Application Number:	14322064
Application Number:	14322438
Application Number:	14322520
Application Number:	14322594
Application Number:	14322616
Application Number:	14322707
Application Number:	14322764
Application Number:	14322781
Application Number:	14324294
Application Number:	14324303
Application Number:	14324466
Application Number:	14324505
Application Number:	14325643

Property Type	Number
Application Number:	14326302
Application Number:	14330930
Application Number:	14331157
Application Number:	14331462
Application Number:	14332137
Application Number:	14332197
Application Number:	14335087
Application Number:	14335539
Application Number:	14335653
Application Number:	14335724
Application Number:	14336820
Application Number:	14338264
Application Number:	14338498
Application Number:	14339339
Application Number:	14339369
Application Number:	14340690
Application Number:	14341485
Application Number:	14341653
Application Number:	14341701
Application Number:	14341737
Application Number:	14446193
Application Number:	14448689
Application Number:	14449119
Application Number:	14451115
Application Number:	14456581
Application Number:	14457077
Application Number:	14457425
Application Number:	14460216
Application Number:	14461153
Application Number:	14461595
Application Number:	14463267
Application Number:	14464023
Application Number:	14464418
Application Number:	14464943
Application Number:	14466515
Application Number:	14466538
Application Number:	14469225
Application Number:	14469412

Property Type	Number
Application Number:	14471103
Application Number:	14475398
Application Number:	14476930
Application Number:	14479767
Application Number:	14480394
Application Number:	14480539
Application Number:	14480552
Application Number:	14480566
Application Number:	14481584
Application Number:	14482487
Application Number:	14482852
Application Number:	14483397
Application Number:	14488735
Application Number:	14489299
Application Number:	14489468
Application Number:	14489477
Application Number:	14489881
Application Number:	14489994
Application Number:	14490525
Application Number:	14491971
Application Number:	14492266
Application Number:	14492318
Application Number:	14492357
Application Number:	14492439
Application Number:	14492545
Application Number:	14493296
Application Number:	14493299
Application Number:	14493304
Application Number:	14493560
Application Number:	14493567
Application Number:	14494559
Application Number:	14494710
Application Number:	14495124
Application Number:	14495863
Application Number:	14497166
Application Number:	14497213
Application Number:	14497272
Application Number:	14497275

Property Type	Number
Application Number:	14497285
Application Number:	14497299
Application Number:	14498320
Application Number:	14498331
Application Number:	14498566
Application Number:	14499011
Application Number:	14499211
Application Number:	14499218
Application Number:	14500937
Application Number:	14500952
Application Number:	14500980
Application Number:	14501471
Application Number:	14503042
Application Number:	14504794
Application Number:	14505307
Application Number:	14506488
Application Number:	14507572
Application Number:	14508697
Application Number:	14508870
Application Number:	14509322
Application Number:	14509400
Application Number:	14509597
Application Number:	14510377
Application Number:	14510951
Application Number:	14511951
Application Number:	14512701
Application Number:	14513320
Application Number:	14514689
Application Number:	14514790
Application Number:	14515318
Application Number:	14517584
Application Number:	14518853
Application Number:	14519396
Application Number:	14520064
Application Number:	14522404
Application Number:	14522451
Application Number:	14523100
Application Number:	14525373

Property Type	Number
Application Number:	14525590
Application Number:	14526134
Application Number:	14526207
Application Number:	14526335
Application Number:	14526336
Application Number:	14526367
Application Number:	14526618
Application Number:	14526627
Application Number:	14526710
Application Number:	14526742
Application Number:	14527088
Application Number:	14530469
Application Number:	14530611
Application Number:	14531537
Application Number:	14532240
Application Number:	14532275
Application Number:	14533027
Application Number:	14534014
Application Number:	14535130
Application Number:	14537363
Application Number:	14538513
Application Number:	14538610
Application Number:	14538676
Application Number:	14539728
Application Number:	14539847
Application Number:	14542555
Application Number:	14546914
Application Number:	14547098
Application Number:	14547462
Application Number:	14548115
Application Number:	14548232
Application Number:	14548242
Application Number:	14548853
Application Number:	14549532
Application Number:	14549535
Application Number:	14555235
Application Number:	14555484
Application Number:	14555496

Property Type	Number
Application Number:	14556411
Application Number:	14556645
Application Number:	14556993
Application Number:	14557148
Application Number:	14557380
Application Number:	14557941
Application Number:	14558329
Application Number:	14560212
Application Number:	14560731
Application Number:	14560767
Application Number:	14560802
Application Number:	14561265
Application Number:	14561679
Application Number:	14562268
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Application Number:	14563721
Application Number:	14563837
Application Number:	14563871
Application Number:	14563936
Application Number:	14564798
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Application Number:	14565635
Application Number:	14569075
Application Number:	14570820
Application Number:	14571178
Application Number:	14571461
Application Number:	14571521
Application Number:	14573873
Application Number:	14574123
Application Number:	14574188
Application Number:	14574250
Application Number:	14574284
Application Number:	14574339
Application Number:	14575090
Application Number:	14575634
Application Number:	14575776
Application Number:	14576063
Application Number:	14576909

Property Type	Number
Application Number:	14578054
Application Number:	14578449
Application Number:	14578450
Application Number:	14578454
Application Number:	14579785
Application Number:	14581274
Application Number:	14581846
Application Number:	14582004
Application Number:	14582025
Application Number:	14582043
Application Number:	14582067
Application Number:	14582068
Application Number:	14582091
Application Number:	14582123
Application Number:	14582545
Application Number:	14582663
Application Number:	14582902
Application Number:	14582921
Application Number:	14582983
Application Number:	14583017
Application Number:	14584326
Application Number:	14585111
Application Number:	14586727
Application Number:	14588838
Application Number:	14589573
Application Number:	14590694
Application Number:	14593801
Application Number:	14595801
Application Number:	14598490
Application Number:	14599734
Application Number:	14601588
Application Number:	14602124
Application Number:	14602160
Application Number:	14602352
Application Number:	14603046
Application Number:	14603258
Application Number:	14604229
Application Number:	14604446

Property Type	Number
Application Number:	14604617
Application Number:	14604630
Application Number:	14604635
Application Number:	14604649
Application Number:	14605687
Application Number:	14605910
Application Number:	14606581
Application Number:	14606921
Application Number:	14607039
Application Number:	14607040
Application Number:	14607055
Application Number:	14608095
Application Number:	14608980
Application Number:	14609580
Application Number:	14612085
Application Number:	14613345
Application Number:	14614273
Application Number:	14615339
Application Number:	14615367
Application Number:	14615913
Application Number:	14616128
Application Number:	14616445
Application Number:	14616621
Application Number:	14617231
Application Number:	14617847
Application Number:	14619030
Application Number:	14619968
Application Number:	14620397
Application Number:	14620557
Application Number:	14620971
Application Number:	14621287
Application Number:	14621314
Application Number:	14621318
Application Number:	14622804
Application Number:	14624255
Application Number:	14625026
Application Number:	14627570
Application Number:	14627580

Property Type	Number
Application Number:	14627590
Application Number:	14628111
Application Number:	14628925
Application Number:	14630720
Application Number:	14630863
Application Number:	14631187
Application Number:	14632085
Application Number:	14633102
Application Number:	14633126
Application Number:	14633301
Application Number:	14635532
Application Number:	14635817
Application Number:	14636077
Application Number:	14638033
Application Number:	14638794
Application Number:	14639442
Application Number:	14639555
Application Number:	14640684
Application Number:	14640944
Application Number:	14642218
Application Number:	14642450
Application Number:	14642597
Application Number:	14642666
Application Number:	14642684
Application Number:	14644415
Application Number:	14644564
Application Number:	14644633
Application Number:	14656898
Application Number:	14657420
Application Number:	14657780
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Application Number:	14661952
Application Number:	14662163
Application Number:	14662527
Application Number:	14663031
Application Number:	14664425
Application Number:	14664570
Application Number:	14664644

Property Type	Number
Application Number:	14664674
Application Number:	14664730
Application Number:	14664768
Application Number:	14666080
Application Number:	14666168
Application Number:	14666184
Application Number:	14666685
Application Number:	14667433
Application Number:	14667470
Application Number:	14667506
Application Number:	14667804
Application Number:	14668940
Application Number:	14668949
Application Number:	14669724
Application Number:	14669931
Application Number:	14669994
Application Number:	14670340
Application Number:	14670353
Application Number:	14670374
Application Number:	14671434
Application Number:	14672484
Application Number:	14673342
Application Number:	14673392
Application Number:	14673544
Application Number:	14673676
Application Number:	14673748
Application Number:	14673785
Application Number:	14674185
Application Number:	14674509
Application Number:	14674681
Application Number:	14674899
Application Number:	14675326
Application Number:	14675531
Application Number:	14675588
Application Number:	14678816
Application Number:	14678906
Application Number:	14679189
Application Number:	14680657

Property Type	Number
Application Number:	14682021
Application Number:	14682048
Application Number:	14683850
Application Number:	14689043
Application Number:	14689770
Application Number:	14692635
Application Number:	14693009
Application Number:	14693685
Application Number:	14695463
Application Number:	14698766
Application Number:	14700760
Application Number:	14701050
Application Number:	14704082
Application Number:	14705684
Application Number:	14706295
Application Number:	14706686
Application Number:	14706881
Application Number:	14707315
Application Number:	14707605
Application Number:	14711428
Application Number:	14712570
Application Number:	14716610
Application Number:	14717179
Application Number:	14718018
Application Number:	14719127
Application Number:	14720697
Application Number:	14720781
Application Number:	14722673
Application Number:	14722873
Application Number:	14724770
Application Number:	14724773
Application Number:	14726513
Application Number:	14728293
Application Number:	14728778
Application Number:	14728871
Application Number:	14729403
Application Number:	14731832
Application Number:	14732015

Property Type	Number
Application Number:	14733027
Application Number:	14733919
Application Number:	14734574
Application Number:	14735411
Application Number:	14735461
Application Number:	14736784
Application Number:	14736860
Application Number:	14737307
Application Number:	14737822
Application Number:	14738797
Application Number:	14739286
Application Number:	14740027
Application Number:	14740098
Application Number:	14740144
Application Number:	14740206
Application Number:	14741157
Application Number:	14741287
Application Number:	14741390
Application Number:	14742309
Application Number:	14743145
Application Number:	14744444
Application Number:	14744947
Application Number:	14745282
Application Number:	14746598
Application Number:	14747098
Application Number:	14748173
Application Number:	14748607
Application Number:	14748616
Application Number:	14749260
Application Number:	14749498
Application Number:	14749814
Application Number:	14749910
Application Number:	14750239
Application Number:	14750815
Application Number:	14752249
Application Number:	14752482
Application Number:	14752646
Application Number:	14752659

Property Type	Number
Application Number:	14752701
Application Number:	14752716
Application Number:	14752751
Application Number:	14753507
Application Number:	14753630
Application Number:	14753944
Application Number:	14754340
Application Number:	14788167
Application Number:	14788183
Application Number:	14788190
Application Number:	14788658
Application Number:	14788771
Application Number:	14790211
Application Number:	14792798
Application Number:	14793702
Application Number:	14794741
Application Number:	14794762
Application Number:	14795836
Application Number:	14797759
Application Number:	14798400
Application Number:	14798428
Application Number:	14798779
Application Number:	14799536
Application Number:	14800444
Application Number:	14802329
Application Number:	14804004
Application Number:	14804063
Application Number:	14808380
Application Number:	14808693
Application Number:	14809775
Application Number:	14810346
Application Number:	14810391
Application Number:	14811297
Application Number:	14811690
Application Number:	14811708
Application Number:	14811754
Application Number:	14812933
Application Number:	14813634

Property Type	Number
Application Number:	14814264
Application Number:	14817538
Application Number:	14818263
Application Number:	14819658
Application Number:	14822853
Application Number:	14823751
Application Number:	14823775
Application Number:	14823796
Application Number:	14825738
Application Number:	14827705
Application Number:	14828255
Application Number:	14832415
Application Number:	14833817
Application Number:	14833844
Application Number:	14834683
Application Number:	14834739
Application Number:	14834743
Application Number:	14834929
Application Number:	14835021
Application Number:	14835271
Application Number:	14835543
Application Number:	14835618
Application Number:	14835622
Application Number:	14841607
Application Number:	14841635
Application Number:	14841672
Application Number:	14841675
Application Number:	14841850
Application Number:	14843122
Application Number:	14843911
Application Number:	14845016
Application Number:	14846019
Application Number:	14846517
Application Number:	14846539
Application Number:	14846568
Application Number:	14847634
Application Number:	14848158
Application Number:	14850615

Property Type	Number
Application Number:	14850741
Application Number:	14850802
Application Number:	14850845
Application Number:	14850984
Application Number:	14851120
Application Number:	14852333
Application Number:	14852844
Application Number:	14853313
Application Number:	14853531
Application Number:	14853741
Application Number:	14853920
Application Number:	14853941
Application Number:	14855629
Application Number:	14857467
Application Number:	14858994
Application Number:	14860010
Application Number:	14862895
Application Number:	14863309
Application Number:	14863378
Application Number:	14864653
Application Number:	14864665
Application Number:	14864716
Application Number:	14865388
Application Number:	14865501
Application Number:	14865858
Application Number:	14867999
Application Number:	14868320
Application Number:	14869606
Application Number:	14869927
Application Number:	14870562
Application Number:	14870571
Application Number:	14870943
Application Number:	14871054
Application Number:	14871096
Application Number:	14871118
Application Number:	14871139
Application Number:	14871553
Application Number:	14871639

Property Type	Number
Application Number:	14871648
Application Number:	14871763
Application Number:	14873629
Application Number:	14876151
Application Number:	14876567
Application Number:	14877290
Application Number:	14879313
Application Number:	14881103
Application Number:	14882147
Application Number:	14882741
Application Number:	14883496
Application Number:	14885018
Application Number:	14886870
Application Number:	14887672
Application Number:	14918829
Application Number:	14920834
Application Number:	14920853
Application Number:	14921418
Application Number:	14921832
Application Number:	14922547
Application Number:	14923000
Application Number:	14924545
Application Number:	14924615
Application Number:	14924670
Application Number:	14924671
Application Number:	14927405
Application Number:	14927414
Application Number:	14929080
Application Number:	14930229
Application Number:	14930898
Application Number:	14932221
Application Number:	14934453
Application Number:	14935337
Application Number:	14935914
Application Number:	14936353
Application Number:	14936584
Application Number:	14936602
Application Number:	14936890

Property Type	Number
Application Number:	14936967
Application Number:	14939934
Application Number:	14941125
Application Number:	14941198
Application Number:	14943211
Application Number:	14943841
Application Number:	14944664
Application Number:	14945240
Application Number:	14946007
Application Number:	14946648
Application Number:	14948145
Application Number:	14948229
Application Number:	14949155
Application Number:	14950938
Application Number:	14951411
Application Number:	14952682
Application Number:	14953982
Application Number:	14954293
Application Number:	14954397
Application Number:	14954486
Application Number:	14954514
Application Number:	14955375
Application Number:	14955878
Application Number:	14956168
Application Number:	14956173
Application Number:	14956251
Application Number:	14961184
Application Number:	14961856
Application Number:	14962816
Application Number:	14964360
Application Number:	14964414
Application Number:	14964453
Application Number:	14967025
Application Number:	14967169
Application Number:	14967667
Application Number:	14968278
Application Number:	14968875
Application Number:	14971911

Property Type	Number
Application Number:	14971995
Application Number:	14972013
Application Number:	14976518
Application Number:	14976574
Application Number:	14977269
Application Number:	14979278
Application Number:	14981785
Application Number:	14981844
Application Number:	14982394
Application Number:	14982706
Application Number:	14982860
Application Number:	14983032
Application Number:	14983308
Application Number:	14987244
Application Number:	14987568
Application Number:	14987581
Application Number:	14987660
Application Number:	14988651
Application Number:	14989386
Application Number:	14989560
Application Number:	14990100
Application Number:	14990314
Application Number:	14990667
Application Number:	14991484
Application Number:	14992353
Application Number:	14992701
Application Number:	14993127
Application Number:	14993531
Application Number:	14997464
Application Number:	15001724
Application Number:	15001730
Application Number:	15002543
Application Number:	15003195
Application Number:	15007646
Application Number:	15007965
Application Number:	15009448
Application Number:	15011338
Application Number:	15011413

Property Type	Number
Application Number:	15011538
Application Number:	15011541
Application Number:	15012260
Application Number:	15012294
Application Number:	15013491
Application Number:	15014007
Application Number:	15016149
Application Number:	15019062
Application Number:	15040030
Application Number:	15040962
Application Number:	15043443
Application Number:	15046250
Application Number:	15047113
Application Number:	15047585
Application Number:	15048565
Application Number:	15050032
Application Number:	15051414
Application Number:	15051539
Application Number:	15052023
Application Number:	15052771
Application Number:	15052946
Application Number:	15053133
Application Number:	15053211
Application Number:	15053459
Application Number:	15058461
Application Number:	15058538
Application Number:	15058571
Application Number:	15058834
Application Number:	15061595
Application Number:	15061702
Application Number:	15061768
Application Number:	15062456
Application Number:	15063253
Application Number:	15065001
Application Number:	15065025
Application Number:	15067284
Application Number:	15068213
Application Number:	15068427

Property Type	Number
Application Number:	15068476
Application Number:	15068491
Application Number:	15071038
Application Number:	15073409
Application Number:	15076742
Application Number:	15077242
Application Number:	15077282
Application Number:	15077302
Application Number:	15077695
Application Number:	15077831
Application Number:	15078963
Application Number:	15080487
Application Number:	15080525
Application Number:	15081064
Application Number:	15081694
Application Number:	15081727
Application Number:	15083135
Application Number:	15083413
Application Number:	15084333
Application Number:	15085875
Application Number:	15086543
Application Number:	15086782
Application Number:	15087386
Application Number:	15087548
Application Number:	15089145
Application Number:	15090249
Application Number:	15090770
Application Number:	15092236
Application Number:	15092492
Application Number:	15094134
Application Number:	15095605
Application Number:	15096102
Application Number:	15097182
Application Number:	15098253
Application Number:	15098668
Application Number:	15098853
Application Number:	15098963
Application Number:	15130320

Property Type	Number
Application Number:	15132143
Application Number:	15132155
Application Number:	15132651
Application Number:	15133217
Application Number:	15136195
Application Number:	15137863
Application Number:	15139988
Application Number:	15140241
Application Number:	15141761
Application Number:	15145205
Application Number:	15145575
Application Number:	15145648
Application Number:	15146685
Application Number:	15146791
Application Number:	15147465
Application Number:	15149706
Application Number:	15150340
Application Number:	15152889
Application Number:	15153357
Application Number:	15154165
Application Number:	15154418
Application Number:	15156267
Application Number:	15156877
Application Number:	15157289
Application Number:	15157315
Application Number:	15158422
Application Number:	15158541
Application Number:	15160325
Application Number:	15160945
Application Number:	15162332
Application Number:	15162504
Application Number:	15164636
Application Number:	15164685
Application Number:	15164811
Application Number:	15164817
Application Number:	15164822
Application Number:	15166694
Application Number:	15167316

Property Type	Number
Application Number:	15168895
Application Number:	15169018
Application Number:	15169589
Application Number:	15174906
Application Number:	15174955
Application Number:	15176953
Application Number:	15181251
Application Number:	15181551
Application Number:	15183657
Application Number:	15184936
Application Number:	15188808
Application Number:	15189901
Application Number:	15189921
Application Number:	15189998
Application Number:	15190859
Application Number:	15194412
Application Number:	15194675
Application Number:	15194678
Application Number:	15195806
Application Number:	15195876
Application Number:	15195947
Application Number:	15197116
Application Number:	15197131
Application Number:	15197183
Application Number:	15197196
Application Number:	15197410
Application Number:	15197483
Application Number:	15197847
Application Number:	15198364
Application Number:	15198842
Application Number:	15198963
Application Number:	15199034
Application Number:	15199540
Application Number:	15199781
Application Number:	15199793
Application Number:	15199833
Application Number:	15199892
Application Number:	15199920

Property Type	Number
Application Number:	15202226
Application Number:	15205319
Application Number:	15207414
Application Number:	15208118
Application Number:	15208237
Application Number:	15214185
Application Number:	15214345
Application Number:	15215304
Application Number:	15216639
Application Number:	15219220
Application Number:	15219474
Application Number:	15220175
Application Number:	15221407
Application Number:	15222504
Application Number:	15222854
Application Number:	15223976
Application Number:	15225884
Application Number:	15226590
Application Number:	15226639
Application Number:	15226830
Application Number:	15228983
Application Number:	15232669
Application Number:	15236386
Application Number:	15236600
Application Number:	15236818
Application Number:	15237345
Application Number:	15240311
Application Number:	15243692
Application Number:	15243708
Application Number:	15245079
Application Number:	15245850
Application Number:	15246364
Application Number:	15250264
Application Number:	15250762
Application Number:	15252501
Application Number:	15253609
Application Number:	15256397
Application Number:	15256522

Property Type	Number
Application Number:	15257431
Application Number:	15257541
Application Number:	15257598
Application Number:	15257741
Application Number:	15258642
Application Number:	15261061
Application Number:	15264391
Application Number:	15265317
Application Number:	15266690
Application Number:	15275670
Application Number:	15277545
Application Number:	15280071
Application Number:	15280094
Application Number:	15282783
Application Number:	15282837
Application Number:	15282908
Application Number:	15294063
Application Number:	15331406
Application Number:	15331552
Application Number:	15331666
Application Number:	15332740
Application Number:	15334197
Application Number:	15335631
Application Number:	15337925
Application Number:	15340582
Application Number:	15342895
Application Number:	15345100
Application Number:	15346818
Application Number:	15351620
Application Number:	15354867
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Application Number:	15355851
Application Number:	15357155
Application Number:	15362332
Application Number:	15364919
Application Number:	15369601
Application Number:	15369730
Application Number:	15373313

Property Type	Number
Application Number:	15373450
Application Number:	15373456
Application Number:	15373937
Application Number:	15380826
Application Number:	15382564
Application Number:	15383047
Application Number:	15384785
Application Number:	15385595
Application Number:	15386702
Application Number:	15388603
Application Number:	15388623
Application Number:	15388633
Application Number:	15388737
Application Number:	15388768
Application Number:	15388883
Application Number:	15389432
Application Number:	15390408
Application Number:	15390433
Application Number:	15390566
Application Number:	15390885
Application Number:	15390889
Application Number:	15392512
Application Number:	15392760
Application Number:	15392938
Application Number:	15393011
Application Number:	15394559
Application Number:	15394560
Application Number:	15394700
Application Number:	15394986
Application Number:	15395144
Application Number:	15395150
Application Number:	15395161
Application Number:	15395279
Application Number:	15395415
Application Number:	15395474
Application Number:	15396206
Application Number:	15396235
Application Number:	15396238

Property Type	Number
Application Number:	15396361
Application Number:	15396366
Application Number:	15396367
Application Number:	15396371
Application Number:	15396405
Application Number:	15396411
Application Number:	15396547
Application Number:	15396548
Application Number:	15400702
Application Number:	15403800
Application Number:	15406204
Application Number:	15406221
Application Number:	15408823
Application Number:	15408943
Application Number:	15412566
Application Number:	15413360
Application Number:	15418178
Application Number:	15418455
Application Number:	15419925
Application Number:	15423205
Application Number:	15426949
Application Number:	15426951
Application Number:	15428000
Application Number:	15428745
Application Number:	15428952
Application Number:	15429228
Application Number:	15435668
Application Number:	15436697
Application Number:	15445128
Application Number:	15445921
Application Number:	15446818
Application Number:	15449612
Application Number:	15451019
Application Number:	15452039
Application Number:	15452045
Application Number:	15452606
Application Number:	15456237
Application Number:	15456267

Property Type	Number
Application Number:	15456648
Application Number:	15457676
Application Number:	15458901
Application Number:	15458930
Application Number:	15458945
Application Number:	15459339
Application Number:	15459955
Application Number:	15461379
Application Number:	15463395
Application Number:	15465367
Application Number:	15465782
Application Number:	15466004
Application Number:	15468245
Application Number:	15468512
Application Number:	15468620
Application Number:	15469384
Application Number:	15470695
Application Number:	15470787
Application Number:	15471781
Application Number:	15472326
Application Number:	15473044
Application Number:	15474340
Application Number:	15474355
Application Number:	15476626
Application Number:	15477739
Application Number:	15478155
Application Number:	15481247
Application Number:	15483035
Application Number:	15484038
Application Number:	15484039
Application Number:	15484044
Application Number:	15486224
Application Number:	15489167
Application Number:	15489282
Application Number:	15489632
Application Number:	15490490
Application Number:	15490724
Application Number:	15492141

Property Type	Number
Application Number:	15492221
Application Number:	15494716
Application Number:	15495900
Application Number:	15497547
Application Number:	15497879
Application Number:	15498326
Application Number:	15530346
Application Number:	15583392
Application Number:	15583738
Application Number:	15583747
Application Number:	15585717
Application Number:	15585753
Application Number:	15585779
Application Number:	15585808
Application Number:	15585827
Application Number:	15585933
Application Number:	15587403
Application Number:	15587571
Application Number:	15589332
Application Number:	15590856
Application Number:	15592621
Application Number:	15593206
Application Number:	15594447
Application Number:	15595174
Application Number:	15595215
Application Number:	15595239
Application Number:	15596198
Application Number:	15596524
Application Number:	15596617
Application Number:	15597342
Application Number:	15599931
Application Number:	15599937
Application Number:	15600672
Application Number:	15600673
Application Number:	15602725
Application Number:	15602874
Application Number:	15604567
Application Number:	15604575

Property Type	Number
Application Number:	15604717
Application Number:	15605102
Application Number:	15606931
Application Number:	15607521
Application Number:	15607604
Application Number:	15608945
Application Number:	15610423
Application Number:	15611510
Application Number:	15611958
Application Number:	15613012
Application Number:	15613795
Application Number:	15614044
Application Number:	15614140
Application Number:	15614415
Application Number:	15614454
Application Number:	15614914
Application Number:	15614939
Application Number:	15615050
Application Number:	15615175
Application Number:	15615368
Application Number:	15616136
Application Number:	15616569
Application Number:	15616804
Application Number:	15616845
Application Number:	15617021
Application Number:	15617059
Application Number:	15617411
Application Number:	15617629
Application Number:	15619157
Application Number:	15621460
Application Number:	15621476
Application Number:	15621480
Application Number:	15621567
Application Number:	15621901
Application Number:	15621932
Application Number:	15621960
Application Number:	15622857
Application Number:	15624937

Property Type	Number
Application Number:	15626027
Application Number:	15626043
Application Number:	15626061
Application Number:	15627042
Application Number:	15627091
Application Number:	15627135
Application Number:	15627632
Application Number:	15628317
Application Number:	15628361
Application Number:	15628573
Application Number:	15629100
Application Number:	15629152
Application Number:	15629457
Application Number:	15629497
Application Number:	15629558
Application Number:	15629641
Application Number:	15630438
Application Number:	15630906
Application Number:	15631034
Application Number:	15631293
Application Number:	15631299
Application Number:	15631336
Application Number:	15631868
Application Number:	15631878
Application Number:	15631887
Application Number:	15631932
Application Number:	15632108
Application Number:	15633307
Application Number:	15633388
Application Number:	15633479
Application Number:	15633608
Application Number:	15633831
Application Number:	15633848
Application Number:	15633865
Application Number:	15634396
Application Number:	15634968
Application Number:	15635003
Application Number:	15635039

Property Type	Number
Application Number:	15635056
Application Number:	15635687
Application Number:	15636023
Application Number:	15636496
Application Number:	15637344
Application Number:	15638045
Application Number:	15638179
Application Number:	15639832
Application Number:	15639988
Application Number:	15640050
Application Number:	15640225
Application Number:	15640234
Application Number:	15640295
Application Number:	15641258
Application Number:	15641708
Application Number:	15647108
Application Number:	15647182
Application Number:	15648594
Application Number:	15649553
Application Number:	15649562
Application Number:	15651544
Application Number:	15651560
Application Number:	15652629
Application Number:	15657224
Application Number:	15657353
Application Number:	15659208
Application Number:	15659767
Application Number:	15660763
Application Number:	15661431
Application Number:	15661882
Application Number:	15662158
Application Number:	15662199
Application Number:	15664667
Application Number:	15665200
Application Number:	15666533
Application Number:	15666877
Application Number:	15667000
Application Number:	15667585

Property Type	Number
Application Number:	15669685
Application Number:	15669881
Application Number:	15671141
Application Number:	15672779
Application Number:	15672857
Application Number:	15673143
Application Number:	15673816
Application Number:	15674952
Application Number:	15675018
Application Number:	15676708
Application Number:	15677145
Application Number:	15677941
Application Number:	15678907
Application Number:	15679025
Application Number:	15679468
Application Number:	15680112
Application Number:	15683710
Application Number:	15684206
Application Number:	15684892
Application Number:	15685555
Application Number:	15688095
Application Number:	15689289
Application Number:	15689427
Application Number:	15689924
Application Number:	15690068
Application Number:	15690114
Application Number:	15690858
Application Number:	15691536
Application Number:	15691620
Application Number:	15692877
Application Number:	15693021
Application Number:	15694276
Application Number:	15695686
Application Number:	15696637
Application Number:	15696913
Application Number:	15697265
Application Number:	15697304
Application Number:	15698958

Property Type	Number
Application Number:	15701481
Application Number:	15701483
Application Number:	15703108
Application Number:	15704866
Application Number:	15709359
Application Number:	15714992
Application Number:	15715863
Application Number:	15716467
Application Number:	15716961
Application Number:	15717494
Application Number:	15717572
Application Number:	15721272
Application Number:	15722616
Application Number:	15722666
Application Number:	15722685
Application Number:	15722989
Application Number:	15723558
Application Number:	15725255
Application Number:	15726313
Application Number:	15726903
Application Number:	15727953
Application Number:	15728419
Application Number:	15728749
Application Number:	15730454
Application Number:	15730511
Application Number:	15782618
Application Number:	15782829
Application Number:	15783739
Application Number:	15785054
Application Number:	15785073
Application Number:	15786763
Application Number:	15787694
Application Number:	15787700
Application Number:	15788173
Application Number:	15789832
Application Number:	15789890
Application Number:	15790368
Application Number:	15793092

Property Type	Number
Application Number:	15793387
Application Number:	15793854
Application Number:	15794140
Application Number:	15794709
Application Number:	15797476
Application Number:	15797672
Application Number:	15797722
Application Number:	15798009
Application Number:	15798029
Application Number:	15800148
Application Number:	15801037
Application Number:	15801250
Application Number:	15801677
Application Number:	15802257
Application Number:	15804391
Application Number:	15805299
Application Number:	15805619
Application Number:	15807568
Application Number:	15808209
Application Number:	15808719
Application Number:	15810632
Application Number:	15811123
Application Number:	15811128
Application Number:	15811371
Application Number:	15811658
Application Number:	15811661
Application Number:	15813332
Application Number:	15816165
Application Number:	15816204
Application Number:	15817442
Application Number:	15817535
Application Number:	15817543
Application Number:	15817593
Application Number:	15817624
Application Number:	15818049
Application Number:	15818119
Application Number:	15820147
Application Number:	15820229

Property Type	Number
Application Number:	15821382
Application Number:	15822198
Application Number:	15822500
Application Number:	15822798
Application Number:	15823503
Application Number:	15824026
Application Number:	15824038
Application Number:	15824046
Application Number:	15824658
Application Number:	15825342
Application Number:	15825490
Application Number:	15826578
Application Number:	15828104
Application Number:	15828229
Application Number:	15828421
Application Number:	15829870
Application Number:	15831283
Application Number:	15832528
Application Number:	15832728
Application Number:	15833338
Application Number:	15833837
Application Number:	15838201
Application Number:	15838502
Application Number:	15838863
Application Number:	15839521
Application Number:	15839668
Application Number:	15840816
Application Number:	15841116
Application Number:	15841807
Application Number:	15843076
Application Number:	15843196
Application Number:	15843486
Application Number:	15843951
Application Number:	15844769
Application Number:	15845005
Application Number:	15846020
Application Number:	15846787
Application Number:	15847389

Property Type	Number
Application Number:	15847662
Application Number:	15847671
Application Number:	15847738
Application Number:	15847761
Application Number:	15847805
Application Number:	15849572
Application Number:	15849598
Application Number:	15849652
Application Number:	15851092
Application Number:	15851277
Application Number:	15851537
Application Number:	15851706
Application Number:	15852068
Application Number:	15852525
Application Number:	15853768
Application Number:	15853770
Application Number:	15853785
Application Number:	15855751
Application Number:	15859085
Application Number:	15859922
Application Number:	15860622
Application Number:	15865021
Application Number:	15866615
Application Number:	15868868
Application Number:	15869751
Application Number:	15869897
Application Number:	15870779
Application Number:	15872995
Application Number:	15873395
Application Number:	15873863
Application Number:	15874165
Application Number:	15874839
Application Number:	15874977
Application Number:	15875474
Application Number:	15875815
Application Number:	15875983
Application Number:	15876119
Application Number:	15876245

Property Type	Number
Application Number:	15876253
Application Number:	15876632
Application Number:	15876785
Application Number:	15878096
Application Number:	15878114
Application Number:	15878735
Application Number:	15879680
Application Number:	15882937
Application Number:	15883071
Application Number:	15883327
Application Number:	15884109
Application Number:	15884480
Application Number:	15885760
Application Number:	15885765
Application Number:	15885767
Application Number:	15885770
Application Number:	15888449
Application Number:	15889419
Application Number:	15890118
Application Number:	15890265
Application Number:	15893392
Application Number:	15893430
Application Number:	15895921
Application Number:	15896440
Application Number:	15896596
Application Number:	15897923
Application Number:	15899334
Application Number:	15899615
Application Number:	15899948
Application Number:	15900531
Application Number:	15900673
Application Number:	15901054
Application Number:	15901432
Application Number:	15902988
Application Number:	15903355
Application Number:	15903930
Application Number:	15906914
Application Number:	15908338

Property Type	Number
Application Number:	15908685
Application Number:	15908711
Application Number:	15910606
Application Number:	15911815
Application Number:	15912648
Application Number:	15912944
Application Number:	15913042
Application Number:	15913581
Application Number:	15913898
Application Number:	15913910
Application Number:	15913914
Application Number:	15914336
Application Number:	15915300
Application Number:	15916082
Application Number:	15916254
Application Number:	15918019
Application Number:	15918060
Application Number:	15919025
Application Number:	15920056
Application Number:	15920422
Application Number:	15921375
Application Number:	15922007
Application Number:	15922689
Application Number:	15922793
Application Number:	15923044
Application Number:	15924555
Application Number:	15925152
Application Number:	15926685
Application Number:	15927644
Application Number:	15927796
Application Number:	15928603
Application Number:	15929090
Application Number:	15929101
Application Number:	15929181
Application Number:	15933209
Application Number:	15933276
Application Number:	15933354
Application Number:	15933697

Property Type	Number
Application Number:	15934379
Application Number:	15934816
Application Number:	15936050
Application Number:	15936319
Application Number:	15936325
Application Number:	15936327
Application Number:	15938359
Application Number:	15938388
Application Number:	15940338
Application Number:	15941747
Application Number:	15942481
Application Number:	15942749
Application Number:	15943129
Application Number:	15944074
Application Number:	15944751
Application Number:	15944760
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Application Number:	15946387
Application Number:	15946534
Application Number:	15947665
Application Number:	15947669
Application Number:	15948560
Application Number:	15949036
Application Number:	15949355
Application Number:	15949976
Application Number:	15951097
Application Number:	15953353
Application Number:	15953373
Application Number:	15954080
Application Number:	15954101
Application Number:	15954171
Application Number:	15954198
Application Number:	15954359
Application Number:	15955432
Application Number:	15956990
Application Number:	15958563
Application Number:	15959120
Application Number:	15959358

Property Type	Number
Application Number:	15959773
Application Number:	15959852
Application Number:	15959875
Application Number:	15961869
Application Number:	15961871
Application Number:	15961877
Application Number:	15962766
Application Number:	15963829
Application Number:	15964027
Application Number:	15965432
Application Number:	15965947
Application Number:	15966724
Application Number:	15967033
Application Number:	15967522
Application Number:	15967528
Application Number:	15970408
Application Number:	15970412
Application Number:	15970435
Application Number:	15970826
Application Number:	15970832
Application Number:	15971869
Application Number:	15971971
Application Number:	15973491
Application Number:	15975543
Application Number:	15976456
Application Number:	15976606
Application Number:	15976750
Application Number:	15978584
Application Number:	15978660
Application Number:	15979348
Application Number:	15980627
Application Number:	15980709
Application Number:	15981624
Application Number:	15981664
Application Number:	15981679
Application Number:	15981711
Application Number:	15981719
Application Number:	15981735

Property Type	Number
Application Number:	15982805
Application Number:	15983016
Application Number:	15983026
Application Number:	15983028
Application Number:	15983033
Application Number:	15984253
Application Number:	15985588
Application Number:	15986744
Application Number:	15986789
Application Number:	15988122
Application Number:	15990468
Application Number:	15992488
Application Number:	15992905
Application Number:	15993209
Application Number:	15994524
Application Number:	15994551
Application Number:	15995590
Application Number:	15995945
Application Number:	15996092
Application Number:	15996266
Application Number:	15997459
Application Number:	16000033
Application Number:	16000103
Application Number:	16001635
Application Number:	16002357
Application Number:	16002359
Application Number:	16002391
Application Number:	16003413
Application Number:	16003914
Application Number:	16004782
Application Number:	16004806
Application Number:	16005835
Application Number:	16006816
Application Number:	16009046
Application Number:	16009075
Application Number:	16009933
Application Number:	16010234
Application Number:	16010516

Property Type	Number
Application Number:	16010518
Application Number:	16011569
Application Number:	16011572
Application Number:	16012236
Application Number:	16012311
Application Number:	16012607
Application Number:	16012661
Application Number:	16013599
Application Number:	16013889
Application Number:	16014128
Application Number:	16014151
Application Number:	16014502
Application Number:	16015024
Application Number:	16015163
Application Number:	16015606
Application Number:	16016233
Application Number:	16016427
Application Number:	16016551
Application Number:	16017806
Application Number:	16017811
Application Number:	16017950
Application Number:	16018360
Application Number:	16018915
Application Number:	16020456
Application Number:	16020742
Application Number:	16020853
Application Number:	16020992
Application Number:	16021231
Application Number:	16021300
Application Number:	16021529
Application Number:	16021602
Application Number:	16021616
Application Number:	16021687
Application Number:	16021813
Application Number:	16021857
Application Number:	16021938
Application Number:	16022116
Application Number:	16022199

Property Type	Number
Application Number:	16022273
Application Number:	16022542
Application Number:	16023767
Application Number:	16024211
Application Number:	16024607
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Application Number:	16024723
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Application Number:	16024738
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Application Number:	16052523
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Application Number:	16054863
Application Number:	16054892
Application Number:	16054918
Application Number:	16054940
Application Number:	16054972
Application Number:	16054980

Property Type	Number
Application Number:	16054989
Application Number:	16055016
Application Number:	16055021
Application Number:	16057564
Application Number:	16057571
Application Number:	16057608
Application Number:	16057643
Application Number:	16086513
Application Number:	16100148
Application Number:	16101158
Application Number:	16101169
Application Number:	16105689
Application Number:	16109489
Application Number:	16109504
Application Number:	16110079
Application Number:	16110493
Application Number:	16112429
Application Number:	16115462
Application Number:	16116806
Application Number:	16116874
Application Number:	16126579
Application Number:	16129364
Application Number:	16133552
Application Number:	16134868
Application Number:	16134910
Application Number:	16136139
Application Number:	16136152
Application Number:	16136174
Application Number:	16136972
Application Number:	16137256
Application Number:	16137261
Application Number:	16137277
Application Number:	16138193
Application Number:	16138280
Application Number:	16138476
Application Number:	16140163
Application Number:	16140192
Application Number:	16140236

Property Type	Number
Application Number:	16140448
Application Number:	16141577
Application Number:	16141806
Application Number:	16141899
Application Number:	16141906
Application Number:	16143102
Application Number:	16143242
Application Number:	16143271
Application Number:	16143963
Application Number:	16144936
Application Number:	16146238
Application Number:	16146294
Application Number:	16146697
Application Number:	16146900
Application Number:	16147161
Application Number:	16147366
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Application Number:	16147576
Application Number:	16147653
Application Number:	16148748
Application Number:	16149091
Application Number:	16152128
Application Number:	16153561
Application Number:	16156626
Application Number:	16157076
Application Number:	16157233
Application Number:	16157520
Application Number:	16157796
Application Number:	16158650
Application Number:	16158941
Application Number:	16159057
Application Number:	16163412
Application Number:	16164730
Application Number:	16167254
Application Number:	16169102
Application Number:	16169863
Application Number:	16171979
Application Number:	16174014

Property Type	Number
Application Number:	16175166
Application Number:	16175948
Application Number:	16176997
Application Number:	16177102
Application Number:	16178271
Application Number:	16178525
Application Number:	16182447
Application Number:	16186207
Application Number:	16188260
Application Number:	16189762
Application Number:	16189778
Application Number:	16189963
Application Number:	16191193
Application Number:	16191210
Application Number:	16192465
Application Number:	16193505
Application Number:	16196077
Application Number:	16203406
Application Number:	16205099
Application Number:	16206079
Application Number:	16207659
Application Number:	16208133
Application Number:	16209519
Application Number:	16209564
Application Number:	16211033
Application Number:	16212130
Application Number:	16212586
Application Number:	16212596
Application Number:	16213590
Application Number:	16216904
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Application Number:	16219825
Application Number:	16221332
Application Number:	16221378
Application Number:	16221682
Application Number:	16223041
Application Number:	16223510
Application Number:	16223662

Property Type	Number
Application Number:	16223716
Application Number:	16223850
Application Number:	16226021
Application Number:	16227168
Application Number:	16228599
Application Number:	16229855
Application Number:	16231493
Application Number:	16231499
Application Number:	16231748
Application Number:	16232639
Application Number:	16233876
Application Number:	16233968
Application Number:	16234166
Application Number:	16234184
Application Number:	16236815
Application Number:	16240274
Application Number:	16242868
Application Number:	16243070
Application Number:	16243851
Application Number:	16244252
Application Number:	16244426
Application Number:	16244924
Application Number:	16244930
Application Number:	16245070
Application Number:	16245173
Application Number:	16246401
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Application Number:	16252593
Application Number:	16254334
Application Number:	16254575
Application Number:	16256010
Application Number:	16256020
Application Number:	16256945
Application Number:	16256994

Property Type	Number
Application Number:	16258405
Application Number:	16258962
Application Number:	16259481
Application Number:	16259502
Application Number:	16259828
Application Number:	16265056
Application Number:	16267040
Application Number:	16268960
Application Number:	16271793
Application Number:	16271840
Application Number:	16274060
Application Number:	16274626
Application Number:	16275167
Application Number:	16276466
Application Number:	16276480
Application Number:	16276500
Application Number:	16276508
Application Number:	16276734
Application Number:	16277180
Application Number:	16277467
Application Number:	16277830
Application Number:	16277835
Application Number:	16277947
Application Number:	16277953
Application Number:	16278695
Application Number:	16282068
Application Number:	16282227
Application Number:	16284613
Application Number:	16287251
Application Number:	16287336
Application Number:	16287737
Application Number:	16287948
Application Number:	16288784
Application Number:	16289042
Application Number:	16289549
Application Number:	16289649
Application Number:	16289738
Application Number:	16290116

Property Type	Number
Application Number:	16290705
Application Number:	16293142
Application Number:	16293393
Application Number:	16293481
Application Number:	16295889
Application Number:	16295969
Application Number:	16295981
Application Number:	16297359
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Application Number:	16354039
Application Number:	16354053
Application Number:	16354907
Application Number:	16357522
Application Number:	16357774
Application Number:	16358310
Application Number:	16359662
Application Number:	16359747
Application Number:	16359941
Application Number:	16360902
Application Number:	16361467
Application Number:	16361493
Application Number:	16363097
Application Number:	16363661
Application Number:	16363744
Application Number:	16363935
Application Number:	16364054
Application Number:	16364347
Application Number:	16365034
Application Number:	16365080
Application Number:	16365346
Application Number:	16365562
Application Number:	16366829
Application Number:	16367080
Application Number:	16367083
Application Number:	16367140
Application Number:	16367900
Application Number:	16368092

Property Type	Number
Application Number:	16368550
Application Number:	16369710
Application Number:	16370225
Application Number:	16370280
Application Number:	16370516
Application Number:	16370616
Application Number:	16370772
Application Number:	16370811
Application Number:	16374332
Application Number:	16375529
Application Number:	16377023
Application Number:	16387413
Application Number:	16389999
Application Number:	16390370
Application Number:	16392252
Application Number:	16394687
Application Number:	16396883
Application Number:	16397993
Application Number:	16398511
Application Number:	16398591
Application Number:	16401172
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Application Number:	16412968
Application Number:	16413173
Application Number:	16413492
Application Number:	16414450
Application Number:	16414641
Application Number:	16415457
Application Number:	16415923
Application Number:	16416911
Application Number:	16417572

Property Type	Number
Application Number:	16417617
Application Number:	16418319
Application Number:	16425455
Application Number:	16425483
Application Number:	16427076
Application Number:	16428305
Application Number:	16430380
Application Number:	16431511
Application Number:	16431667
Application Number:	16432116
Application Number:	16433110
Application Number:	16433535
Application Number:	16434365
Application Number:	16436185
Application Number:	16437270
Application Number:	16438377
Application Number:	16438381
Application Number:	16438945
Application Number:	16440018
Application Number:	16440233
Application Number:	16440250
Application Number:	16440378
Application Number:	16440472
Application Number:	16440631
Application Number:	16440922
Application Number:	16441555
Application Number:	16441566
Application Number:	16441573
Application Number:	16442858
Application Number:	16442983
Application Number:	16443011
Application Number:	16444418
Application Number:	16444461
Application Number:	16444671
Application Number:	16444976
Application Number:	16445498
Application Number:	16446316
Application Number:	16446927

Property Type	Number
Application Number:	16447291
Application Number:	16447321
Application Number:	16447366
Application Number:	16447443
Application Number:	16447542
Application Number:	16447619
Application Number:	16447861
Application Number:	16449310
Application Number:	16449718
Application Number:	16449728
Application Number:	16449797
Application Number:	16449799
Application Number:	16449985
Application Number:	16450111
Application Number:	16450171
Application Number:	16450618
Application Number:	16450817
Application Number:	16450838
Application Number:	16450857
Application Number:	16450947
Application Number:	16451357
Application Number:	16451368
Application Number:	16451402
Application Number:	16451739
Application Number:	16451744
Application Number:	16451801
Application Number:	16451891
Application Number:	16451976
Application Number:	16452110
Application Number:	16452128
Application Number:	16452203
Application Number:	16452254
Application Number:	16452320
Application Number:	16452460
Application Number:	16452463
Application Number:	16452465
Application Number:	16452466
Application Number:	16452468

Property Type	Number
Application Number:	16452522
Application Number:	16453146
Application Number:	16453179
Application Number:	16453354
Application Number:	16453362
Application Number:	16453368
Application Number:	16453372
Application Number:	16453458
Application Number:	16453735
Application Number:	16453882
Application Number:	16453986
Application Number:	16453991
Application Number:	16454376
Application Number:	16454850
Application Number:	16454885
Application Number:	16455181
Application Number:	16455564
Application Number:	16455569
Application Number:	16455577
Application Number:	16455635
Application Number:	16455644
Application Number:	16455654
Application Number:	16455660
Application Number:	16455661
Application Number:	16455664
Application Number:	16455857
Application Number:	16455900
Application Number:	16456242
Application Number:	16456381
Application Number:	16456522
Application Number:	16456564
Application Number:	16457134
Application Number:	16457166
Application Number:	16457187
Application Number:	16457277
Application Number:	16457298
Application Number:	16457964
Application Number:	16458651

Property Type	Number
Application Number:	16459064
Application Number:	16459183
Application Number:	16459194
Application Number:	16459369
Application Number:	16459389
Application Number:	16504848
Application Number:	16506835
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Application Number:	16512312
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Application Number:	16535505
Application Number:	16537594
Application Number:	16538112
Application Number:	16538619
Application Number:	16548116
Application Number:	16551235
Application Number:	16551671
Application Number:	16553881
Application Number:	16554519
Application Number:	16554527
Application Number:	16557129
Application Number:	16558552
Application Number:	16559372
Application Number:	16560844
Application Number:	16563776

Property Type	Number
Application Number:	16564654
Application Number:	16564704
Application Number:	16565706
Application Number:	16566645
Application Number:	16569163
Application Number:	16569823
Application Number:	16572551
Application Number:	16572973
Application Number:	16575358
Application Number:	16577055
Application Number:	16581127
Application Number:	16583121
Application Number:	16583169
Application Number:	16583832
Application Number:	16584684
Application Number:	16585101
Application Number:	16585503
Application Number:	16586756
Application Number:	16586861
Application Number:	16586865
Application Number:	16586895
Application Number:	16586899
Application Number:	16586903
Application Number:	16591473
Application Number:	16597709
Application Number:	16597715
Application Number:	16600816
Application Number:	16600953
Application Number:	16601236
Application Number:	16655630
Application Number:	16659383
Application Number:	16661210
Application Number:	16662340
Application Number:	16666967
Application Number:	16667565
Application Number:	16667670
Application Number:	16669853
Application Number:	16670105

Property Type	Number
Application Number:	16670112
Application Number:	16675165
Application Number:	16676344
Application Number:	16681833
Application Number:	16683095
Application Number:	16683968
Application Number:	16684147
Application Number:	16684314
Application Number:	16686860
Application Number:	16686917
Application Number:	16688080
Application Number:	16688853
Application Number:	16688992
Application Number:	16690528
Application Number:	16691316
Application Number:	16691902
Application Number:	16692652
Application Number:	16692903
Application Number:	16692965
Application Number:	16693006
Application Number:	16693134
Application Number:	16693175
Application Number:	16695052
Application Number:	16695072
Application Number:	16697013
Application Number:	16697019
Application Number:	16698704
Application Number:	16700501
Application Number:	16701947
Application Number:	16702333
Application Number:	16702340
Application Number:	16702346
Application Number:	16702797
Application Number:	16703643
Application Number:	16703646
Application Number:	16704824
Application Number:	16705940
Application Number:	16706618

Property Type	Number
Application Number:	16706780
Application Number:	16706797
Application Number:	16706822
Application Number:	16708006
Application Number:	16708054
Application Number:	16708091
Application Number:	16708107
Application Number:	16709338
Application Number:	16709709
Application Number:	16710440
Application Number:	16711294
Application Number:	16712659
Application Number:	16712730
Application Number:	16713620
Application Number:	16714601
Application Number:	16716115
Application Number:	16716378
Application Number:	16716796
Application Number:	16717469
Application Number:	16718148
Application Number:	16718346
Application Number:	16718351
Application Number:	16718667
Application Number:	16718828
Application Number:	16719408
Application Number:	16720455
Application Number:	16720600
Application Number:	16721314
Application Number:	16721862
Application Number:	16722278
Application Number:	16723192
Application Number:	16723513
Application Number:	16724078
Application Number:	16724081
Application Number:	16724226
Application Number:	16725824
Application Number:	16726084
Application Number:	16727064

Property Type	Number
Application Number:	16728507
Application Number:	16728514
Application Number:	16728897
Application Number:	16728917
Application Number:	16729080
Application Number:	16730713
Application Number:	16730726
Application Number:	16730730
Application Number:	16730746
Application Number:	16730758
Application Number:	16730771
Application Number:	16730777
Application Number:	16730784
Application Number:	16731590
Application Number:	16731672
Application Number:	16731740
Application Number:	16731787
Application Number:	16732649
Application Number:	16733652
Application Number:	16736719
Application Number:	16737551
Application Number:	16738904
Application Number:	16738956
Application Number:	16739015
Application Number:	16739051
Application Number:	16739058
Application Number:	16739064
Application Number:	16739065
Application Number:	16739066
Application Number:	16739095
Application Number:	16739098
Application Number:	16741667
Application Number:	16741952
Application Number:	16743827
Application Number:	16744059
Application Number:	16744061
Application Number:	16744097
Application Number:	16746381

Property Type	Number
Application Number:	16746623
Application Number:	16746663
Application Number:	16748790
Application Number:	16748795
Application Number:	16748881
Application Number:	16749408
Application Number:	16750329
Application Number:	16751124
Application Number:	16751126
Application Number:	16751615
Application Number:	16752445
Application Number:	16752516
Application Number:	16752638
Application Number:	16773314
Application Number:	16775023
Application Number:	16776198
Application Number:	16777191
Application Number:	16777658
Application Number:	16778177
Application Number:	16778433
Application Number:	16780216
Application Number:	16780281
Application Number:	16781194
Application Number:	16781216
Application Number:	16781225
Application Number:	16781688
Application Number:	16781717
Application Number:	16781885
Application Number:	16783057
Application Number:	16784077
Application Number:	16786889
Application Number:	16787482
Application Number:	16787859
Application Number:	16788117
Application Number:	16791238
Application Number:	16791560
Application Number:	16791759
Application Number:	16792010

Property Type	Number
Application Number:	16792060
Application Number:	16794079
Application Number:	16794100
Application Number:	16798590
Application Number:	16798650
Application Number:	16798682
Application Number:	16799757
Application Number:	16801375
Application Number:	16801921
Application Number:	16802638
Application Number:	16803851
Application Number:	16803952
Application Number:	16803958
Application Number:	16803960
Application Number:	16803962
Application Number:	16805244
Application Number:	16805403
Application Number:	16805414
Application Number:	16805570
Application Number:	16806029
Application Number:	16808656
Application Number:	16811816
Application Number:	16812549
Application Number:	16814631
Application Number:	16814761
Application Number:	16814812
Application Number:	16814864
Application Number:	16815416
Application Number:	16815860
Application Number:	16816211
Application Number:	16817138
Application Number:	16817264
Application Number:	16818290
Application Number:	16818426
Application Number:	16818452
Application Number:	16818571
Application Number:	16818752
Application Number:	16818817

Property Type	Number
Application Number:	16818883
Application Number:	16818949
Application Number:	16819636
Application Number:	16820552
Application Number:	16820711
Application Number:	16821849
Application Number:	16821860
Application Number:	16821918
Application Number:	16821926
Application Number:	16822010
Application Number:	16823185
Application Number:	16823235
Application Number:	16823592
Application Number:	16823714
Application Number:	16824269
Application Number:	16824508
Application Number:	16824514
Application Number:	16824519
Application Number:	16824581
Application Number:	16824584
Application Number:	16824587
Application Number:	16824814
Application Number:	16825762
Application Number:	16825836
Application Number:	16826063
Application Number:	16827548
Application Number:	16827585
Application Number:	16827591
Application Number:	16827597
Application Number:	16827605
Application Number:	16828532
Application Number:	16828901
Application Number:	16828945
Application Number:	16828948
Application Number:	16828953
Application Number:	16829792
Application Number:	16830129
Application Number:	16830167

Property Type	Number
Application Number:	16830222
Application Number:	16830612
Application Number:	16831004
Application Number:	16831517
Application Number:	16831728
Application Number:	16831729
Application Number:	16832352
Application Number:	16832402
Application Number:	16833310
Application Number:	16833650
Application Number:	16833942
Application Number:	16834515
Application Number:	16835016
Application Number:	16835191
Application Number:	16835198
Application Number:	16835836
Application Number:	16835837
Application Number:	16836424
Application Number:	16836454
Application Number:	16836679
Application Number:	16836687
Application Number:	16836730
Application Number:	16836764
Application Number:	16837313
Application Number:	16837786
Application Number:	16837889
Application Number:	16845685
Application Number:	16847352
Application Number:	16848700
Application Number:	16851510
Application Number:	16851568
Application Number:	16851574
Application Number:	16852091
Application Number:	16852462
Application Number:	16853233
Application Number:	16853275
Application Number:	16853407
Application Number:	16853408

Property Type	Number
Application Number:	16853440
Application Number:	16854677
Application Number:	16855549
Application Number:	16857053
Application Number:	16857423
Application Number:	16858223
Application Number:	16858265
Application Number:	16858318
Application Number:	16858332
Application Number:	16858339
Application Number:	16858345
Application Number:	16858350
Application Number:	16858356
Application Number:	16858358
Application Number:	16858390
Application Number:	16859494
Application Number:	16859940
Application Number:	16860720
Application Number:	16861068
Application Number:	16861118
Application Number:	16861207
Application Number:	16861543
Application Number:	16861565
Application Number:	16862436
Application Number:	16862439
Application Number:	16863417
Application Number:	16863503
Application Number:	16864050
Application Number:	16864257
Application Number:	16866070
Application Number:	16867373
Application Number:	16867380
Application Number:	16867793
Application Number:	16868354
Application Number:	16869424
Application Number:	16870176
Application Number:	16870612
Application Number:	16870658

Property Type	Number
Application Number:	16870930
Application Number:	16872222
Application Number:	16872613
Application Number:	16874101
Application Number:	16874751
Application Number:	16874899
Application Number:	16875078
Application Number:	16876365
Application Number:	16877765
Application Number:	16878230
Application Number:	16878910
Application Number:	16879595
Application Number:	16879601
Application Number:	16880772
Application Number:	16880845
Application Number:	16882843
Application Number:	16883894
Application Number:	16883897
Application Number:	16883901
Application Number:	16883911
Application Number:	16883916
Application Number:	16883918
Application Number:	16884324
Application Number:	16884569
Application Number:	16884577
Application Number:	16885073
Application Number:	16885076
Application Number:	16885143
Application Number:	16885147
Application Number:	16885160
Application Number:	16885655
Application Number:	16885775
Application Number:	16885801
Application Number:	16886679
Application Number:	16886685
Application Number:	16887107
Application Number:	16887563
Application Number:	16887715

Property Type	Number
Application Number:	16887747
Application Number:	16888009
Application Number:	16888017
Application Number:	16888095
Application Number:	16888485
Application Number:	16888571
Application Number:	16889383
Application Number:	16889416
Application Number:	16889459
Application Number:	16889501
Application Number:	16889629
Application Number:	16889644
Application Number:	16890246
Application Number:	16890270
Application Number:	16890973
Application Number:	16891348
Application Number:	16891683
Application Number:	16891702
Application Number:	16891802
Application Number:	16892966
Application Number:	16893011
Application Number:	16893016
Application Number:	16893033
Application Number:	16893204
Application Number:	16893397
Application Number:	16894068
Application Number:	16894481
Application Number:	16894665
Application Number:	16895075
Application Number:	16895853
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Application Number:	16896029
Application Number:	16896134
Application Number:	16896142
Application Number:	16896615
Application Number:	16897151
Application Number:	16897499
Application Number:	16897724

Property Type	Number
Application Number:	16897910
Application Number:	16898098
Application Number:	16898119
Application Number:	16899262
Application Number:	16899276
Application Number:	16899366
Application Number:	16899374
Application Number:	16899536
Application Number:	16899580
Application Number:	16899923
Application Number:	16899958
Application Number:	16899972
Application Number:	16899992
Application Number:	16900639
Application Number:	16900764
Application Number:	16901524
Application Number:	16901633
Application Number:	16903054
Application Number:	16903253
Application Number:	16903277
Application Number:	16903282
Application Number:	16903930
Application Number:	16904255
Application Number:	16904400
Application Number:	16904808
Application Number:	16905387
Application Number:	16905781
Application Number:	16905789
Application Number:	16905796
Application Number:	16906404
Application Number:	16906480
Application Number:	16906497
Application Number:	16906516
Application Number:	16906644
Application Number:	16906961
Application Number:	16907003
Application Number:	16907031
Application Number:	16907523

Property Type	Number
Application Number:	16908035
Application Number:	16908147
Application Number:	16908270
Application Number:	16908576
Application Number:	16908581
Application Number:	16908642
Application Number:	16908709
Application Number:	16909018
Application Number:	16909527
Application Number:	16909563
Application Number:	16909751
Application Number:	16909785
Application Number:	16909794
Application Number:	16909798
Application Number:	16909815
Application Number:	16910512
Application Number:	16910869
Application Number:	16910886
Application Number:	16910893
Application Number:	16910905
Application Number:	16910973
Application Number:	16911064
Application Number:	16911083
Application Number:	16911143
Application Number:	16911296
Application Number:	16911312
Application Number:	16911342
Application Number:	16911356
Application Number:	16911787
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Application Number:	16912500
Application Number:	16912509
Application Number:	16912514
Application Number:	16912572
Application Number:	16912577
Application Number:	16912588
Application Number:	16912615
Application Number:	16912912

Property Type	Number
Application Number:	16913044
Application Number:	16913383
Application Number:	16913596
Application Number:	16913825
Application Number:	16914201
Application Number:	16914206
Application Number:	16914764
Application Number:	16914790
Application Number:	16915397
Application Number:	16915617
Application Number:	16915698
Application Number:	16915709
Application Number:	16915718
Application Number:	16915723
Application Number:	16915730
Application Number:	16915739
Application Number:	16915742
Application Number:	16915793
Application Number:	16915856
Application Number:	16915910
Application Number:	16915962
Application Number:	16915981
Application Number:	16916019
Application Number:	16916107
Application Number:	16916730
Application Number:	16916784
Application Number:	16916945
Application Number:	16917206
Application Number:	16917231
Application Number:	16917291
Application Number:	16917334
Application Number:	16917373
Application Number:	16917458
Application Number:	16917470
Application Number:	16917484
Application Number:	16917487
Application Number:	16917521
Application Number:	16917534

Property Type	Number
Application Number:	16917544
Application Number:	16917634
Application Number:	16917654
Application Number:	16917870
Application Number:	16918837
Application Number:	16918841
Application Number:	16918848
Application Number:	16919593
Application Number:	16920093
Application Number:	16921033
Application Number:	16921719
Application Number:	16921804
Application Number:	16922900
Application Number:	16923849
Application Number:	16924074
Application Number:	16924186
Application Number:	16925185
Application Number:	16925188
Application Number:	16925191
Application Number:	16925343
Application Number:	16926429
Application Number:	16928292
Application Number:	16928737
Application Number:	16928953
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Application Number:	16929887
Application Number:	16931302
Application Number:	16931305
Application Number:	16931309
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Application Number:	16932477
Application Number:	16932539
Application Number:	16933177
Application Number:	16933802
Application Number:	16933997
Application Number:	16934971
Application Number:	16935763
Application Number:	16936303

Property Type	Number
Application Number:	16936320
Application Number:	16936780
Application Number:	16937067
Application Number:	16937308
Application Number:	16937420
Application Number:	16937455
Application Number:	16943995
Application Number:	16944758
Application Number:	16944826
Application Number:	16946031
Application Number:	16946034
Application Number:	16946539
Application Number:	16946615
Application Number:	16950117
Application Number:	16984478
Application Number:	16991971
Application Number:	16994472
Application Number:	16995050
Application Number:	16995656
Application Number:	16996723
Application Number:	16997701
Application Number:	16998989
Application Number:	17001593
Application Number:	17004534
Application Number:	17004690
Application Number:	17008926
Application Number:	17009487
Application Number:	17010698
Application Number:	17017626
Application Number:	17028484
Application Number:	17029826
Application Number:	17029833
Application Number:	17036889
Application Number:	17037308
Application Number:	17039840
Application Number:	17064415
Application Number:	17068700
Application Number:	17069663

Property Type	Number
Application Number:	17075980
Application Number:	17078351
Application Number:	17086152
Application Number:	17086159
Application Number:	17094686
Application Number:	17098831
Application Number:	17100199
Application Number:	17103695
Application Number:	17107597
Application Number:	17107611
Application Number:	17107637
Application Number:	17107847
Application Number:	17115146
Application Number:	17127290
Application Number:	17127306
Application Number:	17137990
Application Number:	17141068
Application Number:	17142027
Application Number:	17143001
Application Number:	17149491
Application Number:	17152486
Application Number:	17153713
Application Number:	17153719
Application Number:	17160263
Application Number:	17162165
Application Number:	17170435
Application Number:	17170498
Application Number:	17171576
Application Number:	17171599
Application Number:	17171612
Application Number:	17171617
Application Number:	17171637
Application Number:	17171644
Application Number:	17171657
Application Number:	17171746
Application Number:	17171852
Application Number:	17172155
Application Number:	17172175

Property Type	Number
Application Number:	17172190
Application Number:	17172244
Application Number:	17172362
Application Number:	17172371
Application Number:	17172513
Application Number:	17173017
Application Number:	17173805
Application Number:	17173843
Application Number:	17174281
Application Number:	17174657
Application Number:	17174681
Application Number:	17174802
Application Number:	17175069
Application Number:	17175099
Application Number:	17175170
Application Number:	17175322
Application Number:	17175449
Application Number:	17175555
Application Number:	17175762
Application Number:	17175976
Application Number:	17175998
Application Number:	17176024
Application Number:	17176282
Application Number:	17176302
Application Number:	17176354
Application Number:	17176445
Application Number:	17176461
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Application Number:	17176591
Application Number:	17176633
Application Number:	17176697
Application Number:	17176765
Application Number:	17176813
Application Number:	17176818
Application Number:	17176831
Application Number:	17176833
Application Number:	17176852
Application Number:	17176867

Property Type	Number
Application Number:	17177031
Application Number:	17177102
Application Number:	17177163
Application Number:	17177292
Application Number:	17177310
Application Number:	17177323
Application Number:	17177334
Application Number:	17177480
Application Number:	17177505
Application Number:	17177523
Application Number:	17177629
Application Number:	17177647
Application Number:	17177715
Application Number:	17177940
Application Number:	17178307
Application Number:	17178344
Application Number:	17178376
Application Number:	17178401
Application Number:	17178433
Application Number:	17178447
Application Number:	17178760
Application Number:	17178770
Application Number:	17178809
Application Number:	17179075
Application Number:	17179107
Application Number:	17179173
Application Number:	17179511
Application Number:	17179542
Application Number:	17179753
Application Number:	17179786
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Application Number:	17179953
Application Number:	17179967
Application Number:	17179987
Application Number:	17180006
Application Number:	17180057
Application Number:	17180067
Application Number:	17180247

Property Type	Number
Application Number:	17180625
Application Number:	17180631
Application Number:	17180642
Application Number:	17180651
Application Number:	17180656
Application Number:	17180659
Application Number:	17180660
Application Number:	17180779
Application Number:	17180782
Application Number:	17180803
Application Number:	17180806
Application Number:	17180998
Application Number:	17181044
Application Number:	17181523
Application Number:	17181553
Application Number:	17181621
Application Number:	17181648
Application Number:	17181675
Application Number:	17181709
Application Number:	17181805
Application Number:	17181886
Application Number:	17181894
Application Number:	17181902
Application Number:	17181907
Application Number:	17181910
Application Number:	17182023
Application Number:	17182027
Application Number:	17182032
Application Number:	17182033
Application Number:	17182038
Application Number:	17182099
Application Number:	17182157
Application Number:	17182177
Application Number:	17182365
Application Number:	17182461
Application Number:	17182485
Application Number:	17182499
Application Number:	17182574

Property Type	Number
Application Number:	17182589
Application Number:	17182698
Application Number:	17182725
Application Number:	17182759
Application Number:	17182784
Application Number:	17182816
Application Number:	17182829
Application Number:	17183140
Application Number:	17183148
Application Number:	17183153
Application Number:	17183155
Application Number:	17183161
Application Number:	17183166
Application Number:	17183190
Application Number:	17183203
Application Number:	17183678
Application Number:	17183703
Application Number:	17183784
Application Number:	17183826
Application Number:	17183991
Application Number:	17184154
Application Number:	17184170
Application Number:	17184371
Application Number:	17184375
Application Number:	17184387
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Application Number:	17184529
Application Number:	17184531
Application Number:	17184533
Application Number:	17184536
Application Number:	17184538
Application Number:	17184541
Application Number:	17184543
Application Number:	17184549
Application Number:	17184550
Application Number:	17185120

Property Type	Number
Application Number:	17185325
Application Number:	17185789
Application Number:	17185791
Application Number:	17185792
Application Number:	17185797
Application Number:	17185859
Application Number:	17186646
Application Number:	17186715
Application Number:	17186764
Application Number:	17187046
Application Number:	17187060
Application Number:	17187275
Application Number:	17187308
Application Number:	17187695
Application Number:	17189548
Application Number:	17191195
Application Number:	17191849
Application Number:	17192142
Application Number:	17192354
Application Number:	17193920
Application Number:	17193954
Application Number:	17194636
Application Number:	17195399
Application Number:	17197488
Application Number:	17197762
Application Number:	17197908
Application Number:	17198534
Application Number:	17199135
Application Number:	17199534
Application Number:	17202163
Application Number:	17202601
Application Number:	17203271
Application Number:	17203420
Application Number:	17203533
Application Number:	17204234
Application Number:	17204277
Application Number:	17204552
Application Number:	17205094

Property Type	Number
Application Number:	17206128
Application Number:	17207725
Application Number:	17210073
Application Number:	17210091
Application Number:	17210174
Application Number:	17210277
Application Number:	17210428
Application Number:	17210919
Application Number:	17210936
Application Number:	17211540
Application Number:	17211592
Application Number:	17211599
Application Number:	17211602
Application Number:	17211605
Application Number:	17212526
Application Number:	17213005
Application Number:	17213486
Application Number:	17213997
Application Number:	17214215
Application Number:	17214870
Application Number:	17215898
Application Number:	17215942
Application Number:	17216046
Application Number:	17216468
Application Number:	17216568
Application Number:	17218160
Application Number:	17218179
Application Number:	17218180
Application Number:	17220828
Application Number:	17220836
Application Number:	17222459
Application Number:	17222565
Application Number:	17222861
Application Number:	17224732
Application Number:	17225385
Application Number:	17227097
Application Number:	17227231
Application Number:	17228010

Property Type	Number
Application Number:	17228016
Application Number:	17228088
Application Number:	17228715
Application Number:	17229429
Application Number:	17229560
Application Number:	17229565
Application Number:	17230392
Application Number:	17230654
Application Number:	17230753
Application Number:	17231344
Application Number:	17232704
Application Number:	17232888
Application Number:	17234051
Application Number:	17234324
Application Number:	17234387
Application Number:	17235499
Application Number:	17235816
Application Number:	17236704
Application Number:	17236730
Application Number:	17237604
Application Number:	17237949
Application Number:	17239057
Application Number:	17239174
Application Number:	17240691
Application Number:	17241846
Application Number:	17241990
Application Number:	17242013
Application Number:	17243348
Application Number:	17244794
Application Number:	17244799
Application Number:	17306073
Application Number:	17306893
Application Number:	17313793
Application Number:	17314374
Application Number:	17314712
Application Number:	17314772
Application Number:	17315202
Application Number:	17316189

Property Type	Number
Application Number:	17316981
Application Number:	17317018
Application Number:	17318259
Application Number:	17318956
Application Number:	17319605
Application Number:	17319756
Application Number:	17319991
Application Number:	17320836
Application Number:	17321032
Application Number:	17321736
Application Number:	17323132
Application Number:	17324679
Application Number:	17324706
Application Number:	17326231
Application Number:	17326628
Application Number:	17326868
Application Number:	17327013
Application Number:	17328013
Application Number:	17330176
Application Number:	17330286
Application Number:	17330675
Application Number:	17331346
Application Number:	17331453
Application Number:	17331958
Application Number:	17332552
Application Number:	17332727
Application Number:	17332974
Application Number:	17332986
Application Number:	17333007
Application Number:	17335623
Application Number:	17335649
Application Number:	17335863
Application Number:	17336314
Application Number:	17336577
Application Number:	17336603
Application Number:	17338464
Application Number:	17338487
Application Number:	17338595

Property Type	Number
Application Number:	17338944
Application Number:	17338952
Application Number:	17339409
Application Number:	17339547
Application Number:	17340027
Application Number:	17340372
Application Number:	17340399
Application Number:	17341049
Application Number:	17341090
Application Number:	17341119
Application Number:	17341814
Application Number:	17342183
Application Number:	17342239
Application Number:	17343069
Application Number:	17343357
Application Number:	17343583
Application Number:	17344350
Application Number:	17345149
Application Number:	17345434
Application Number:	17345634
Application Number:	17345676
Application Number:	17345877
Application Number:	17345972
Application Number:	17346122
Application Number:	17346699
Application Number:	17346732
Application Number:	17347234
Application Number:	17347457
Application Number:	17347472
Application Number:	17348148
Application Number:	17348519
Application Number:	17348989
Application Number:	17349438
Application Number:	17349445
Application Number:	17349508
Application Number:	17349515
Application Number:	17349598
Application Number:	17349698

Property Type	Number
Application Number:	17350882
Application Number:	17350903
Application Number:	17351455
Application Number:	17351666
Application Number:	17352874
Application Number:	17352953
Application Number:	17353043
Application Number:	17353068
Application Number:	17353176
Application Number:	17353192
Application Number:	17353456
Application Number:	17353472
Application Number:	17353584
Application Number:	17353781
Application Number:	17354005
Application Number:	17354096
Application Number:	17354119
Application Number:	17354168
Application Number:	17354457
Application Number:	17355590
Application Number:	17356044
Application Number:	17356054
Application Number:	17356155
Application Number:	17356206
Application Number:	17356277
Application Number:	17356331
Application Number:	17356403
Application Number:	17356408
Application Number:	17356413
Application Number:	17356999
Application Number:	17357004
Application Number:	17357030
Application Number:	17357053
Application Number:	17357153
Application Number:	17357759
Application Number:	17357852
Application Number:	17357856
Application Number:	17357859

Property Type	Number
Application Number:	17358431
Application Number:	17358457
Application Number:	17358576
Application Number:	17358739
Application Number:	17358749
Application Number:	17358786
Application Number:	17358810
Application Number:	17358927
Application Number:	17358990
Application Number:	17359046
Application Number:	17359098
Application Number:	17359132
Application Number:	17359171
Application Number:	17359199
Application Number:	17359344
Application Number:	17359352
Application Number:	17359644
Application Number:	17360373
Application Number:	17360544
Application Number:	17360671
Application Number:	17361272
Application Number:	17361496
Application Number:	17361532
Application Number:	17361997
Application Number:	17362060
Application Number:	17362255
Application Number:	17362330
Application Number:	17362427
Application Number:	17362809
Application Number:	17362992
Application Number:	17363000
Application Number:	17363490
Application Number:	17365863
Application Number:	17369307
Application Number:	17370716
Application Number:	17375296
Application Number:	17375987
Application Number:	17380811

Property Type	Number
Application Number:	17382424
Application Number:	17387270
Application Number:	17387563
Application Number:	17387609
Application Number:	17387638
Application Number:	17390643
Application Number:	17391842
Application Number:	17392111
Application Number:	17395018
Application Number:	17395291
Application Number:	17395306
Application Number:	17395820
Application Number:	17396199
Application Number:	17396213
Application Number:	17396234
Application Number:	17396243
Application Number:	17396359
Application Number:	17397245
Application Number:	17398714
Application Number:	17400609
Application Number:	17401846
Application Number:	17401856
Application Number:	17402370
Application Number:	17404924
Application Number:	17405923
Application Number:	17405954
Application Number:	17405991
Application Number:	17409667
Application Number:	17411770
Application Number:	17411918
Application Number:	17412140
Application Number:	17412145
Application Number:	17412151
Application Number:	17412153
Application Number:	17412158
Application Number:	17412159
Application Number:	17412161
Application Number:	17412889

Property Type	Number
Application Number:	17448166
Application Number:	17448167
Application Number:	17448168
Application Number:	17448170
Application Number:	17450525
Application Number:	17450533
Application Number:	17450940
Application Number:	17452310
Application Number:	17453047
Application Number:	17454711
Application Number:	17454880
Application Number:	17455007
Application Number:	17455120
Application Number:	17455696
Application Number:	17455839
Application Number:	17455862
Application Number:	17455885
Application Number:	17455887
Application Number:	17456440
Application Number:	17456443
Application Number:	17457404
Application Number:	17457587
Application Number:	17457659
Application Number:	17458045
Application Number:	17460531
Application Number:	17460651
Application Number:	17461405
Application Number:	17461482
Application Number:	17463089
Application Number:	17463340
Application Number:	17463358
Application Number:	17463368
Application Number:	17464384
Application Number:	17464533
Application Number:	17465165
Application Number:	17465192
Application Number:	17465391
Application Number:	17465423

Property Type	Number
Application Number:	17465455
Application Number:	17465848
Application Number:	17470141
Application Number:	17471028
Application Number:	17471608
Application Number:	17472019
Application Number:	17472415
Application Number:	17474345
Application Number:	17475217
Application Number:	17476227
Application Number:	17476955
Application Number:	17476966
Application Number:	17477958
Application Number:	17479790
Application Number:	17479795
Application Number:	17480301
Application Number:	17481575
Application Number:	17482690
Application Number:	17486310
Application Number:	17486322
Application Number:	17486528
Application Number:	17488703
Application Number:	17489378
Application Number:	17490279
Application Number:	17490531
Application Number:	17491379
Application Number:	17492107
Application Number:	17492175
Application Number:	17492224
Application Number:	17492450
Application Number:	17493719
Application Number:	17493722
Application Number:	17494129
Application Number:	17494825
Application Number:	17495015
Application Number:	17495994
Application Number:	17499572
Application Number:	17499588

Property Type	Number
Application Number:	17500125
Application Number:	17500572
Application Number:	17500653
Application Number:	17501890
Application Number:	17503198
Application Number:	17503612
Application Number:	17503950
Application Number:	17504440
Application Number:	17506212
Application Number:	17506660
Application Number:	17507480
Application Number:	17510212
Application Number:	17511917
Application Number:	17512127
Application Number:	17512216
Application Number:	17514441
Application Number:	17514771
Application Number:	17515977
Application Number:	17516188
Application Number:	17517911
Application Number:	17518144
Application Number:	17519261
Application Number:	17519434
Application Number:	17520936
Application Number:	17522128
Application Number:	17522366
Application Number:	17522404
Application Number:	17522646
Application Number:	17523124
Application Number:	17525790
Application Number:	17527687
Application Number:	17527792
Application Number:	17528390
Application Number:	17528768
Application Number:	17529189
Application Number:	17529193
Application Number:	17530056
Application Number:	17531734

Property Type	Number
Application Number:	17531975
Application Number:	17533019
Application Number:	17533523
Application Number:	17534400
Application Number:	17534832
Application Number:	17536800
Application Number:	17537302
Application Number:	17539062
Application Number:	17539793
Application Number:	17539800
Application Number:	17539807
Application Number:	17540371
Application Number:	17540682
Application Number:	17541028
Application Number:	17541219
Application Number:	17541794
Application Number:	17541969
Application Number:	17542795
Application Number:	17542815
Application Number:	17543209
Application Number:	17543434
Application Number:	17543441
Application Number:	17543463
Application Number:	17543473
Application Number:	17545051
Application Number:	17545926
Application Number:	17547455
Application Number:	17550175
Application Number:	17550682
Application Number:	17550991
Application Number:	17551911
Application Number:	17551981
Application Number:	17552072
Application Number:	17553024
Application Number:	17554414
Application Number:	17555254
Application Number:	17555957
Application Number:	17556913

Property Type	Number
Application Number:	17556935
Application Number:	17557528
Application Number:	17557541
Application Number:	17557545
Application Number:	17558014
Application Number:	17558089
Application Number:	17558954
Application Number:	17559327
Application Number:	17559802
Application Number:	17561180
Application Number:	17561881
Application Number:	17561898
Application Number:	17562105
Application Number:	17562490
Application Number:	17562703
Application Number:	17563533
Application Number:	17564193
Application Number:	17564485
Application Number:	17565768
Application Number:	17565928
Application Number:	17567098
Application Number:	17567099
Application Number:	17569356
Application Number:	17569360
Application Number:	17569362
Application Number:	17569375
Application Number:	17571841
Application Number:	17571922
Application Number:	17572344
Application Number:	17572917
Application Number:	17573169
Application Number:	17575840
Application Number:	17575963
Application Number:	17575976
Application Number:	17576038
Application Number:	17576634
Application Number:	17577300
Application Number:	17579147

Property Type	Number
Application Number:	17579246
Application Number:	17579947
Application Number:	17580293
Application Number:	17580561
Application Number:	17582435
Application Number:	17582642
Application Number:	17583402
Application Number:	17584020
Application Number:	17584097
Application Number:	17585410
Application Number:	17588473
Application Number:	17588682
Application Number:	17588758
Application Number:	17589973
Application Number:	17590561
Application Number:	17591129
Application Number:	17591200
Application Number:	17591414
Application Number:	17592237
Application Number:	17592350
Application Number:	17592814
Application Number:	17592920
Application Number:	17592953
Application Number:	17602319
Application Number:	17643398
Application Number:	17643401
Application Number:	17643783
Application Number:	17643789
Application Number:	17643792
Application Number:	17644228
Application Number:	17644231
Application Number:	17646095
Application Number:	17646378
Application Number:	17647809
Application Number:	17649246
Application Number:	17649249
Application Number:	17649291
Application Number:	17649614

Property Type	Number
Application Number:	17649703
Application Number:	17649999
Application Number:	17650490
Application Number:	17651100
Application Number:	17651117
Application Number:	17651254
Application Number:	17651257
Application Number:	17652066
Application Number:	17652067
Application Number:	17652070
Application Number:	17652652
Application Number:	17652811
Application Number:	17652815
Application Number:	17652872
Application Number:	17652918
Application Number:	17653113
Application Number:	17653364
Application Number:	17654257
Application Number:	17654369
Application Number:	17654528
Application Number:	17654979
Application Number:	17657248
Application Number:	17657455
Application Number:	17657456
Application Number:	17657844
Application Number:	17658443
Application Number:	17658447
Application Number:	17659688
Application Number:	17659809
Application Number:	17660878
Application Number:	17661578
Application Number:	17665330
Application Number:	17667242
Application Number:	17668037
Application Number:	17670087
Application Number:	17670763
Application Number:	17671855
Application Number:	17672050

Property Type	Number
Application Number:	17673150
Application Number:	17673537
Application Number:	17675951
Application Number:	17678428
Application Number:	17678765
Application Number:	17679219
Application Number:	17679565
Application Number:	17680043
Application Number:	17680068
Application Number:	17682060
Application Number:	17682640
Application Number:	17683737
Application Number:	17683958
Application Number:	17684133
Application Number:	17684139
Application Number:	17685184
Application Number:	17686620
Application Number:	17687875
Application Number:	17687890
Application Number:	17688099
Application Number:	17688384
Application Number:	17688999
Application Number:	17689798
Application Number:	17689809
Application Number:	17689817
Application Number:	17689821
Application Number:	17691904
Application Number:	17692889
Application Number:	17693255
Application Number:	17693626
Application Number:	17693877
Application Number:	17694244
Application Number:	17694255
Application Number:	17694470
Application Number:	17695518
Application Number:	17697859
Application Number:	17697861
Application Number:	17699979

Property Type	Number
Application Number:	17700362
Application Number:	17700893
Application Number:	17700995
Application Number:	17701348
Application Number:	17701578
Application Number:	17702691
Application Number:	17703318
Application Number:	17704434
Application Number:	17705122
Application Number:	17705147
Application Number:	17706335
Application Number:	17707368
Application Number:	17707809
Application Number:	17708558
Application Number:	17708663
Application Number:	17709699
Application Number:	17709745
Application Number:	17711225
Application Number:	17712023
Application Number:	17713126
Application Number:	17713734
Application Number:	17713736
Application Number:	17714328
Application Number:	17714379
Application Number:	17714446
Application Number:	17714793
Application Number:	17714837
Application Number:	17714861
Application Number:	17714863
Application Number:	17714886
Application Number:	17715673
Application Number:	17716296
Application Number:	17716312
Application Number:	17717533
Application Number:	17717707
Application Number:	17717748
Application Number:	17718021
Application Number:	17719049

Property Type	Number
Application Number:	17719815
Application Number:	17720106
Application Number:	17720248
Application Number:	17721117
Application Number:	17721137
Application Number:	17721688
Application Number:	17723263
Application Number:	17723635
Application Number:	17723887
Application Number:	17724617
Application Number:	17724689
Application Number:	17724725
Application Number:	17725197
Application Number:	17725359
Application Number:	17725367
Application Number:	17725764
Application Number:	17726755
Application Number:	17726762
Application Number:	17726923
Application Number:	17726990
Application Number:	17727461
Application Number:	17727805
Application Number:	17728850
Application Number:	17729346
Application Number:	17729729
Application Number:	17729746
Application Number:	17729843
Application Number:	17729854
Application Number:	17729856
Application Number:	17731762
Application Number:	17732611
Application Number:	17732943
Application Number:	17734398
Application Number:	17735277
Application Number:	17736072
Application Number:	17736378
Application Number:	17737618
Application Number:	17737686

Property Type	Number
Application Number:	17737830
Application Number:	17737838
Application Number:	17737852
Application Number:	17737877
Application Number:	17738425
Application Number:	17739552
Application Number:	17740293
Application Number:	17740826
Application Number:	17740836
Application Number:	17741192
Application Number:	17741207
Application Number:	17741213
Application Number:	17741217
Application Number:	17741242
Application Number:	17741244
Application Number:	17741347
Application Number:	17741422
Application Number:	17741955
Application Number:	17742082
Application Number:	17743184
Application Number:	17743285
Application Number:	17743287
Application Number:	17743292
Application Number:	17743295
Application Number:	17743298
Application Number:	17743386
Application Number:	17743391
Application Number:	17743393
Application Number:	17743619
Application Number:	17743622
Application Number:	17743926
Application Number:	17744291
Application Number:	17744551
Application Number:	17744901
Application Number:	17746019
Application Number:	17746068
Application Number:	17746090
Application Number:	17746104

Property Type	Number
Application Number:	17746402
Application Number:	17746571
Application Number:	17746849
Application Number:	17746897
Application Number:	17747056
Application Number:	17747076
Application Number:	17748336
Application Number:	17749711
Application Number:	17750026
Application Number:	17750047
Application Number:	17750058
Application Number:	17750219
Application Number:	17750864
Application Number:	17751159
Application Number:	17752112
Application Number:	17752208
Application Number:	17752264
Application Number:	17752305
Application Number:	17752470
Application Number:	17752771
Application Number:	17804490
Application Number:	17810710
Application Number:	17821166
Application Number:	17822119
Application Number:	17824066
Application Number:	17824700
Application Number:	17824745
Application Number:	17825824
Application Number:	17827193
Application Number:	17827692
Application Number:	17828226
Application Number:	17828285
Application Number:	17828334
Application Number:	17828368
Application Number:	17828489
Application Number:	17829479
Application Number:	17829481
Application Number:	17829563

Property Type	Number
Application Number:	17829653
Application Number:	17829712
Application Number:	17829719
Application Number:	17830528
Application Number:	17830941
Application Number:	17831343
Application Number:	17831810
Application Number:	17833027
Application Number:	17834051
Application Number:	17834209
Application Number:	17834219
Application Number:	17834226
Application Number:	17834840
Application Number:	17835502
Application Number:	17836861
Application Number:	17836927
Application Number:	17837175
Application Number:	17837345
Application Number:	17837858
Application Number:	17838481
Application Number:	17838491
Application Number:	17838493
Application Number:	17839011
Application Number:	17839172
Application Number:	17839615
Application Number:	17839626
Application Number:	17839628
Application Number:	17839712
Application Number:	17839727
Application Number:	17839732
Application Number:	17840303
Application Number:	17840322
Application Number:	17840446
Application Number:	17841357
Application Number:	17841378
Application Number:	17841432
Application Number:	17841460
Application Number:	17841600

Property Type	Number
Application Number:	17842563
Application Number:	17843524
Application Number:	17843629
Application Number:	17843641
Application Number:	17843675
Application Number:	17844491
Application Number:	17845630
Application Number:	17845770
Application Number:	17845777
Application Number:	17845788
Application Number:	17845792
Application Number:	17845797
Application Number:	17845809
Application Number:	17846316
Application Number:	17846335
Application Number:	17847039
Application Number:	17847068
Application Number:	17847078
Application Number:	17847080
Application Number:	17847089
Application Number:	17847101
Application Number:	17848006
Application Number:	17848300
Application Number:	17849159
Application Number:	17849462
Application Number:	17849504
Application Number:	17849510
Application Number:	17849512
Application Number:	17849702
Application Number:	17849703
Application Number:	17849957
Application Number:	17850352
Application Number:	17850423
Application Number:	17850483
Application Number:	17850767
Application Number:	17850787
Application Number:	17850858
Application Number:	17850873

Property Type	Number
Application Number:	17850945
Application Number:	17851566
Application Number:	17851595
Application Number:	17852103
Application Number:	17852129
Application Number:	17852245
Application Number:	17852290
Application Number:	17852301
Application Number:	17852360
Application Number:	17852363
Application Number:	17852366
Application Number:	17852704
Application Number:	17852707
Application Number:	17852709
Application Number:	17852718
Application Number:	17853266
Application Number:	17853510
Application Number:	17853589
Application Number:	17853752
Application Number:	17853896
Application Number:	17854312
Application Number:	17854568
Application Number:	17854592
Application Number:	17854617
Application Number:	17854785
Application Number:	17855045
Application Number:	17855660
Application Number:	17856073
Application Number:	17857224
Application Number:	17858754
Application Number:	17860203
Application Number:	17860238
Application Number:	17860263
Application Number:	17860318
Application Number:	17860343
Application Number:	17860369
Application Number:	17860548
Application Number:	17864101

Property Type	Number
Application Number:	17864259
Application Number:	17864265
Application Number:	17864609
Application Number:	17865641
Application Number:	17865660
Application Number:	17867477
Application Number:	17868586
Application Number:	17869325
Application Number:	17869951
Application Number:	17869991
Application Number:	17870395
Application Number:	17870407
Application Number:	17870414
Application Number:	17871297
Application Number:	17873318
Application Number:	17873882
Application Number:	17874555
Application Number:	17874903
Application Number:	17875054
Application Number:	17875074
Application Number:	17875741
Application Number:	17876900
Application Number:	17877554
Application Number:	17878253
Application Number:	17878388
Application Number:	17878490
Application Number:	17878589
Application Number:	17880251
Application Number:	17881220
Application Number:	17883976
Application Number:	17883989
Application Number:	17885265
Application Number:	17885288
Application Number:	17886155
Application Number:	17886163
Application Number:	17886244
Application Number:	17887687
Application Number:	17888845

Property Type	Number
Application Number:	17889088
Application Number:	17895541
Application Number:	17895566
Application Number:	17895640
Application Number:	17896717
Application Number:	17897028
Application Number:	17897040
Application Number:	17897374
Application Number:	17897928
Application Number:	17899073
Application Number:	17899139
Application Number:	17899823
Application Number:	17900276
Application Number:	17900317
Application Number:	17901157
Application Number:	17901719
Application Number:	17902113
Application Number:	17902641
Application Number:	17903131
Application Number:	17903189
Application Number:	17903528
Application Number:	17903632
Application Number:	17903750
Application Number:	17903965
Application Number:	17905724
Application Number:	17931447
Application Number:	17933720
Application Number:	17933823
Application Number:	17939186
Application Number:	17939537
Application Number:	17939795
Application Number:	17941573
Application Number:	17941664
Application Number:	17942452
Application Number:	17943767
Application Number:	17944516
Application Number:	17945187
Application Number:	17945586

Property Type	Number
Application Number:	17945747
Application Number:	17946399
Application Number:	17946537
Application Number:	17946541
Application Number:	17946565
Application Number:	17947075
Application Number:	17948059
Application Number:	17949127
Application Number:	17949130
Application Number:	17949132
Application Number:	17950386
Application Number:	17950593
Application Number:	17950603
Application Number:	17951490
Application Number:	17951596
Application Number:	17951993
Application Number:	17952463
Application Number:	17953104
Application Number:	17954089
Application Number:	17954252
Application Number:	17954679
Application Number:	17954757
Application Number:	17955403
Application Number:	17955432
Application Number:	17956780
Application Number:	17956783
Application Number:	17956784
Application Number:	17956786
Application Number:	17957330
Application Number:	17958182
Application Number:	17958185
Application Number:	17958594
Application Number:	17958610
Application Number:	17958877
Application Number:	17958934
Application Number:	17959029
Application Number:	17959037
Application Number:	17959497

Property Type	Number
Application Number:	17959899
Application Number:	17961468
Application Number:	17965168
Application Number:	17968249
Application Number:	17970190
Application Number:	17970221
Application Number:	17980177
Application Number:	17991620
Application Number:	17996360
Application Number:	18004402
Application Number:	18053644
Application Number:	18065098
Application Number:	18071340
Application Number:	18076578
Application Number:	18081446
Application Number:	18082721
Application Number:	18082730
Application Number:	18093596
Application Number:	18093734
Application Number:	18095483
Application Number:	18097473
Application Number:	18104176
Application Number:	18104180
Application Number:	18105368
Application Number:	18123436
Application Number:	18128622
Application Number:	18128862
Application Number:	18130304
Application Number:	18132230
Application Number:	18135065
Application Number:	18135084
Application Number:	18139912
Application Number:	18142938
Application Number:	18157747
Application Number:	18160848
Application Number:	18160974
Application Number:	18161209
Application Number:	18165089

Property Type	Number
Application Number:	18195375
Application Number:	18197495
Application Number:	18197902
Application Number:	18204270
Application Number:	18206046
Application Number:	18216348
Application Number:	18308576
Application Number:	18316664
Application Number:	18322163
Application Number:	18322171
Application Number:	18323945
Application Number:	18325942
Application Number:	18343118
Application Number:	18343162
Application Number:	18343173
Application Number:	18344227
Application Number:	18346520
Application Number:	29350409
Application Number:	29370332
Application Number:	29370333
Application Number:	29370334
Application Number:	29370342
Application Number:	29440387
Application Number:	29455869
Application Number:	29455879
Application Number:	29458601
Application Number:	29467896
Application Number:	29470544
Application Number:	29478517
Application Number:	29478526
Application Number:	29493635
Application Number:	29504004
Application Number:	29505661
Application Number:	29507571
Application Number:	29507576
Application Number:	29507644
Application Number:	29514572
Application Number:	29521107

Property Type	Number
Application Number:	29522307
Application Number:	29531264
Application Number:	29536660
Application Number:	29538882
Application Number:	29564687
Application Number:	29564690
Application Number:	29566048
Application Number:	29574816
Application Number:	29592244
Application Number:	29592455
Application Number:	29599985
Application Number:	29613711
Application Number:	29629700
Application Number:	29629706
Application Number:	29662069
Application Number:	29662081
Application Number:	29671737
Application Number:	29690857
Application Number:	29695667
Application Number:	29727700
Application Number:	29755015
Application Number:	29756994
Application Number:	29775446
Application Number:	29775449
Application Number:	29794408
Application Number:	29794416
Application Number:	29830184
Application Number:	29853777
Application Number:	63378426
Application Number:	63379399
Application Number:	63380437
Application Number:	63380666
Application Number:	63380973
Application Number:	63383230
Application Number:	63383232
Application Number:	63384034
Application Number:	63384532
Application Number:	63385318

Property Type	Number
Application Number:	63385866
Application Number:	63386068
Application Number:	63386938
Application Number:	63386943
Application Number:	63386973
Application Number:	63387328
Application Number:	63387622
Application Number:	63397073
Application Number:	63397660
Application Number:	63403971
Application Number:	63407297
Application Number:	63409037
Application Number:	63409059
Application Number:	63413128
Application Number:	63413131
Application Number:	63413512
Application Number:	63413956
Application Number:	63414325
Application Number:	63415167
Application Number:	63416211
Application Number:	63416365
Application Number:	63417622
Application Number:	63418090
Application Number:	63418828
Application Number:	63418962
Application Number:	63419127
Application Number:	63419292
Application Number:	63419411
Application Number:	63419414
Application Number:	63419418
Application Number:	63419432
Application Number:	63419659
Application Number:	63420838
Application Number:	63420842
Application Number:	63420845
Application Number:	63421250
Application Number:	63421254
Application Number:	63421327

Property Type	Number
Application Number:	63421399
Application Number:	63421486
Application Number:	63421487
Application Number:	63421488
Application Number:	63421647
Application Number:	63423563
Application Number:	63423633
Application Number:	63423636
Application Number:	63423672
Application Number:	63423883
Application Number:	63423952
Application Number:	63424652
Application Number:	63425359
Application Number:	63425607
Application Number:	63426015
Application Number:	63426176
Application Number:	63426340
Application Number:	63426681
Application Number:	63427159
Application Number:	63427162
Application Number:	63427416
Application Number:	63427418
Application Number:	63427621
Application Number:	63428488
Application Number:	63428643
Application Number:	63428913
Application Number:	63429208
Application Number:	63430185
Application Number:	63430497
Application Number:	63430949
Application Number:	63430996
Application Number:	63431252
Application Number:	63431253
Application Number:	63431254
Application Number:	63431884
Application Number:	63432051
Application Number:	63432675
Application Number:	63433086

Property Type	Number
Application Number:	63433675
Application Number:	63433808
Application Number:	63434446
Application Number:	63435310
Application Number:	63435405
Application Number:	63435721
Application Number:	63435768
Application Number:	63435832
Application Number:	63436209
Application Number:	63436819
Application Number:	63436941
Application Number:	63437169
Application Number:	63437171
Application Number:	63437981
Application Number:	63439507
Application Number:	63439737
Application Number:	63440006
Application Number:	63440072
Application Number:	63440719
Application Number:	63440839
Application Number:	63440857
Application Number:	63440861
Application Number:	63440990
Application Number:	63441370
Application Number:	63441614
Application Number:	63442084
Application Number:	63442149
Application Number:	63442407
Application Number:	63442564
Application Number:	63442971
Application Number:	63443292
Application Number:	63443665
Application Number:	63444613
Application Number:	63444717
Application Number:	63444803
Application Number:	63444806
Application Number:	63445104
Application Number:	63445219

Property Type	Number
Application Number:	63445365
Application Number:	63445523
Application Number:	63445527
Application Number:	63446098
Application Number:	63446117
Application Number:	63446168
Application Number:	63447550
Application Number:	63447798
Application Number:	63448012
Application Number:	63448411
Application Number:	63448527
Application Number:	63449173
Application Number:	63449770
Application Number:	63449783
Application Number:	63449802
Application Number:	63449835
Application Number:	63450422
Application Number:	63450510
Application Number:	63450709
Application Number:	63450771
Application Number:	63451338
Application Number:	63451708
Application Number:	63452533
Application Number:	63452942
Application Number:	63453288
Application Number:	63453353
Application Number:	63454171
Application Number:	63454423
Application Number:	63454519
Application Number:	63455395
Application Number:	63455413
Application Number:	63455508
Application Number:	63455879
Application Number:	63455894
Application Number:	63456617
Application Number:	63456659
Application Number:	63457358
Application Number:	63457361

Property Type	Number
Application Number:	63457582
Application Number:	63457598
Application Number:	63457620
Application Number:	63457929
Application Number:	63457939
Application Number:	63457951
Application Number:	63458361
Application Number:	63459227
Application Number:	63459533
Application Number:	63460497
Application Number:	63461400
Application Number:	63461898
Application Number:	63461953
Application Number:	63462066
Application Number:	63462293
Application Number:	63462526
Application Number:	63462785
Application Number:	63462787
Application Number:	63462960
Application Number:	63463254
Application Number:	63463347
Application Number:	63463461
Application Number:	63463732
Application Number:	63463754
Application Number:	63464823
Application Number:	63465070
Application Number:	63465297
Application Number:	63465312
Application Number:	63465318
Application Number:	63465589
Application Number:	63466875
Application Number:	63466908
Application Number:	63466938
Application Number:	63467030
Application Number:	63467084
Application Number:	63467131
Application Number:	63467138
Application Number:	63467216

Property Type	Number
Application Number:	63467244
Application Number:	63467384
Application Number:	63467732
Application Number:	63467848
Application Number:	63468063
Application Number:	63468098
Application Number:	63468508
Application Number:	63468637
Application Number:	63468846
Application Number:	63468937
Application Number:	63469675
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Property Type	Number
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Application Number:	63507507
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Application Number:	63507921
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Application Number:	63508796
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Property Type	Number
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Property Type	Number
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Application Number:	63523943
Application Number:	63523955
Application Number:	63523973
Application Number:	63524015
Application Number:	63524062
Application Number:	63524107
Application Number:	63524423

CORRESPONDENCE DATA

Fax Number: (800)914-4240

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 800-713-0755

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Correspondent Name: CT CORPORATION

Address Line 1: 4400 EASTON COMMONS WAY

Address Line 2: SUITE 125

Address Line 4: COLUMBUS, OHIO 43219

Patent Collateral Agreement

This August 18, 2023, WESTERN DIGITAL TECHNOLOGIES, INC. (“*Debtor*”) with its principal place of business and mailing address at 5601 Great Oaks Parkway, San Jose, CA 95119, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, grants to JPMORGAN CHASE BANK, N.A., a national banking association (the “*Agent*”), with its mailing address at 10 South Dearborn, Chicago, IL 60603, acting as collateral agent hereunder for the Secured Parties as defined in the Security Agreement (and, to the extent provided in Section 15 of the Security Agreement, the 2029/2032 Notes Secured Parties), dated as of June 20, 2023, among Debtor, Agent and the other debtors party thereto, as the same may be amended, restated, amended and restated or otherwise modified from time to time (the “*Security Agreement*”) for the benefit of the Secured Parties (and, to the extent provided in Section 15 of the Security Agreement, the 2029/2032 Notes Secured Parties), a lien on and security interest in, all right, title, and interest of such Debtor in and to all of the following (collectively, “*Patent Collateral*”):

- (i) Each patent and patent application owned by Debtor, other than to the extent the same constitutes Excluded Property, that is listed on Schedule A hereto (the “*Patents*”); and
- (ii) All proceeds of the foregoing, including any claim by Debtor against third parties for damages by reason of past, present or future infringement of any Patent, in each case together with the right to sue for and collect said damages.

All capitalized terms used herein without definition have the meanings given to such terms in the Security Agreement.

Debtor and Agent do hereby further acknowledge and affirm that the rights and remedies of the Agent with respect to the grant of a security interest in the Patent Collateral made hereby are more fully set forth in, and subject to, the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Patent Collateral Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

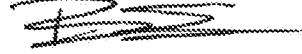
THIS PATENT COLLATERAL AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED BY AND INTERPRETED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, Debtor has caused this Patent Collateral Agreement to be duly executed as of the date and year last above written.

WESTERN DIGITAL TECHNOLOGIES, INC.

By: _____



Name: Brandi Steege

Title: Assistant Secretary

Accepted and agreed to as of the date and year last above written.

JPMORGAN CHASE BANK, N.A., as Agent

By:  _____
Name: Timothy Lee
Title: Executive Director

SCHEDULE A
TO PATENT COLLATERAL AGREEMENT
U.S. PATENTS AND PATENT APPLICATIONS

See Schedule A Attached

ASSIGNEE IN FIP	TITLE	CTRY	STATUS	APPLN NO.	FILING DATE	PATENT NO.	ISSUE DATE
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING VERTICAL WIRE BONDS	US	Allowed	17/137,990	Dec 30, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-Cure and Cure Hybrid Film-On-Die for Embedded Controller Die	US	Allowed	17/375,296	Jul 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	RELIABLE TRANSPORTATION MECHANISM FOR MICRO SOLDER BALLS	US	Allowed	16/912,615	Jun 25, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENSIBLE STORAGE SYSTEM AND METHOD	US	Allowed	17/700,362	Mar 21, 2022	11,704,023	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSOR IN NON-VOLATILE STORAGE MEMORY	US	Allowed	17/103,695	Nov 24, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System For Managing Memory Device	US	Allowed	17/693,255	Mar 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE STREAM BUFFER ON NETWORK ATTACHED STORAGE	US	Allowed	17/534,400	Nov 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW RESISTANCE MULTI-LAYER ELECTRODE FOR PHASE CHANGE MEMORY AND METH	US	Allowed	17/078,351	Oct 23, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW RESISTANCE MONOSILICIDE ELECTRODE FOR PHASE CHANGE MEMORY AND METH	US	Allowed	17/460,651	Aug 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Method and System with Persistent Memory and Non-Volatile Memory	US	Allowed	17/555,254	Dec 17, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS TRANSLATION FOR STORAGE DEVICE	US	Allowed	17/357,852	Jun 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTOLIC NEURAL NETWORK ENGINE WITH CROSSOVER CONNECTION OPTIMIZATION	US	Allowed	15/981,679	May 16, 2018		
WESTERN DIGITAL TECHNOLOGIES, INC.	Coherent Access To Persistent Memory Region Range	US	Allowed	17/178,770	Feb 18, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Low Power State Staging	US	Allowed	16/915,910	Jun 29, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Controller for Quality Of Service Based Arbitrations	US	Allowed	17/860,318	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Systems and Methods for Improved Data Relocation Based on Read-Level	US	Allowed	17/356,403	Jun 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR IMPROVED RECOVERY AFTER A WRITE A	US	Allowed	17/580,561	Jan 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSFERRING COMPUTATIONAL OPERATIONS TO CONTROLLERS OF DATA STORAGE D	US	Allowed	17/729,856	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH DEEP LEARNING NEURAL NETWORK	US	Allowed	17/405,923	Aug 18, 2021	11,705,191	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-PHASE PROGRAMMING WITH BALANCED GRAY CODING	US	Allowed	17/356,408	Jun 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL CELL PROGRAMMING USING OPTIMIZED MULTIPHASE MAPPING WITH B	US	Allowed	17/359,344	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL TO PHYSICAL MAPPING MANAGEMENT USING LOW-LATENCY NON-VOLATILE	US	Allowed	17/694,470	Mar 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	3-DIMENSIONAL NAND FLASH LAYER VARIATION AWARE SSD RAID	US	Allowed	17/461,482	Aug 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Hardware Accelerated Discretized Neural Network	US	Allowed	17/370,716	Jul 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING MAGNETORESISTIVE MEMORY CELL WITH OVER A SELECTOR PILL	US	Allowed	17/590,561	Feb 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR (STO) SENSORS USED IN NUCLEIC ACID SEQUENCING ARRAY	US	Allowed	16/791,759	Feb 14, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Applying Endurance Groups to Zoned Namespaces	US	Allowed	16/868,354	May 6, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Devices Using Virtual Side Shields for Improved Areal Density Capa	US	Allowed	17/039,840	Sep 30, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Training Ensemble Models To Improve Performance In The Presence Of Unreliable Base	US	Allowed	16/889,644	Jun 1, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Improving Utilization of a Communication Channel bet	US	Allowed	16/717,469	Dec 17, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC GRADIENT CONCENTRATOR/RELUCTANCE DETECTOR FOR MOLECULE DETE	US	Allowed	16/823,592	Mar 19, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Nand Dropped Command Detection And Recovery	US	Allowed	17/490,531	Sep 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	OBJECT DETECTION USING MULTIPLE NEURAL NETWORK CONFIGURATIONS	US	Allowed	17/653,113	Mar 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Initializing a data storage device with a manager device	US	Allowed	16/739,065	Jan 9, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	VARIABLE POWER MODE INFERENCING	US	Allowed	16/854,677	Apr 21, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP_COPY FOR INTEGRATED MEMORY ASSEMBLY	US	Allowed	17/494,129	Oct 5, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Just-In-Time Post-Processing Computation Capabilities for Encrypted Data	US	Allowed	16/914,201	Jun 26, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure optical communication link	US	Allowed	16/899,536	Jun 11, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR MANAGING NETWORK TRAFFIC FOR A DISTRIBUTED CACH	US	Allowed	16/914,206	Jun 26, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING MEDIA WITH AMORPHOUS MAGNETIC GRAIN	US	Allowed	17/361,272	Jun 28, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Host Memory Access	US	Allowed	17/717,748	Apr 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Enabling a Software-Defined Dynamic Storage Respons	US	Allowed	17/830,528	Jun 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR PASSWORD PROTECTION OF DEFINED SPACES WITHIN A	US	Allowed	16/928,292	Jul 14, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERATING TRANSCODED MEDIA USING DATA STORAGE DEVICES	US	Allowed	17/533,523	Nov 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR NETWORK MESSAGE SEQUENCING	US	Allowed	17/174,681	Feb 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Parallel Boot Execution Of Memory Devices	US	Allowed	16/932,477	Jul 17, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT Film Stack for Differential Reader	US	Allowed	17/395,306	Aug 5, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Identified Zones for Optimal Parity Sharing Zones	US	Allowed	17/877,554	Jul 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA INTEGRITY OF REPLICATED DATABASES	US	Allowed	17/218,160	Mar 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	READ THRESHOLD MANAGEMENT AND CALIBRATION	US	Allowed	17/230,392	Apr 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATION WITH A DATA STORAGE DEVICE USING AN EMULATED WI-FI CAPTIV	US	Allowed	17/206,128	Mar 19, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe Simple Copy Command Support Using Dummy Virtual Function	US	Allowed	17/182,027	Feb 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection Of Page Discrepancy During Read Threshold Calibration	US	Allowed	17/184,536	Feb 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Devices Having External Alternating Current Sources	US	Allowed	17/183,161	Feb 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NONVOLATILE MEMORY WITH ON-CHIP ENCODING FOR FOGGY-FINE PROGRAMMING	US	Allowed	17/172,362	Feb 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENABLING LATCHES OF NON-VOLATILE MEMORY DIES FOR USE	US	Allowed	17/184,387	Feb 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Device-Determined, Application-Specific Dynamic Con	US	Allowed	17/177,505	Feb 17, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-FETCH OF DATA USING SEEK INTERVALS	US	Allowed	17/844,491	Jun 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Event-Driven Data Stitching in Surveillance Systems	US	Allowed	17/178,433	Feb 18, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Providing a Dual-Priority Credit System	US	Allowed	17/178,401	Feb 18, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Automatic Flexible Schema Detection and Migration	US	Allowed	17/181,553	Feb 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE PERFORMANCE INDICATOR FOR STORAGE DEVICES	US	Allowed	17/941,573	Sep 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURITY DEVICE FOR A DATA STORAGE DEVICE	US	Allowed	17/216,568	Mar 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Load Based Dynamic Storage System for Configuration for Increased Performance	US	Allowed	17/831,343	Jun 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe Persistent Memory Region Quick Copy	US	Allowed	17/185,792	Feb 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Improving Word Line Data Retention for Memory Blocks	US	Allowed	17/835,502	Jun 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Valley Searching in Solid State Drives	US	Allowed	17/961,468	Oct 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE DATA STORAGE DEVICE AND METHOD OF ENCRYPTION	US	Allowed	17/207,725	Mar 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Control Block Management in Storage Devices	US	Allowed	17/234,324	Apr 19, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Fetching Data for Multi-Pass Programming within Storage Devices	US	Allowed	17/319,605	May 13, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enhanced D3-Cold and Faster Recovery	US	Allowed	17/224,732	Apr 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Pre-Erase of Memory in Storage Devices	US	Allowed	17/222,459	Apr 5, 2021	11,698,745	Jul 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Management of a Debug Buffer Based on Priority Information	US	Allowed	17/210,091	Mar 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Modified Distribution of Memory Device States	US	Allowed	17/959,029	Oct 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR Recording Head with SAF Trailing Shield Notch and/or Bump	US	Allowed	17/345,972	Jun 11, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PASSCODE AUTHENTICATION BASED DATA STORAGE DEVICE	US	Allowed	17/362,809	Jun 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING REFRESH MONITOR BASED ON A LEARNING BASED	US	Allowed	17/204,234	Mar 17, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Low-Latency Power State Transitions by Having P	US	Allowed	17/340,399	Jul 7, 2021	11,698,751	Jul 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Buffer Layers And Interlayers That Promote BiSiNx (012) Alloy Orientation For SOT And	US	Allowed	17/401,856	Aug 13, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Legitimized Data Transfer	US	Allowed	17/336,577	Jun 2, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Providing Priority Indicators for NVMe Data Communication Streams	US	Allowed	17/357,153	Jun 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Handling of Background Operations for Improving Sustained Performance of H	US	Allowed	17/357,004	Jun 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	FROZEN TIME CACHE FOR MULTI-HOST READ OPERATIONS	US	Allowed	17/354,168	Jun 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Rate ECC Parity For Fast SLC Read	US	Allowed	17/331,346	May 26, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SUSPENSION SYSTEM FOR A TAPE DRIVE	US	Allowed	17/361,997	Jun 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Head Having One Or More Antiferromagnetic Layers Above Soft Bias Side Shields	US	Allowed	17/867,477	Jul 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Priority Command Data Fetching Management	US	Allowed	17/358,457	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCK OR UNLOCK INDICATOR ON A DATA STORAGE DEVICE	US	Allowed	17/362,992	Jun 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure-Erase Prediction for Data Storage Devices	US	Allowed	17/353,043	Jun 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTING APPARATUS FOR DATA STORAGE DEVICES	US	Allowed	17/458,045	Aug 26, 2021	11,698,408	Jul 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Global Extension of a Logical-To-Physical Region of a Data Storage Device	US	Allowed	17/411,918	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOVABLE DISK CLAMP FOR READ-WRITE DEVICE IN ARCHIVAL DATA STORAGE LIBRA	US	Allowed	17/465,848	Sep 3, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID MEMORY MANAGEMENT OF NON-VOLATILE MEMORY (NVM) DEVICES FOR US	US	Allowed	17/499,572	Oct 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLEAVED ECC CODING FOR KEY VALUE DATA STORAGE DEVICES	US	Allowed	17/492,107	Oct 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for File-Based Interrupt Coalescing	US	Allowed	17/489,378	Sep 29, 2021		

WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO ENSURE MESSAGE ARRIVAL BEFORE A MESSAGE POINTER	US	Allowed	17/525,790	Nov 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Recovery from HMB loss	US	Allowed	17/479,795	Sep 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Continuous NAND Data-Transfer Using Filling Rate Evaluation Approach	US	Allowed	17/492,175	Oct 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Direct Write Operation for Quad-level Cell Based Data Storage Devices	US	Allowed	17/514,441	Oct 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF COMPOSITE COLD TEMPERATURE FOR DATA STORAGE DEVICES	US	Allowed	17/543,463	Dec 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and Storage System with a Layered Caching Policy	US	Allowed	17/528,390	Nov 17, 2021	11,704,236	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head With Side-Shielded Writers And Process For Making Same	US	Allowed	17/647,809	Jan 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Recording System And Method For Reading Media Having Write-Append Head-P	US	Allowed	17/729,843	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cross-track current design for energy assisted magnetic recording	US	Allowed	17/456,440	Nov 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK BUDGET ENHANCEMENT MECHANISMS FOR MEMORY	US	Allowed	17/530,056	Nov 18, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH REVERSE STATE PROGRAM	US	Allowed	17/481,575	Sep 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	UECC Failure Handling Method	US	Allowed	17/507,480	Oct 21, 2021	11,704,190	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY MATCHED LOW DENSITY PARITY CHECK CODING SCHEMES	US	Allowed	17/545,051	Dec 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimizing Recovery of Recurrent Blocks Using Bloom Filter	US	Allowed	17/454,711	Nov 12, 2021	11,704,027	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Data Path In Compare Command Execution	US	Allowed	17/450,533	Oct 11, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Preamplifier with Read/Write Power Channels	US	Allowed	17/557,528	Dec 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Signal Correction Using Soft Information in a Data Channel	US	Allowed	17/564,485	Dec 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING FILE SIZES FOR MEDIA CONTENT	US	Allowed	17/564,193	Dec 28, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SOFT ON-DISK ACTIVATION OF FINE ACTUATORS	US	Allowed	17/550,991	Dec 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR DETECTION AND DATA RECOVERY FOR DISTRIBUTED CACHE	US	Allowed	17/665,330	Feb 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ERROR CORRECTION FOR MAGNETIC DISKS	US	Allowed	17/707,809	Mar 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Maximizing Performance Through Traffic Balancing	US	Allowed	17/562,703	Dec 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Content Aware Decoding In KV Devices	US	Allowed	17/569,356	Jan 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Port Allocation In PCIe Bifurcation System	US	Allowed	17/649,703	Feb 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Providing a Temperature-Driven Variable Storage	US	Allowed	17/541,969	Dec 3, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Topological Insulator Based Spin Torque Oscillator Reader	US	Allowed	17/828,226	May 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Preventing Data Loss During an Ungraceful Shutd	US	Allowed	17/542,815	Dec 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Device Lifetime Improvement Through Constant Temperature	US	Allowed	17/652,070	Feb 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING NOISE IN BACK EMF SENSING FOR DATA STORAGE	US	Allowed	17/693,626	Mar 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Resource Management For Solid State Drive Accelerators	US	Allowed	17/671,855	Feb 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	POSITION AND RISK RECONSTRUCTION IN SHINGLED MAGNETIC RECORDING DATA STO	US	Allowed	17/703,318	Mar 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TRAY AND PACKAGING ASSEMBLY FOR DATA STORAGE DEVICES	US	Allowed	17/708,663	Mar 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUSPENSION PAD PRE-SOLDER FORMATION AND GUIDING	US	Allowed	17/702,691	Mar 23, 2022	11,705,153	Jul 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE HAVING DUAL ACTUATORS AND METHOD FOR EMERGENCY PO	US	Allowed	17/716,312	Apr 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VCM PWM TO LINEAR MODE TRANSITION OFFSET OPTIMIZATION TO IMPROVE PES	US	Allowed	17/742,082	May 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Extendable Parity Code Matrix Construction and Utilization in a Data Storage Device	US	Allowed	17/834,219	Jun 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH DETECTION AND MITIGATION OF NON-NOMINAL HEAD H	US	Allowed	17/804,490	May 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Long-Term Spacing Compensation for Heat Assisted Magnetic Recording	US	Allowed	17/830,941	Jun 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	WORKLOAD TRIGGERED DYNAMIC CAPTURE IN SURVEILLANCE SYSTEMS	US	Allowed	17/829,479	Jun 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANT VIDEO STORAGE AMONG NETWORKED VIDEO CAMERAS	US	Allowed	17/852,707	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST ASSISTED APPLICATION GROUPING FOR EFFICIENT UTILIZATION OF DEVICE RESOU	US	Allowed	17/850,787	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR CONTROLLING FLASH TRANSLATION LAYER RECYCLE F	US	Issued	15/900,673	Feb 20, 2018	10,564,886	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FINE GRANULARITY TRANSLATION LAYER FOR DATA STORAGE DEVICES	US	Issued	16/246,401	Jan 11, 2019	10,769,062	Sep 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic head slider and magnetic disk apparatus	US	Issued	10/659,372	Sep 11, 2003	7,095,587	Aug 22, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus, signal-processing circuit and device for magnetic recording system	US	Issued	09/940,475	Aug 29, 2001	7,502,189	Mar 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular magnetic recording head and perpendicular magnetic recording and rep	US	Issued	10/335,884	Jan 3, 2003	7,145,750	Dec 5, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	Network storage virtualization method and system	US	Issued	10/368,644	Feb 20, 2003	7,433,934	Oct 7, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	motor control method for a magnetic disk drive	US	Issued	10/377,897	Feb 28, 2003	6,870,700	Mar 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION HAVING MAGNETIC HEAD ASSEMBLY MOUNTED THEREON AND MAGNETI	US	Issued	10/676,677	Sep 30, 2003	7,088,543	Aug 8, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION HAVING MAGNETIC HEAD ASSEMBLY MOUNTED THEREON AND MAGNETI	US	Issued	12/080,631	Apr 4, 2008	7,667,921	Feb 23, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Head and method for production therefor	US	Issued	11/717,899	Mar 13, 2007	7,515,380	Apr 7, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic disk drive reducing influence of rigidity of transmission lines on suspension	US	Issued	10/783,692	Feb 20, 2004	6,992,550	Jan 31, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PREVENTING DATA LOSS DUE TO REPEATED WRITES TO A GIVEN TRACK	US	Issued	10/674,763	Sep 29, 2003	7,177,979	Feb 13, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF STORING A DATA SET IN A DISTRIBUTED STORAGE SYSTEM, DISTRIBUTED S	US	Issued	12/991,131	May 4, 2009	8,738,855	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Device driver for use in a data storage system	US	Issued	13/635,444	Jan 11, 2011	9,256,383	Feb 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A DEVICE DRIVER	US	Issued	14/987,660	Jan 4, 2016	9,699,255	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISTRIBUTED OBJECT STORAGE SYSTEM COMPRISING LOW POWER STORAGE NODES	US	Issued	13/976,055	Dec 27, 2011	9,535,621	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISTRIBUTED OBJECT STORAGE SYSTEM COMPRISING LOW POWER STORAGE NODES	US	Issued	14/990,667	Jan 7, 2016	9,823,870	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED OBJECT STORAGE SYSTEM COMPRISING LOW POWER STORAGE NODES	US	Issued	15/811,128	Nov 13, 2017	10,503,420	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISTRIBUTED OBJECT STORAGE SYSTEM	US	Issued	13/283,650	Oct 28, 2011	8,386,840	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISTRIBUTED OBJECT STORAGE SYSTEM COMPRISING PERFORMANCE OPTIMIZATION	US	Issued	13/976,061	Dec 23, 2011	8,738,582	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Object storage system for an unreliable storage medium	US	Issued	14/154,442	Jan 14, 2014	9,135,136	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	An object storage system for an unreliable storage medium	US	Issued	14/811,690	Jul 28, 2015	9,846,629	Dec 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	OBJECT STORAGE SYSTEM FOR AN UNRELIABLE STORAGE MEDIUM	US	Issued	15/841,116	Dec 13, 2017	10,725,884	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISTRIBUTED OBJECT STORAGE SYSTEM	US	Issued	13/909,337	Jun 4, 2013	9,588,862	Mar 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed Object Storage System	US	Issued	15/451,019	Mar 6, 2017	10,379,953	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed Object Storage System Comprising Performance Optimizations	US	Issued	14/060,294	Oct 22, 2013	10,228,867	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	A COMPUTER IMPLEMENTED METHOD FOR DYNAMIC SHARDING	US	Issued	14/855,629	Sep 16, 2015	9,965,539	May 8, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTER IMPLEMENTED METHOD FOR DYNAMIC SHARDING	US	Issued	15/973,491	May 7, 2018	10,776,396	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	A HYBRID DISTRIBUTED STORAGE SYSTEM	US	Issued	14/712,570	May 14, 2015	9,645,885	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DISTRIBUTED STORAGE SYSTEM	US	Issued	15/590,856	May 9, 2015	10,133,616	Nov 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Hybrid Distributed Storage System	US	Issued	14/814,264	Jul 30, 2015	10,241,872	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE ARRAY SCALING METHOD AND SYSTEM WITH MINIMAL DATA MOVEM	US	Issued	12/134,051	Jun 5, 2008	8,239,622	Aug 7, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	REBUILDING LOST DATA IN A DISTRIBUTED REDUNDANCY DATA STORAGE SYSTEM	US	Issued	12/710,101	Feb 22, 2010	8,156,368	Apr 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	READ-MODIFY-WRITE PROTOCOL FOR MAINTAINING PARITY COHERENCY IN A WRITE B	US	Issued	12/710,123	Feb 22, 2010	8,103,903	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Read-other protocol for maintaining parity coherency in a write-back distributed redur	US	Issued	12/710,162	Feb 22, 2010	8,103,904	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Rules engine ecosystem developed with an object cache framework	US	Issued	13/367,981	Feb 7, 2012	8,930,298	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE ACCESS TO SHARED STORAGE RESOURCES	US	Issued	13/781,167	Feb 28, 2013	8,931,054	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	READ CHANNEL WITH AUTOMATIC SERVO TRACK WRITER	US	Issued	10/293,370	Nov 12, 2002	6,934,103	Aug 23, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR PROGRAMMING A MULTI-LEVEL PHASE CHANGE MEM	US	Issued	13/659,364	Oct 24, 2012	9,576,655	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING STACKED DIE WITH CONTINUOUS INTEGRAL VIA	US	Issued	15/394,986	Dec 30, 2016	10,304,816	May 28, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING DUMMY PULL-DOWN WIRE BONDS	US	Issued	16/398,511	Apr 30, 2019	11,031,372	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including Reinforced Corner Supports	US	Issued	16/277,180	Feb 15, 2019	11,393,735	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including Through Vias In Molded Columns	US	Issued	16/277,467	Feb 15, 2019	10,872,856	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Module Integrated Interposer And Semiconductor Device Formed Therefrom	US	Issued	16/818,817	Mar 13, 2020	11,257,785	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	APERTURE STRUCTURE ON SEMICONDUCTOR COMPONENT BACKSIDE TO ALLEVIATE DE	US	Issued	16/821,860	Mar 17, 2020	11,289,395	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device With Top Die Positioned To Reduce Die Cracking	US	Issued	16/814,761	Mar 10, 2020	11,177,241	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	High Capacity Semiconductor Device Including Bifurcated Memory Module	US	Issued	16/818,752	Mar 13, 2020	11,276,669	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including Magnetic Hold-Down Layer	US	Issued	16/814,812	Mar 10, 2020	11,177,242	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Integrated electronic element module, semiconductor package, and method for fabric	US	Issued	16/887,107	May 29, 2020	11,456,279	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including High Speed Heterogeneous Integrated Controller And	US	Issued	16/818,290	Mar 13, 2020	11,031,378	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including Vertically Stacked Semiconductor Dies	US	Issued	16/818,883	Mar 13, 2020	11,302,673	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Including Contact Fingers On Opposed Surfaces	US	Issued	16/814,864	Mar 10, 2020	11,139,277	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DIE AND SEMICONDUCTOR PACKAGE	US	Issued	16/818,426	Mar 13, 2020	11,355,485	Jun 7, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WIRE BOND PAD DESIGN FOR COMPACT STACKED-DIE PACKAGE	US	Issued	16/705,940	Dec 6, 2019	11,189,582	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STACKED DIE PACKAGE WITH CURVED SPACER	US	Issued	16/692,652	Nov 22, 2019	11,094,673	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL RELIEF FOR THROUGH-HOLE AND SURFACE MOUNTING	US	Issued	16/787,482	Feb 11, 2020	11,284,502	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Package process, DAF replacement	US	Issued	16/934,971	Jul 21, 2020	11,552,040	Jan 10, 2023

WESTERN DIGITAL TECHNOLOGIES, INC.	Side Contact Pads For High-Speed Memory Card	US	Issued	17/107,847	Nov 30, 2020	11,425,817	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE PACKAGE HAVING THERMALLY CONDUCTIVE PATHWAYS	US	Issued	17/186,646	Feb 26, 2021	11,508,644	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD TRACE FOR GALVANIC EFFECT REDUCTION	US	Issued	17/214,215	Mar 26, 2021	11,234,327	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE PACKAGE HAVING THERMALLY CONDUCTIVE LAYERS FOR HE	US	Issued	17/229,429	Apr 13, 2021	11,488,883	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMOELECTRIC SEMICONDUCTOR DEVICE AND METHOD OF MAKING SAME	US	Issued	17/314,712	May 7, 2021	11,444,001	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTING MEMORY ACCESS MEANS AND METHOD	US	Issued	10/411,594	Apr 10, 2003	7,149,934	Dec 12, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTING MEMORY ACCESS MEANS AND METHOD	US	Issued	11/541,354	Sep 29, 2006	8,108,735	Jan 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SCR matrix storage device	US	Issued	10/913,218	Aug 6, 2004	7,376,008	May 20, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-LINEAR CONDUCTOR MEMORY	US	Issued	11/926,778	Oct 29, 2007	7,813,157	Oct 12, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW-COST HIGH-DENSITY RECTIFIER MATRIX MEMORY	US	Issued	13/065,755	Mar 29, 2011	8,116,109	Feb 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DIAGONAL CONNECTION STORAGE ARRAY	US	Issued	12/395,071	Feb 27, 2009	8,358,526	Jan 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SEQUENCING DECODER CIRCUIT	US	Issued	12/575,055	Oct 7, 2009	8,325,556	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR DISABLING A MEMORY-ARRAY PORTION	US	Issued	12/639,599	Dec 16, 2009	8,325,557	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL SWITCH THREE-DIMENSIONAL MEMORY ARRAY	US	Issued	12/720,843	Mar 10, 2010	8,773,881	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL SWITCH THREE-DIMENSIONAL MEMORY ARRAY	US	Issued	14/282,444	May 20, 2014	9,305,624	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	BIPOLAR-MOS MEMORY CIRCUIT	US	Issued	13/714,499	Dec 14, 2012	9,007,801	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BIPOLAR-MOS MEMORY CIRCUIT	US	Issued	14/628,925	Feb 23, 2015	9,270,269	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DIAGONALLY ACCESSED MEMORY ARRAY CIRCUIT	US	Issued	12/925,934	Nov 2, 2010	8,635,426	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MEANS AND METHOD FOR OPERATING A RESISTIVE ARRAY	US	Issued	13/135,235	Jun 29, 2011	8,934,293	Jan 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	OPERATING A RESISTIVE ARRAY	US	Issued	14/576,909	Dec 19, 2014	9,349,448	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIFIED SWITCH ARRAY FOR MEMORY DEVICES	US	Issued	13/199,437	Aug 30, 2011	8,378,456	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE SECTOR PARALLEL ACCESS MEMORY ARRAY WITH ERROR CORRECTION	US	Issued	13/200,909	Oct 4, 2011	9,195,540	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED NON-VOLATILE MEMORY	US	Issued	14/306,801	Jan 17, 2014	9,054,031	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED NON-VOLATILE MEMORY	US	Issued	14/733,919	Jun 8, 2015	9,431,460	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED NON-VOLATILE MEMORY	US	Issued	15/236,600	Aug 15, 2016	9,812,503	Nov 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICES HAVING FINE PITCH STRUCTURES	US	Issued	14/616,128	Feb 6, 2015	9,437,657	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICES HAVING FINE PITCH STRUCTURES	US	Issued	15/181,551	Jan 14, 2016	10,008,542	Jun 26, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	4F2 SCR MEMORY DEVICE	US	Issued	14/841,672	Aug 31, 2015	9,871,043	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE BIT PER CELL DUAL-ALLOY GST MEMORY ELEMENTS	US	Issued	14/561,679	Dec 5, 2014	9,490,426	Nov 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ALIGNED MEMORY CELL CONTACT	US	Issued	14/794,762	Jul 8, 2015	9,450,182	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NMOS REGULATED VOLTAGE REFERENCE	US	Issued	14/795,836	Jul 9, 2015	9,753,481	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DEPOSITION METHOD FOR PLANAR SURFACES	US	Issued	14/956,173	Dec 1, 2015	9,837,269	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FORMING PCM AND RRAM 3-D MEMORY CELLS	US	Issued	14/967,025	Dec 11, 2015	9,570,516	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FORMING PCM AND RRAM 3-D MEMORY CELLS	US	Issued	15/412,566	Jan 23, 2017	9,837,472	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLING COUPLING LARGE CROSS-POINT MEMORY ARRAYS	US	Issued	14/635,532	Mar 2, 2015	9,349,447	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW COMPLEXITY INTER-TRACK INTERFERENCE CANCELLATION RECEIVER FOR MAGNE	US	Issued	14/218,036	Mar 18, 2014	8,947,805	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Disk Drive with Filter Compensation Integrated in Sliders for High-Bandwidth Read Sens	US	Issued	14/218,591	Mar 18, 2014	8,891,189	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE DISK STACK, SINGLE ACTUATOR HARD DISK DRIVE	US	Issued	14/056,846	Oct 17, 2013	8,958,172	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Modified Areal Densities For Degraded Storage Device Read Heads	US	Issued	14/068,879	Oct 31, 2013	9,070,390	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH DIFFERENT SYNCHRONIZATION FIELDS AND SYNCHRONIZATION MARK	US	Issued	14/031,970	Sep 19, 2013	8,982,491	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH DIFFERENT DATA SECTOR INTEGRATED PREAMBLES IN ADJACENT DAT	US	Issued	14/031,989	Sep 19, 2013	8,988,807	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIZATION CONTROL FOR MAGNETIC SHIELD IN MAGNETIC RECORDING HEAD	US	Issued	14/227,933	Mar 27, 2014	9,263,086	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LASER-INTEGRATED HEAD GIMBAL ASSEMBLY HAVING LASER CONTACT PROTECTION	US	Issued	14/514,790	Oct 15, 2014	9,153,275	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	GROUNDING FOR A HARD DISK DRIVE SUSPENSION TAIL	US	Issued	14/135,222	Dec 19, 2013	9,036,306	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SURFACE ANALYSIS TEST (SAT) FUNCTION FOR MICROWAVE-ASSISTED	US	Issued	14/057,257	Oct 18, 2013	8,885,274	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	AF-COUPLED DUAL SIDE SHIELD READER WITH AF-COUPLED USL	US	Issued	14/194,488	Feb 28, 2014	9,190,081	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING DISK DRIVE (HAMR) WITH THERMAL SENSOR A	US	Issued	14/059,653	Oct 22, 2013	8,842,507	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR HEAD SPOT-SIZE CONVERTERS WITH SECONDARY INDEX CONFINEMENT	US	Issued	14/136,414	Dec 20, 2013	9,147,415	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SURFACE DIFFUSION INHIBITOR FOR HAMR NPT	US	Issued	14/158,515	Jan 17, 2014	8,988,827	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SURFACE DIFFUSION INHIBITOR FOR HAMR NPT	US	Issued	14/638,033	Mar 4, 2015	9,099,114	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	RANDOM NUMBER GENERATOR BY SUPERPARAMAGNETISM	US	Issued	14/156,356	Jan 15, 2014	9,459,835	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	RANDOM NUMBER GENERATOR BY SUPERPARAMAGNETISM	US	Issued	15/257,741	Sep 6, 2016	10,175,948	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RANDOM NUMBER GENERATOR BY SUPERPARAMAGNETISM	US	Issued	16/147,516	Sep 28, 2018	10,534,579	Jan 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PHASE DETECTION OF SPIN TORQUE OSCILLATOR READER EXCITED THROUGH PARAME	US	Issued	14/174,084	Feb 6, 2014	9,030,783	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH CPP-GMR SPIN-VALVE SENSOR AND EXTENDED PIN	US	Issued	14/272,381	May 7, 2014	9,130,055	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ALL-OPTICAL MAGNETIC RECORDING SYSTEM USING FeMnPt MEDIA	US	Issued	14/106,587	Dec 13, 2013	9,280,996	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DIRECTED SELF-ASSEMBLY (DSA) OF BLOCK COPOLYMERS	US	Issued	14/067,769	Oct 30, 2013	9,054,043	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DIRECTED SELF-ASSEMBLY (DSA) OF BLOCK COPOLYMERS	US	Issued	14/679,189	Apr 6, 2015	9,129,812	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DIRECTED SELF-ASSEMBLY (DSA) OF A BLOCK COPOLYMER (BCP) USING A	US	Issued	14/707,315	May 8, 2015	9,230,820	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE HAVING MULTIPLE DISK STACKS ON A ROTATABLE PLATFORM	US	Issued	14/051,281	Oct 10, 2013	9,025,277	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE HAVING MULTIPLE DISK STACKS AND A MOVABLE HEAD STACK ASSEN	US	Issued	14/057,641	Oct 18, 2013	8,824,094	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE HAVING MULTIPLE MOVABLE DISK STACKS ON A GUIDE RAIL	US	Issued	14/056,893	Oct 17, 2013	8,958,173	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE CURRENT AND MEDIA HEATER CONTROL FOR HEAT OR MICROWAVE ASSISTED N	US	Issued	14/273,284	May 8, 2014	9,070,397	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PREVENTION OF FE CONTAMINATION WITH OXYGEN M	US	Issued	14/148,226	Jan 6, 2014	8,885,287	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR DISK DRIVE FLUID DYNAMIC BEARING	US	Issued	14/091,189	Nov 26, 2013	9,086,858	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ACOUSTICALLY SECURE PHASE CHANGE MEMORY DEVICES	US	Issued	14/096,921	Dec 4, 2013	9,367,483	Jan 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED PERFORMANCE WITH READ BEFORE WRITE TO PHASE CHA	US	Issued	14/084,483	Nov 19, 2013	9,754,682	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC VARIABLE CAPACITY HARD DISK DRIVE	US	Issued	14/100,405	Dec 9, 2013	8,941,943	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTIVELY WRITTEN GUARD BANDS IN A COLD STORAGE OR MIXED MODE DRIVE	US	Issued	14/100,566	Dec 9, 2013	8,922,925	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING I-REGIONS HAVING CONFIGURABLE FINAL LOGICAL BLOCK ADD	US	Issued	14/100,702	Dec 9, 2013	9,489,145	Nov 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR DYNAMIC TRACK SQUEEZE IN A HARD DRIVE	US	Issued	14/100,786	Dec 9, 2013	8,867,153	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING RESONANCE FREQUENCY OF HARD DISK DRIVE VOICE COIL MOTOR	US	Issued	14/149,258	Jan 7, 2014	8,958,179	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Disk Drive with Pre-amplifier for Multiple Readers in a Slider with a Common Return Sig	US	Issued	14/489,477	Sep 18, 2014	9,988,829	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Disk Drive with Channel and Preamp with Dynamic Write-Current Control for Write He	US	Issued	14/804,063	Jul 20, 2015	9,275,656	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NETWORK INTERFACE CONTROLLER EMULATION	US	Issued	14/096,606	Dec 4, 2013	9,760,505	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ASYMMETRIC DEGAUSS CONTROL FOR WRITE HEAD FOR HARD DISK D	US	Issued	14/104,143	Dec 12, 2013	9,280,993	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TRACK READER FOR IMPROVED SIGNAL TO NOISE RATIO	US	Issued	14/194,552	Feb 28, 2014	9,741,369	Aug 22, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TRACK READER FOR IMPROVED SIGNAL TO NOISE RATIO	US	Issued	15/674,952	Aug 11, 2017	10,127,933	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER HAVING NOTCH DIFFUSION BARRIER	US	Issued	14/170,462	Jan 31, 2014	9,099,112	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR HA	US	Issued	14/062,800	Oct 24, 2013	9,047,892	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRICATION OF SIDE-BY-SIDE SENSORS FOR MIMO RECORDING	US	Issued	14/156,265	Jan 15, 2014	9,305,579	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPENSATION OF LASER DIODE INTRODUCED FLYING HEIGHT CHANGES	US	Issued	14/182,187	Feb 17, 2014	9,311,943	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRICATION OF MULTIPLE SENSOR LAYERS WITH SELF-ALIGNED BACK EDGES	US	Issued	14/156,274	Jan 15, 2014	9,082,435	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	RECESSED IRMN READER PROCESS	US	Issued	14/158,552	Jan 17, 2014	9,177,588	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A DOUBLE BUMP WRAP AROUND SHIELD	US	Issued	14/218,761	Mar 18, 2014	8,947,828	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SUBMOUNT-INTEGRATED PHOTODETECTOR FOR MONITORING A LASER FOR A HEAT AS	US	Issued	14/089,589	Nov 25, 2013	9,245,553	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL MAIN POLE LAMINATION FOR POLE ERAUSURE IMPROVEMENT	US	Issued	14/165,052	Jan 27, 2014	9,129,619	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SIDE SHIELD READER WITH A SHIELD EXCITING COIL	US	Issued	14/194,529	Feb 28, 2014	9,165,575	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE READERS FOR HIGH RESOLUTION AND SNR FOR HIGH AREAL DENSITY APPLIC	US	Issued	14/138,804	Dec 23, 2013	9,230,578	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL MAGNETIC SENSOR FOR MULTI-INPUT MAGNETIC RECORDING	US	Issued	14/292,749	May 30, 2014	9,099,127	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STRAY FIELD SHIELDING FOR PERPENDICULAR MAGNETIC RECORDING WRITE HEAD	US	Issued	14/136,830	Dec 20, 2013	9,269,378	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO SIDE BY SIDE MIMO READ SENSORS FABRICATED BY SELF-ALIGNED PROCESSING	US	Issued	14/254,828	Apr 16, 2014	9,373,344	Jun 21, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY STABLE AU ALLOYS AS A HEAT DIFFUSION AND PLASMONIC UNDERLAYER F	US	Issued	14/140,408	Dec 24, 2013	9,443,545	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH TEMPLATE LAYER FORMED OF A B	US	Issued	14/169,255	Jan 31, 2014	9,224,412	Dec 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DOORBELL-LESS ENDPOINT-INITIATED PROTOCOL FOR STORAGE DEVICES	US	Issued	14/466,515	Aug 22, 2014	9,513,869	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ACK-LESS PROTOCOL FOR NOTICING COMPLETION OF READ REQUESTS	US	Issued	14/466,538	Aug 22, 2014	9,547,472	Jan 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ACKNOWLEDGEMENT-LESS PROTOCOL FOR SOLID STATE DRIVE INTERFACE	US	Issued	14/489,881	Sep 18, 2014	9,535,870	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DOORBELL-LESS PROTOCOL FOR SOLID STATE DRIVE INTERFACE	US	Issued	14/489,994	Sep 18, 2014	9,652,199	May 16, 2017

WESTERN DIGITAL TECHNOLOGIES, INC.	PILE SPIN-TORQUE OSCILLATOR WITH AF-MODE OSCILLATION FOR GENERATING HIGH	US	Issued	14/217,157	Mar 17, 2014	9,064,508	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ACTUATOR ASSEMBLY WITH INTERLEAVED VOICE COIL MOTOR	US	Issued	14/095,819	Dec 3, 2013	9,093,094	Jul 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CLEARANCE MONITORING IN STORAGE MEDIA	US	Issued	14/109,603	Dec 17, 2013	9,159,348	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE CABLE ASSEMBLY HAVING REDUCED-TOLERANCE ELECTRICAL CONNECTION PA	US	Issued	14/071,430	Nov 4, 2013	9,460,757	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SEALED IN HELIUM USING A SECONDARY CONTAINER	US	Issued	14/099,870	Dec 6, 2013	9,001,458	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE-PIECE YOKE DAMPER FOR VOICE COIL ACTUATOR	US	Issued	14/081,872	Nov 15, 2013	9,177,579	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Shielded Flex Cable for Use in a Disk Drive	US	Issued	14/106,308	Dec 13, 2013	9,275,664	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING CALIBRATION OF COOLING SENSITIVITY OF EMBEDDED CONTACT SENS	US	Issued	14/102,458	Dec 10, 2013	8,982,504	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING HEAD EMPLOYING NOBLE METAL ALLOY AS DIF	US	Issued	14/133,003	Dec 18, 2013	9,099,111	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL STAGE MICROACTUATOR FLEXURE FEATURE FOR MINIMIZING ELECTRICAL SHOR	US	Issued	14/163,845	Jan 24, 2014	9,218,834	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SACRIFICIAL PROTECTION LAYER FOR PREVENTING ION MILL DAMAGE TO HAMR OPTIC	US	Issued	14/181,508	Feb 14, 2014	8,908,482	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING HEAD	US	Issued	14/254,823	Apr 16, 2014	9,001,465	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH TAPERED SIDE GAP FOR REDUCED FAR TRACK INTERFERE	US	Issued	14/263,895	Apr 28, 2014	8,929,027	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDED SPIN TORQUE OSCILLATOR	US	Issued	14/290,768	May 29, 2014	9,336,797	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING IMPROVED CLEARANCE CONTROL	US	Issued	14/278,946	May 15, 2014	8,964,324	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ULTRA-LOW PROFILE MULTIDENTATE LUBRICANT FOR USE AS A SUB-NANOMETER THIC	US	Issued	14/185,153	Feb 20, 2014	9,466,322	Oct 11, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PROFILE MULTIDENTATE LUBRICANTS FOR USE AT SUB-NANOMETER THICKNESSE	US	Issued	15/157,315	May 17, 2016	10,262,685	Apr 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT UNDERLAYER HAVING A MULTILAYER STRUCTURE FOR HIGH AREAL DENSITY PERF	US	Issued	14/265,161	Apr 29, 2014	9,245,564	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR TYPE MAGNETIC SENSOR WITH HIGH MAGNETIC MOMENT BIAS STRUCTURE F	US	Issued	14/174,776	Feb 6, 2014	9,513,349	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY CONDUCTIVE FEATURES FOR A HEAT-ASSISTED MAGNETIC RECORDING HE	US	Issued	14/331,157	Jul 14, 2014	9,025,423	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE PRINTED CIRCUIT BOARD STIFFENER FOR HARD DISK DRIVE	US	Issued	14/109,741	Dec 17, 2013	9,001,470	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DAMPERS FOR ACTUATOR ASSEMBLY OF HARD DISK DRIVE	US	Issued	14/245,932	Apr 4, 2014	9,153,261	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FEEDTHROUGH CONNECTOR FOR HERMETICALLY SEALED ELECTRONIC DEVICES	US	Issued	14/199,133	Mar 6, 2014	9,196,303	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKPLANE FOR RECEIVING ELECTRICAL COMPONENTS	US	Issued	14/218,117	Mar 18, 2014	9,823,712	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SHAPED BACKPLANE FOR RECEIVING ELECTRICAL COMPONENTS	US	Issued	14/218,835	Mar 18, 2014	9,513,677	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN TORQUE OSCILLATOR POWER-ON OSCILLATION CHECKER USING	US	Issued	14/316,628	Jun 26, 2014	8,917,465	Dec 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN TORQUE OSCILLATOR POWER-ON OSCILLATION CHECKER FOR MI	US	Issued	14/316,732	Jun 26, 2014	9,001,444	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BYTE ALIGNMENT IN DATA STORAGE DEVICES	US	Issued	15/875,474	Jan 19, 2018	10,440,117	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING WRITE HEAD DEVICE FOR CONTACT DETECTION AND SPACING SENSING	US	Issued	14/504,794	Oct 2, 2014	9,117,474	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BROADCAST DATA OPERATIONS IN DISTRIBUTED FILE SYSTEMS	US	Issued	14/271,435	May 6, 2014	10,523,753	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE DISK SEPARATOR PLATE CONSTRUCTION	US	Issued	14/189,954	Feb 25, 2014	9,263,094	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED STORAGE CANISTER	US	Issued	14/297,611	Jun 5, 2014	9,612,629	Apr 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CANISTER WITH MULTIPLE STORAGE DEVICE MOUNTING ELEMENTS	US	Issued	14/297,617	Jun 5, 2014	9,829,937	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CANISTER WITH MULTIPLE STORAGE DEVICE MOUNTING ELEMENTS	US	Issued	15/801,677	Nov 2, 2017	10,067,542	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM	US	Issued	14/605,687	Jan 26, 2015	9,460,027	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM	US	Issued	15/253,609	Aug 31, 2016	10,089,704	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL CAPPING LAYER UTILIZED IN A MAGNETORESISTIVE EFFECT SENSOR	US	Issued	14/166,699	Jan 28, 2014	9,183,858	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR INITIATING REFRESH OPERATIONS	US	Issued	14/203,142	Mar 10, 2014	8,941,935	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR LINE DENSITY MULTIPLICATION USING BLOCK COPOLYMERS AND SEQUE	US	Issued	14/174,939	Feb 7, 2014	9,416,447	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED BLOCK COPOLYMER STRUCTURE WITH OXIDE LINES FOR LINE DENSITY MU	US	Issued	15/208,237	Jul 12, 2016	9,719,170	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	READER SENSOR HAVING A RECESSED ANTIFERROMAGNETIC (AFM) PINNING LAYER	US	Issued	14/265,187	Apr 29, 2014	9,007,729	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLAYER COUPLING FIELD CONTROL IN TUNNELING MAGNETORESISTIVE READ HEA	US	Issued	14/248,970	Apr 9, 2014	9,099,120	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TMR/CPP READER FOR NARROW READER GAP APPLICATION	US	Issued	14/221,375	Mar 21, 2014	9,001,473	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	COMBINED MICRO HEATER AND WAVEGUIDE POWER SENSOR FOR HEAT-ASSISTED MA	US	Issued	14/271,254	May 6, 2014	9,087,546	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MAMR HEAD WITH SELF-ALIGNED SPIN TORQUE OSCILLATOR ALONG FLA	US	Issued	14/278,969	May 15, 2014	9,406,316	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FILE MANAGEMENT SYSTEM	US	Issued	14/612,085	Feb 2, 2015	9,778,845	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DETERMINING HEAD-DISK CONTACT IN A MAGNETIC RECO	US	Issued	14/219,986	Mar 19, 2014	8,804,275	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ASSEMBLED NANOPARTICLES WITH POLYMERIC AND/OR OLIGOMERIC LIGANDS	US	Issued	14/547,098	Nov 18, 2014	9,966,096	May 8, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WAVEGUIDE POWER SENSOR STRUCTURES FREE OF OPTICAL COHERENCE EFFECTS IN A	US	Issued	14/265,474	Apr 30, 2014	9,202,492	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SLIDER HAVING IMPROVED AIR BEARING COMPLIANCE AND HIGHER ACTUATION	US	Issued	14/294,075	Jun 2, 2014	9,082,441	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Negative-polarization Spin-Torque-Oscillator	US	Issued	14/494,559	Sep 23, 2014	9,305,574	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR STR	US	Issued	14/277,978	May 14, 2014	9,042,059	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SPLIT-RING RESONATOR (SRR) NFT DESIGN FOR USE IN HAMR	US	Issued	14/339,339	Jul 23, 2014	9,053,722	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SPLIT-RING RESONATOR (SRR) NFT DESIGN FOR USE IN HAMR	US	Issued	14/706,686	May 7, 2015	9,202,492	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED COMPOUND DBR LASER FOR HAMR APPLICATIONS	US	Issued	14/307,451	Jun 17, 2014	9,129,634	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED COMPOUND DBR LASER FOR HAMR APPLICATIONS	US	Issued	14/846,517	Sep 4, 2015	9,431,043	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STRUCTURE WITH ELECTRIC DAMAGE PROTECTION FOR A MICROWAVE-ASSISTED	US	Issued	14/302,549	Jun 12, 2014	9,007,724	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MONODISPERSE LUBRICANT INCLUDING MULTIDENTATE PERFLUOROPOLYETHER STRU	US	Issued	14/480,552	Sep 8, 2014	9,765,273	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Real Time Writer Shields Magnetization optimization for FTI improvement	US	Issued	14/332,137	Jul 15, 2014	9,099,110	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD WITH PROTECTIVE FILM	US	Issued	14/255,088	Apr 17, 2014	8,902,720	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) WRITE HEAD AND SYSTEM	US	Issued	14/480,394	Sep 8, 2014	9,142,227	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ SENSOR WITH INDEPENDENTLY EXTENDED PINNED LAYER AND SEED	US	Issued	14/292,760	May 30, 2014	9,053,721	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR UNIDIRECTIONAL BIASING WITH HARD BIAS STABILIZED SOFT BIAS	US	Issued	14/464,418	Aug 20, 2014	9,406,320	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH HIGH FREQUENCY VOLTAGE GROUND AND LOW FREQUENCY DC VOLTAGE	US	Issued	14/341,701	Jul 25, 2014	9,275,665	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED PERFORMANCE WITH READ BEFORE WRITE TO PHASE CHA	US	Issued	14/332,197	Jul 15, 2014	9,471,227	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHE COHERENCE PROTOCOL	US	Issued	15/081,064	Mar 25, 2016	10,055,349	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PEER-TO-PEER PCIe STORAGE TRANSFERS	US	Issued	14/272,214	May 7, 2014	9,304,690	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PEER-TO-PEER PCIe STORAGE TRANSFERS	US	Issued	15/086,782	Mar 31, 2016	9,557,922	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	LATENCY COMMAND PROCESSING FOR SOLID STATE DRIVE INTERFACE PROTOCOL	US	Issued	14/469,225	Aug 26, 2014	9,563,367	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Copy on Write on an SSD	US	Issued	14/630,863	Feb 25, 2015	9,880,755	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Copy on Write on an SSD	US	Issued	15/876,245	Jan 22, 2018	10,540,106	Jan 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Copy on Write on an SSD	US	Issued	16/746,663	Jan 17, 2020	11,226,747	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CACHING SOLID STATE DEVICE READ REQUEST RESULTS	US	Issued	14/275,468	May 12, 2014	9,990,298	Jun 5, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE LOW PROFILE DISK CLAMP TO TIED-SHAFT MOTOR ASSEMBLY	US	Issued	14/309,533	Jun 19, 2014	9,343,101	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING CONTACT SENSING WITH NEAR FIELD TRANSDUCER (NFT) AND IN-DRIV	US	Issued	14/292,622	May 30, 2014	8,908,483	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS TO GENERATE ZERO CONTENT OVER GARBAGE DATA WHEN	US	Issued	15/051,539	Feb 23, 2015	9,436,618	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS TO GENERATE ZERO CONTENT OVER GARBAGE DATA WHEN	US	Issued	15/226,639	Aug 2, 2016	9,959,218	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO GENERATE PATTERN DATA OVER GARBAGE DATA WHEN ENCRYPTION PAR	US	Issued	15/704,866	Sep 14, 2017	10,372,627	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS TO GENERATE ZERO CONTENT OVER GARBAGE DATA WHEN	US	Issued	15/967,033	Apr 30, 2018	10,698,840	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS TO GENERATE ZERO CONTENT OVER GARBAGE DATA WHEN	US	Issued	16/876,365	May 18, 2020	11,416,417	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DEBUG DATA SAVING IN HOST MEMORY ON PCIE SOLID STATE DRIVE	US	Issued	14/476,930	Sep 4, 2014	10,474,618	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED DATA VERIFY IN DATA STORAGE ARRAYS	US	Issued	14/316,798	Jun 27, 2014	9,367,254	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF INTERLEAVING DATA RETRIEVED FROM FIRST AND SECOND	US	Issued	14/293,846	Jun 2, 2014	10,339,079	Jul 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUSPENSION DIMPLE	US	Issued	14/294,861	Jun 3, 2014	9,183,861	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING ION MIGRATION IN A HARD DISK DRIVE MICROACTUATOR FLEXURE ASSEM	US	Issued	14/295,296	Jun 3, 2014	9,449,623	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HANGING CARRIER FOR HDD	US	Issued	14/316,781	Jun 26, 2014	9,361,946	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING NOISE BASED DETECTION OF SPIN TORQUE OSCILLATOR POWER-ON IN	US	Issued	14/526,367	Oct 28, 2014	9,099,128	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Suspension Design with Split Substrate for Improved Interference Signal Immunity	US	Issued	14/557,380	Dec 1, 2014	9,117,469	Nov 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED LEAD SUSPENSION (ILS) FOR TWO-DIMENSIONAL MAGNETIC RECORDING	US	Issued	14/340,690	Jul 25, 2014	9,196,266	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ISOLATOR SYSTEM FOR A SEGMENTED FRAME FOR A STORAGE DRIVE	US	Issued	14/263,678	Apr 28, 2014	9,247,660	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SEGMENTED FRAME FOR A STORAGE DRIVE	US	Issued	14/265,567	Apr 30, 2014	9,274,571	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR EVENLY DISTRIBUTING THERMAL EXPOSURE TO DISK IN HE	US	Issued	14/292,338	May 30, 2014	8,941,944	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Disk drive with preamplifier with isolation for multiple readers in a slider with a comm	US	Issued	14/711,428	May 13, 2015	9,128,822	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE STEPPED LOAD BEAM	US	Issued	14/296,281	Jun 4, 2014	9,219,618	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-DISSIPATING STEPPED SLIDER FOR A HEAT-ASSISTED MAGNETIC RECORDING HEA	US	Issued	14/322,707	Jul 2, 2014	9,013,967	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Charge control agent for fluid dynamic bearing motor lubricant	US	Issued	14/495,124	Sep 24, 2014	9,368,150	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Charge Control Agent for Fluid Dynamic Bearing Motor Lubricant	US	Issued	15/158,422	May 18, 2016	9,728,220	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHODS UTILIZING DUAL READ SENSORS	US	Issued	14/281,461	May 19, 2014	9,036,304	May 19, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH WRITE CURRENT OVERSHOOT AMPLITUDE CONTROL	US	Issued	14/526,336	Oct 28, 2014	9,111,561	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY TRANSFER OF OBJECTS IN A DATA STORAGE DEVICE	US	Issued	14/495,863	Sep 24, 2014	10,031,860	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSFER OF OBJECT MEMORY REFERENCES IN A DATA STORAGE DEVICE	US	Issued	15/843,196	Dec 15, 2017	10,620,841	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CHASSIS INPUT/OUTPUT (I/O) MODULE FOR USE IN FRONT REGION OF MASS STORAGE	US	Issued	14/490,525	Sep 18, 2014	9,727,079	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	COOLING SYSTEM FOR USE IN A MASS STORAGE CHASSIS ASSEMBLY	US	Issued	14/489,468	Sep 18, 2014	9,485,888	Nov 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH ULTRATHIN NOBLE	US	Issued	14/255,752	Apr 17, 2014	9,183,865	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Spot Size Converter with a plurality of branches for HAMR heads	US	Issued	14/271,743	May 7, 2014	9,053,716	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF CONDUCTING IN-PLACE WRITE OPERATIONS IN A SHINGLED	US	Issued	14/673,342	Mar 30, 2015	9,454,990	Sep 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED ULTRAFAST TOUCHDOWN MEASUREMENT SCHEME USING	US	Issued	14/790,211	Jul 2, 2015	9,401,169	Jul 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH MULTIPLE PREAMPLIFIERS AND COMMON TR	US	Issued	14/656,898	Mar 13, 2015	9,165,596	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	VERIFICATION OF STORAGE MEDIA UPON DEPLOYMENT	US	Issued	14/689,770	Apr 17, 2015	9,934,871	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	VERIFICATION OF STORAGE MEDIA UPON DEPLOYMENT	US	Issued	15/942,749	Apr 2, 2018	10,607,714	Mar 31, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Scissor reader with side shield decoupled from bias material	US	Issued	14/479,767	Sep 8, 2014	9,230,576	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR INTEGRATION OF MAGNETIC LIP AND NEAR FIELD TRANSDUC	US	Issued	14/530,611	Oct 31, 2014	9,183,856	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL CURRENT PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENS	US	Issued	14/331,462	Jul 15, 2014	8,922,953	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MASS STORAGE CHASSIS ASSEMBLY CONFIGURED TO ACCOMMODATE PREDETERMINE	US	Issued	14/463,267	Aug 19, 2014	10,042,730	Aug 7, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR COMB HAVING A STEPPED INNER BORE	US	Issued	14/481,584	Sep 9, 2014	9,293,162	Mar 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-CLEANING RECORDING HEADS BASED ON ACTUATOR SEEK PROFILE	US	Issued	14/517,584	Oct 17, 2014	9,368,137	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED GARBAGE COLLECTION FOR SOLID-STATE STORAGE DEVICES	US	Issued	14/500,952	Sep 29, 2014	10,025,530	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED GARBAGE COLLECTION FOR SOLID-STATE STORAGE DEVICES	US	Issued	16/013,599	Jun 20, 2018	10,223,027	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST SECURE ERASE IN A FLASH SYSTEM	US	Issued	14/506,488	Oct 3, 2014	9,368,218	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST SECURE ERASE IN A FLASH SYSTEM	US	Issued	15/181,251	Jun 13, 2016	9,818,486	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SIDE-BY-SIDE MAGNETIC MULTI-INPUT MULTI-OUTPUT (MIMO) READ HEAD	US	Issued	14/489,299	Sep 17, 2014	9,218,831	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PHOTODIODE INTEGRATED EDGE EMITTING LASER FOR HEAT ASSISTED MAGNETIC REC	US	Issued	14/335,087	Jul 18, 2014	9,053,717	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH PATTERNED SERVO REGIONS AND	US	Issued	14/263,132	Apr 28, 2014	8,824,084	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE AND STORAGE DRIVE BLOCK	US	Issued	14/482,487	Sep 10, 2014	9,836,097	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLDER BALL JET NOZZLE HAVING IMPROVED RELIABILITY	US	Issued	14/527,088	Oct 29, 2014	10,029,327	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW BS SPIN-POLARIZER FOR SPIN TORQUE OSCILLATOR	US	Issued	14/555,484	Nov 26, 2014	9,230,569	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	UNDERLAYER FOR REFERENCE LAYER OF POLYCRYSTALLINE CPP GMR SENSOR STACK	US	Issued	14/488,735	Sep 17, 2014	9,412,399	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin Torque Oscillator with Low magnetic moment & High perpendicular magnetic anis	US	Issued	14/548,853	Nov 20, 2014	9,378,759	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	OFFLINE DEDUPLICATION FOR SOLID-STATE STORAGE DEVICES	US	Issued	14/500,937	Sep 29, 2014	9,792,069	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CONTROLLING PCIe DIRECT ATTACHED NONVOLATILE MEM	US	Issued	14/493,567	Sep 23, 2014	9,612,763	Apr 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CONTROLLING VARIOUS ASPECTS OF PCIe DIRECT ATTACHE	US	Issued	14/493,560	Sep 23, 2014	9,940,036	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CONTROLLING PCIe DIRECT ATTACHED NONVOLATILE MEM	US	Issued	15/478,155	Apr 3, 2017	10,552,284	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE HEALTH DIAGNOSIS	US	Issued	14/498,331	Sep 26, 2014	10,235,056	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TIER SCHEME FOR LOGICAL STORAGE MANAGEMENT	US	Issued	14/498,566	Sep 26, 2014	9,582,201	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TIER SCHEME FOR LOGICAL STORAGE MANAGEMENT	US	Issued	15/445,921	Feb 28, 2017	10,289,314	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TIER SCHEME FOR LOGICAL STORAGE MANAGEMENT	US	Issued	16/370,811	Mar 29, 2019	10,552,055	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TIER SCHEME FOR LOGICAL STORAGE MANAGEMENT	US	Issued	16/751,124	Jan 23, 2020	11,068,170	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO PROVIDE FILE SYSTEM FUNCTIONALITY OVER A PCIe INTERFA	US	Issued	14/507,572	Oct 6, 2014	10,275,175	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE WITH AT LEAST ONE VOLTAGE-GUIDED CONDUCTIVE FILAME	US	Issued	14/505,307	Oct 2, 2014	9,356,001	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE ECC CODEWORD SIZES IN AN SSD	US	Issued	14/338,264	Jul 22, 2014	9,430,326	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFINEMENT MAGNETIC CAP	US	Issued	14/341,737	Jul 25, 2014	9,330,692	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STABILIZING LAYER FOR A SPIN TORQUE OSCILLATOR (STO)	US	Issued	14/604,635	Jan 23, 2015	9,099,107	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES WITH PERFORMANCE-AWARE POWER CAPPING	US	Issued	14/493,296	Sep 22, 2014	9,541,988	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE-AWARE POWER CAPPING CONTROL OF DATA STORAGE DEVICES	US	Issued	14/493,304	Sep 22, 2014	10,146,293	Dec 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	OPERATING PARAMETERS FOR FLASH MEMORY DEVICES	US	Issued	14/846,568	Sep 4, 2015	10,235,057	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	OPERATING PARAMETERS FOR FLASH MEMORY DEVICES	US	Issued	16/282,227	Feb 21, 2019	10,963,166	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Operating Parameters for Non-Volatile Memory Devices	US	Issued	17/177,102	Feb 16, 2021	11,630,583	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods and Systems to Reduce SSD IO Latency	US	Issued	14/633,301	Feb 27, 2015	10,156,994	Dec 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, SYSTEMS, AND METHODS FOR PROVIDING WEAR LEVELING IN SOLID STA	US	Issued	14/509,400	Oct 8, 2014	9,336,136	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN SOLID STATE DEVICES	US	Issued	15/130,320	Apr 15, 2016	10,019,166	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN SOLID STATE DEVICES	US	Issued	16/011,572	Jun 18, 2018	10,642,495	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN SOLID STATE DEVICES	US	Issued	16/827,605	Mar 23, 2020	11,204,697	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE ACCELERATION DURING SHUTDOWN OF A DATA STORAGE DEVICE	US	Issued	14/523,100	Oct 24, 2014	9,645,769	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, SYSTEMS, AND METHODS FOR PROVIDING A MEMORY EFFICIENT CACHE	US	Issued	14/509,597	Oct 8, 2014	9,501,419	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR STR	US	Issued	14/341,485	Jul 25, 2014	8,873,204	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INVALIDATION DATA AREA FOR CACHE	US	Issued	14/316,256	Jun 26, 2014	9,501,418	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INVALIDATION DATA AREA FOR CACHE	US	Issued	15/357,155	Nov 21, 2016	10,445,242	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	INVALIDATION DATA AREA FOR CACHE	US	Issued	16/455,635	Jun 27, 2019	10,810,128	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INVALIDATION DATA AREA FOR CACHE	US	Issued	17/068,700	Oct 12, 2020	11,372,771	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUID DYNAMIC BEARING GROOVE CONFIGURATION	US	Issued	14/515,318	Oct 15, 2014	9,361,932	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FEEDTHROUGH CONNECTOR FOR HERMETICALLY SEALED ELECTRONIC DEVICES	US	Issued	14/518,853	Oct 20, 2014	9,431,759	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FEEDTHROUGH CONNECTOR FOR HERMETICALLY SEALED ELECTRONIC DEVICES	US	Issued	15/223,976	Jul 29, 2016	9,691,434	Jun 27, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD/UNLOAD RAMPS FOR MULTIPLE DISK STACK, SHARED ACTUATOR HARD DISK DRI	US	Issued	14/548,232	Nov 19, 2014	9,183,862	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD/UNLOAD RAMPS FOR MULTIPLE DISK STACK, SHARED ACTUATOR HARD DISK DRI	US	Issued	14/548,242	Nov 19, 2014	9,218,833	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Programmable Solid State Drive Controller And Method For Scheduling Commands U	US	Issued	14/564,829	Dec 9, 2014	9,575,669	Feb 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING REDUNDANCY IN MEMORY CONTROLLE	US	Issued	14/564,798	Dec 9, 2014	9,619,326	Apr 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING REDUNDANCY IN MEMORY CONTROLLE	US	Issued	15/484,039	Apr 10, 2017	10,133,629	Nov 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING REDUNDANCY IN MEMORY CONTROLLE	US	Issued	16/164,730	Oct 18, 2018	10,628,260	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING REDUNDANCY IN MEMORY CONTROLLE	US	Issued	16/818,949	Mar 13, 2020	11,132,255	Sep 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING REDUNDANCY IN MEMORY CONTROLLE	US	Issued	17/463,340	Aug 31, 2021	11,579,973	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING OPTIMAL READ LEVELS	US	Issued	14/549,535	Nov 20, 2014	9,576,671	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING OPTIMAL READ LEVELS	US	Issued	15/436,697	Feb 17, 2017	10,566,061	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING OPTIMAL READ LEVELS	US	Issued	16/752,516	Jan 24, 2020	11,488,673	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING AN IMPRINT TEMPLATE WITH DATA REGIONS AND NON-DATA R	US	Issued	14/471,103	Aug 28, 2014	9,336,809	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DUAL PARTIALLY INDEPENDENT THERMAL FLYHEIGHT CONTROL (TFC)	US	Issued	14/678,906	Apr 3, 2015	9,564,163	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TIERED SUB-UNIT THROUGHPUTS IN MASS STORAGE ASSEMBLIES	US	Issued	14/558,329	Dec 2, 2014	9,671,959	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH SPIN-TORQUE OSCILLATOR (STO) AND STO CORROSION MONITOR	US	Issued	14/542,555	Nov 15, 2014	9,099,113	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH ALUMINUM COMPOUND FILL	US	Issued	14/562,268	Dec 5, 2014	9,406,323	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IRON-OXIDIZED HARD DISK DRIVE ENCLOSURE COVER	US	Issued	14/588,838	Jan 2, 2015	9,202,483	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IRON-OXIDIZED HARD DISK DRIVE ENCLOSURE COVER	US	Issued	14/932,221	Nov 4, 2015	9,293,161	Mar 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HDD MAGNETIC HEAD DEGRADATION FIELD-FAILURE DETECTION AND PREDICTION	US	Issued	14/750,815	Jun 25, 2015	9,548,070	Jan 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	REAL TIME PROTOCOL GENERATION	US	Issued	14/548,115	Nov 19, 2014	9,836,215	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	RESOURCE ALLOCATION AND DEALLOCATION FOR POWER MANAGEMENT IN DEVICES	US	Issued	14/546,914	Nov 18, 2014	9,417,961	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Adaptive Error Corrective Code Mechanisms	US	Issued	14/560,767	Dec 4, 2014	10,067,823	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Multi-Zone Data Tiering for Endurance Extension in Solid Sta	US	Issued	14/560,802	Dec 4, 2014	10,691,531	Jun 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Multi-Zone Data Tiering for Endurance Extension in Solid Sta	US	Issued	16/824,508	Mar 19, 2020	11,150,984	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Allocating Blocks of Memory to Multiple Zones Associated w	US	Issued	17/501,890	Oct 14, 2021	11,640,333	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL GROUPING ALGORITHMS FOR INCREASED FLASH PERFORMANCE	US	Issued	14/549,532	Nov 20, 2014	9,905,302	Feb 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Level Grouping for Increased Flash Performance	US	Issued	14/664,768	Mar 20, 2015	9,720,574	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-SENSOR READER STRUCTURE HAVING A CURRENT PATH WITH INCREASED SIZE T	US	Issued	14/604,617	Jan 23, 2015	9,542,962	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR STR	US	Issued	14/513,320	Oct 14, 2014	9,099,125	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A PATTERNED PERPENDICULAR MAGNETIC RECORDING DISK US	US	Issued	14/469,412	Aug 26, 2014	9,464,348	Oct 11, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TRACK ERROR-CORRECTING CODE EXTENSION	US	Issued	14/595,801	Jan 13, 2015	9,632,863	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	INTRA-ZONE WEAR LEVELING FOR HEAT-ASSISTED MAGNETIC RECORDING - SHINGLED	US	Issued	14/603,046	Jan 22, 2015	9,153,290	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH PERFORMANCE PERPENDICULAR MAGNETIC GRANULAR MEDIA CONSISTING OF N	US	Issued	14/603,258	Jan 22, 2015	9,129,638	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-SENSOR (MIMO) HEAD HAVING A BACK SIDE ANTIFERROMAGNETIC MIDDLE SHI	US	Issued	14/604,630	Jan 23, 2015	9,269,383	Feb 23, 2016

WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID ANALOG AND DIGITAL MEMORY DEVICE	US	Issued	14/683,850	Apr 10, 2015	9,558,814	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING WEAR OF SYSTEM AREAS OF STORAGE DEVICES	US	Issued	14/602,124	Jan 21, 2015	9,459,857	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING WEAR OF SYSTEM AREAS OF STORAGE DEVICES	US	Issued	15/226,590	Aug 2, 2016	10,289,408	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods and Systems for Memory Page Allocation	US	Issued	14/640,944	Mar 6, 2015	9,678,665	Jun 13, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER ANNEAL FOR HEAT ASSISTED MAGNETIC RECORDING	US	Issued	14/533,027	Nov 4, 2014	9,424,865	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR HEAD WITH INCLINED MAMR HEAD BODY	US	Issued	14/620,557	Feb 12, 2015	9,129,621	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) DEVICE WITH MgO TUNNELING BARRIER LAYER	US	Issued	14/499,218	Sep 28, 2014	9,099,124	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MIMO READ HEAD WITH SOFT BIAS AND SPLIT SHIELD	US	Issued	14/644,564	Mar 11, 2015	9,299,370	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SERVO CONTROL SYSTEM WITH LOW POWER CONSUMPTION FOR LONG SE	US	Issued	14/602,352	Jan 22, 2015	9,275,667	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN TORQUE OSCILLATOR ERASURE PREVENTION IN MICROWAVE-ASS	US	Issued	14/731,832	Jun 5, 2015	9,355,657	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR REDUCING ADJACENT TRACK INTERFERENCE EFFECTS IN A DATA STORAGE	US	Issued	14/614,273	Feb 4, 2015	9,336,818	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH PATTERNED TEMPLATE LAYER	US	Issued	14/530,469	Oct 31, 2014	9,431,046	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE TARGETING OF READ LEVELS IN STORAGE DEVICES	US	Issued	14/617,231	Feb 9, 2015	9,535,786	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, SYSTEMS, AND METHODS FOR DATA RECOVERY	US	Issued	14/590,694	Jan 6, 2015	9,535,799	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Hybrid Solid State Drive (SSD) using PCM or other high performance solid-state memor	US	Issued	14/620,971	Feb 12, 2015	9,696,934	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING (HAMR) MEDIA HAVING A HIGHLY ORDERED CR	US	Issued	14/555,496	Nov 26, 2014	9,558,777	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING SCHEME FOR 3D VERTICAL FLASH MEMORY	US	Issued	14/627,580	Feb 20, 2015	9,830,219	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED MAGNETIC MEMORY CELL	US	Issued	14/834,743	Aug 25, 2015	10,157,656	Dec 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING MAGNETIC MEMORY PILLAR DESIGN	US	Issued	15/369,601	Dec 5, 2016	9,673,387	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING 3D SCALABLE MAGNETIC MEMORY WITH INTERLAYER DIELECTRIC STAG	US	Issued	14/834,929	Aug 25, 2015	9,443,905	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING MAGNETIC MEMORY INTEGRATION WITH CMOS DRIVING CIRCUITS	US	Issued	14/835,021	Aug 25, 2015	9,780,143	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DEPOSITION GROWTH METHOD FOR MAGNETIC MEMORY	US	Issued	14/835,271	Aug 25, 2015	9,431,457	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DEPOSITION GROWTH METHOD FOR MAGNETIC MEMORY	US	Issued	15/197,847	Jun 30, 2016	9,899,595	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DEPOSITION GROWTH METHOD FOR MAGNETIC MEMORY	US	Issued	15/876,632	Jan 22, 2018	10,361,365	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SEGREGATED MEDIA BASED MAGNETIC MEMORY	US	Issued	14/835,543	Aug 25, 2015	9,444,036	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	UPDATING EXCLUSIVE-OR PARITY DATA	US	Issued	14/642,218	Mar 9, 2015	10,275,310	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ANTI-CORROSION INSULATION LAYER FOR MAGNETIC RECORDING MEDIUM	US	Issued	14/662,527	Mar 19, 2015	10,210,895	Feb 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Far Field Interference Mitigation By Relative Frequency Ordering	US	Issued	14/601,588	Jan 21, 2015	9,153,247	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	RETRACTABLE GUIDE FEATURES FOR DATA STORAGE DEVICE CARRIERS	US	Issued	14/604,229	Jan 23, 2015	9,870,804	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	RETRACTABLE GUIDE FEATURES FOR DATA STORAGE DEVICE CARRIERS	US	Issued	15/869,897	Jan 12, 2018	10,910,019	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	INDIRECTION DATA STRUCTURES TO MANAGE FILE SYSTEM METADATA	US	Issued	14/615,913	Feb 6, 2015	9,690,793	Jun 27, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	INDIRECTION DATA STRUCTURES TO MANAGE FILE SYSTEM METADATA	US	Issued	15/595,239	May 15, 2017	10,083,085	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STABILIZATION AND SCISSOR DESIGN FOR ANOMALOUS HALL EFFECT MAGN	US	Issued	14/616,621	Feb 6, 2015	9,293,160	Mar 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	BOUNDARY SCAN TESTING A STORAGE DEVICE VIA SYSTEM MANAGEMENT BUS INTER	US	Issued	14/689,043	Apr 16, 2015	10,162,006	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DIRECTED SELF-ASSEMBLY (DSA) OF BLOCK COPOLYMERS USING GUIDIN	US	Issued	14/532,240	Nov 4, 2014	9,458,531	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD WITH RECESSED NEAR-FI	US	Issued	14/510,377	Oct 9, 2014	9,036,307	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NON-MAGNETIC BUMP STRUCTURE FORMED ON S	US	Issued	14/602,160	Jan 21, 2015	9,230,573	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PEAK POWER EFFICIENT DATA STORAGE DRIVES	US	Issued	14/606,581	Jan 27, 2015	9,348,529	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE TEMPERED DATA STORAGE DEVICE	US	Issued	14/620,397	Feb 12, 2015	9,417,814	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ATOMIC WRITE-IN-PLACE FOR HARD DISK DRIVES	US	Issued	14/604,446	Jan 23, 2015	9,236,066	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE HEAD-DISK INTERFACE DITHERING	US	Issued	14/633,126	Feb 26, 2015	9,595,280	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	GEOMETRY AWARE BLOCK RECLAMATION	US	Issued	14/616,445	Feb 6, 2015	9,582,192	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE TUNING FOR STORAGE DEVICES	US	Issued	14/599,734	Jan 19, 2015	10,228,866	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR IMPLEMENTING HIGH SPEED SERIAL INTERFACE BUS HAV	US	Issued	15/090,249	Apr 4, 2016	10,049,076	Aug 14, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Doorless protocol having multiple queue read requests in flight	US	Issued	14/631,187	Feb 25, 2015	9,778,859	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE VOICE COIL ACTUATOR LATCH	US	Issued	14/622,804	Feb 13, 2015	9,177,578	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ADAPTIVE READ LEVEL ADJUSTMENT	US	Issued	15/068,427	Mar 11, 2016	9,761,308	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR UPDATING A RECOVERY SEQUENCE MAP	US	Issued	14/833,844	Aug 24, 2015	10,108,503	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods and Systems for Improving Flash Memory Flushing	US	Issued	14/833,817	Aug 24, 2015	10,209,891	Feb 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLING ENCRYPTED DATA STORED ON A REMOTE STORAGE DEVICE	US	Issued	14/658,129	Mar 13, 2015	9,762,548	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION FOR NON-VOLATILE MEMORY	US	Issued	14/627,570	Feb 20, 2015	9,619,320	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION FOR NON-VOLATILE MEMORY	US	Issued	15/463,395	Mar 20, 2017	9,959,166	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) READ HEAD WITH REDUCED GAP THICKNESS	US	Issued	14/561,265	Dec 5, 2014	9,177,575	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Air bearing surface design with extreme particle trapping holes for improving HDD part	US	Issued	14/640,684	Mar 6, 2015	9,230,587	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STRUCTURES AND METHODS FOR TEMPLATED GROWTH OF HIGH AREAL DENSITY HEAT	US	Issued	14/728,871	Jun 2, 2015	10,347,281	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	A magnetic head provided spin torque oscillator with low drive voltage for microwav	US	Issued	14/593,801	Jan 9, 2015	9,202,484	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Near-field transducer with compositionally graded material for heat assisted magnetic	US	Issued	14/638,794	Mar 4, 2015	9,202,481	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH MULTIPLE EXCHANGE COUPLING LAYERS AND	US	Issued	14/644,633	Mar 11, 2015	9,934,808	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH MULTIPLE EXCHANGE COUPLING LAYERS AND	US	Issued	15/912,648	Mar 6, 2018	10,930,313	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH MULTIPLE EXCHANGE COUPLING LAYERS AND	US	Issued	16/904,400	Jun 17, 2020	11,276,428	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE PREAMPLIFIER WITH WRITE DRIVER HAVING BYPASS CURRENT SOUR	US	Issued	14/630,720	Feb 25, 2015	9,153,248	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTAMINATION MITIGATION CAP FOR A HARD DISK DRIVE ACTUATOR PIVOT ASSEMBL	US	Issued	14/642,450	Mar 9, 2015	9,245,546	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER FOR HEAT ASSISTED MAGNETIC RECORDING COMPRISING O	US	Issued	14/705,684	May 6, 2015	10,403,315	Sep 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER FOR HEAT ASSISTED MAGNETIC RECORDING COMPRISING O	US	Issued	16/551,671	Aug 26, 2019	10,636,442	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR HAVING AN IR SEED LAYER FOR IMPROVED PINNED LAYER	US	Issued	14/718,018	May 20, 2015	9,343,090	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STRUCTURES AND METHODS FOR PARALLEL TESTING OF MULTIPLE READ HEADS IN TW	US	Issued	14/720,781	May 23, 2015	9,454,981	Sep 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR SPIN TRANSFER TORQUE (STT) MEMORY CELL WITH DOUBLE MgO INT	US	Issued	14/664,644	Mar 20, 2015	9,337,415	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PREHEATING A HARD DISK DRIVE HEAD SLIDER FOR HEAD SWITCH SEEK	US	Issued	14/869,927	Sep 29, 2015	9,460,745	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED TRACK FOLLOWING DURING READ BACK USING HEAD ASYN	US	Issued	14/988,651	Jan 5, 2016	10,008,229	Jun 26, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NANOPARTICULATE-TRAPPING FILTER FOR HARD DISK DRIVE	US	Issued	14/742,309	Jan 17, 2015	9,418,710	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXURE BACK-FLOW STOPPER	US	Issued	14/707,605	May 8, 2015	9,938,990	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXURE BACK-FLOW STOPPER	US	Issued	15/928,603	Mar 22, 2018	10,718,354	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL BLOCK ADDRESS MAPPING FOR HARD DISK DRIVES	US	Issued	14/876,151	Oct 6, 2015	10,423,339	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	THIN FILM CONFIGURED TO PRESERVE ALUMINA HEIGHT IN A MAGNETIC RECORDING H	US	Issued	14/793,702	Jul 7, 2015	9,406,324	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO DIMENSIONAL MAGNETIC READ HEAD HAVING ASYMMETRICAL SECONDARY READ	US	Issued	14/822,853	Aug 10, 2015	9,396,744	Jul 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARDWARE EFFICIENT RABIN FINGERPRINTS	US	Issued	14/835,618	Aug 25, 2015	10,108,659	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Hardware Efficient Fingerprinting	US	Issued	14/835,622	Aug 25, 2015	10,078,646	Sep 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC CAPPING LAYER STRUCTURE FOR A SPIN TORQUE OSCILLATOR	US	Issued	14/818,263	Aug 4, 2015	9,355,655	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Symmetrical STO for oscillation with both polarity bias	US	Issued	14/808,693	Jul 24, 2015	9,311,934	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR ADJUSTING BIAS OF RELATIVE MAGNETIZATIONS OF FERROMAGNETIC LA	US	Issued	14/693,009	Apr 22, 2015	9,378,761	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR WITH HIGH SPIN TORQUE EFFICIENCY AND RELIABILITY	US	Issued	14/726,513	May 30, 2015	9,437,222	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING GUIDING LINES WITH OXIDIZED SIDEWALLS FOR USE IN DIRECTE	US	Issued	14/704,082	May 5, 2015	9,431,219	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER HAVING AN ADHESION LAYER COUPLED THERETO	US	Issued	14/741,390	Jun 16, 2015	9,633,677	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER HAVING AN ADHESION LAYER COUPLED THERETO	US	Issued	15/459,955	Mar 15, 2017	9,852,749	Dec 26, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) DEVICE WITH MAGNESIUM OXIDE TUNNELING	US	Issued	14/701,050	Apr 30, 2015	9,177,573	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PLANAR VARIABLE RESISTANCE MEMORY	US	Issued	14/882,147	Oct 13, 2015	9,728,255	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PLANAR VARIABLE RESISTANCE MEMORY	US	Issued	15/667,000	Aug 2, 2017	10,163,504	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Electroplated phase change switch	US	Issued	14/788,183	Jun 30, 2015	9,595,669	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Multilevel phase change device	US	Issued	14/845,016	Sep 3, 2015	9,564,585	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Multilevel phase change device	US	Issued	15/406,221	Jan 13, 2017	10,020,053	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL PHASE CHANGE DEVICE	US	Issued	16/017,806	Jun 25, 2018	10,460,801	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	A Method for Fabricating MRAM Bits on a Tight Pitch	US	Issued	14/728,778	Jun 2, 2015	9,472,753	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A Method for Fabricating MRAM Bits on a Tight Pitch	US	Issued	15/280,094	Sep 29, 2016	9,755,141	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-volatile Memory with Adjustable Cell Bit Shape	US	Issued	14/788,167	Jun 30, 2015	9,472,281	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR INLINE COMPRESSION AND DEDUPLICATION	US	Issued	14/744,444	Jun 19, 2015	10,152,389	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID LONGITUDINAL-FIELD BIAS SIDE SHIELD FOR A SCISSOR MAGNETIC SENSOR AND	US	Issued	14/811,754	Jul 28, 2015	9,280,992	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Method to coat NFT area with highly thermal conducting material in HAMR structure	US	Issued	14/798,428	Jul 13, 2015	9,460,738	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Method to coat NFT area with highly thermal conducting material in HAMR structure	US	Issued	15/280,071	Sep 29, 2016	9,747,929	Aug 29, 2017

WESTERN DIGITAL TECHNOLOGIES, INC.	T-SHAPE SCISSOR SENSOR AND METHOD OF MAKING THE SAME	US	Issued	14/745,282	Jun 19, 2015	9,472,215	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING PARITY DATA SEPARATE FROM PROTECTED DATA	US	Issued	14/823,796	Aug 11, 2015	10,133,625	Nov 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CORRELATING PHYSICAL PAGE ADDRESSES FOR SOFT DECISION DECODING	US	Issued	14/823,751	Aug 11, 2015	9,659,637	May 23, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED REDUNDANT CACHING FOR SHINGLED MAGNETIC RECORDING DEVICES IN	US	Issued	14/734,574	Jun 9, 2015	10,001,932	Jun 19, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BLOCKING CACHING FOR DATA STORAGE DRIVES	US	Issued	14/788,190	Jun 30, 2015	10,696,815	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT BURST DATA VERIFY IN SHINGLED DATA STORAGE DRIVES	US	Issued	14/788,771	Jun 30, 2015	9,269,376	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE WEAR LEVELLING	US	Issued	15/331,552	Oct 21, 2016	10,282,111	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANCY OF ERROR CORRECTION ENCODED DATA IN A STORAGE SYSTEM	US	Issued	15/068,491	Mar 11, 2016	10,198,313	Feb 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH ADJUSTABLE DATA TRACK PITCH AND COMPE	US	Issued	14/749,814	Jun 25, 2015	9,349,400	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HIERARCHICAL VARIABLE CODE RATE ERROR CORRECTION CODING	US	Issued	15/331,666	Oct 21, 2016	10,509,603	Dec 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL WAVEGUIDE NEAR FIELD TRANSDUCER FOR HEAT ASSISTED MAGNETIC RECORDI	US	Issued	14/850,845	Sep 10, 2015	9,472,220	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE DEVICE WITH LAMINATE INSERTION LAYER IN THE FREE LAYER	US	Issued	14/797,759	Jul 13, 2015	9,831,419	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROL OF VORTEX SHEDDING ASSOCIATED WITH A HARD DISK DRIVE DAMPER PLAT	US	Issued	15/804,391	Nov 6, 2017	10,283,169	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR SINGLE PASS ENTROPY DETECTION ON DATA TRANSFER	US	Issued	14/744,947	Jun 19, 2015	9,552,384	Jan 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR SINGLE PASS ENTROPY DETECTION ON DATA TRANSFER	US	Issued	15/380,826	Dec 15, 2016	10,089,360	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING NONVOLATILE STORAGE WRITE BANDWIDTH USING A CACH	US	Issued	14/850,741	Sep 10, 2015	10,108,350	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING NONVOLATILE STORAGE WRITE BANDWIDTH USING A CACH	US	Issued	14/850,802	Sep 10, 2015	10,048,876	Aug 14, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH WRITE POSITION ERROR SIGNAL VALUES WR	US	Issued	14/800,444	Jul 15, 2015	9,437,232	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO-DIMENSIONAL MAGNETIC RECORDING (TDMR) DISK DRIVE WITH VARYING SERV	US	Issued	14/834,683	Aug 25, 2015	9,286,926	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALING OF HARD DISK DRIVE USING LAMINATED FILM SEAL	US	Issued	14/964,360	Dec 9, 2015	9,721,619	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALING OF HARD DISK DRIVE USING LAMINATED FILM SEAL	US	Issued	14/964,414	Dec 9, 2015	9,704,539	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALING OF HARD DISK DRIVE USING LAMINATED FILM SEAL	US	Issued	14/964,453	Dec 9, 2015	9,721,620	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SPACING MEASUREMENT IMPROVEMENT IN THE PRESENCE OF TRACK MIS-REGISTRAT	US	Issued	14/832,415	Aug 21, 2015	9,361,922	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PERMEABILITY ELECTRICAL FEED-THROUGH	US	Issued	14/858,994	Sep 18, 2015	9,490,620	Nov 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PERMEABILITY ELECTRICAL FEED-THROUGH	US	Issued	15/228,983	Aug 4, 2016	9,736,940	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	LAMINATED FILM-PACKED HARD DISK DRIVE FOR HERMETIC SEALING	US	Issued	14/997,464	Jan 15, 2016	9,570,114	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVICE LEVEL BASED CONTROL OF STORAGE SYSTEMS	US	Issued	14/841,850	Sep 1, 2015	10,296,232	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Tilted Synthetic Antiferromagnet Polarizer/Reference Layer for STT-MRAM Bits	US	Issued	14/841,675	Aug 31, 2015	9,852,782	Dec 26, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Tilted Synthetic Antiferromagnet Polarizer/Reference Layer for STT-MRAM Bits	US	Issued	15/696,637	Sep 6, 2017	10,269,400	Apr 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Tilted Synthetic Antiferromagnet Polarizer/Reference Layer for STT-MRAM Bits	US	Issued	15/844,769	Dec 18, 2017	10,290,338	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Scissor Sensor with closed-loop side shield	US	Issued	14/955,878	Dec 1, 2015	9,679,591	Jun 13, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Tunable contact detection sensitivity to directly measure clearance of protrusions in m	US	Issued	14/823,775	Aug 11, 2015	9,595,281	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH	US	Issued	14/827,705	Aug 17, 2015	9,805,747	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF DECREASING WRITE AMPLIFICATION OF NAND FLASH USING A JOURNAL A	US	Issued	14/943,841	Nov 17, 2015	10,013,346	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Hard Disk Drive With A Vibration Isolation Frame	US	Issued	14/967,667	Dec 14, 2015	10,019,043	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION STANDOFF GEOMETRY FOR SLIDER CROWN CHANGE REDUCTION	US	Issued	14/850,615	Sep 10, 2015	9,558,768	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Shielded Patterned Ground Structure Filter for EMI reduction	US	Issued	14/927,405	Oct 29, 2015	9,717,140	Jul 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Repair-Optimal Parity Code	US	Issued	14/865,388	Sep 25, 2015	9,793,922	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH POSITION ERROR SIGNAL (PES) BLOCKS IN TH	US	Issued	14/834,739	Aug 25, 2015	9,412,403	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY-SEALED HARD DISK DRIVE COVER PERIMETER ADHESIVE SEAL	US	Issued	15/046,250	Feb 17, 2016	9,852,777	Dec 26, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetostrictive Effect Devices Having Enhanced Magnetic Anisotropy	US	Issued	14/948,145	Nov 20, 2015	9,564,581	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING OVERCOUNTING OF TRACK-LEVEL DAMAGE CAUSED BY ADJACENT-TRACK A	US	Issued	14/877,290	Oct 7, 2015	9,390,751	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LIBRARY FOR SEAMLESS MANAGEMENT OF STORAGE DEVICES	US	Issued	14/983,308	Dec 29, 2015	9,836,427	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	LIBRARY FOR SEAMLESS MANAGEMENT OF STORAGE DEVICES	US	Issued	15/828,229	Nov 30, 2017	10,719,473	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Half select method and structure for gating Rashba or Spin Hall MRAM	US	Issued	14/871,118	Sep 30, 2015	9,490,297	Nov 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Joint Decoding of Rewriting NVM Error Sectors	US	Issued	14/871,096	Sep 30, 2015	9,836,350	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Nano-Particle Matrix for 3D NVM RRAM	US	Issued	15/007,965	Jan 27, 2016	9,929,213	Mar 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CHARACTERIZING AND OPERATING A NON-VOLATILE MEMORY DEVICE	US	Issued	14/991,484	Jan 8, 2016	9,620,227	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CHARACTERIZING AND OPERATING A NON-VOLATILE MEMORY DEVICE	US	Issued	15/484,038	Apr 10, 2017	10,068,650	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CHARACTERIZING AND OPERATING A NON-VOLATILE MEMORY DEVICE	US	Issued	16/116,806	Aug 29, 2018	10,475,517	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized data layout for object store system	US	Issued	14/853,741	Sep 14, 2015	10,289,326	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED DATA STORAGE WITH REDUCED STORAGE OVERHEAD USING REDUCED D	US	Issued	14/987,244	Jan 4, 2016	10,146,618	Dec 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRIC INTERCONNECTION FOR MEMORY BANKS BASED ON NETWORK-ON-CHIP METH	US	Issued	14/922,547	Oct 26, 2015	11,165,717	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRIC INTERCONNECTION FOR MEMORY BANKS BASED ON NETWORK-ON-CHIP METH	US	Issued	17/486,528	Sep 27, 2021	11,546,272	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	System And Method For Reading Data Recorded On Ferroelectric Storage Medium By	US	Issued	15/944,074	Apr 3, 2018	10,283,146	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE MAGNETIC SENSOR WITH SCISSOR SENSOR AND MULT	US	Issued	14/956,251	Dec 1, 2015	9,940,955	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED LOW OVERHEAD DATA PROTECTION IN DATA STORAGE DRIVES	US	Issued	14/863,378	Sep 23, 2015	9,530,442	Dec 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED LOW OVERHEAD DATA PROTECTION IN DATA STORAGE DRIVES	US	Issued	15/373,937	Dec 9, 2016	9,921,767	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED DATA PROTECTION IN DATA STORAGE DRIVES	US	Issued	15/925,152	Mar 19, 2018	10,372,356	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED QUEUE MANAGEMENT FOR POWER CONTROL OF DATA STORAGE DEVICE	US	Issued	14/921,832	Oct 23, 2015	9,965,206	May 8, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTILAYER 3D MEMORY BASED ON NETWORK-ON-CHIP INTERCONNECTION	US	Issued	14/924,670	Oct 27, 2015	10,243,881	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE TERMINAL SOT MEMORY CELL WITH ANOMALOUS HALL EFFECT	US	Issued	14/927,414	Oct 29, 2015	9,830,966	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Three Terminal SOT Memory Cell with Anomalous Hall Effect	US	Issued	15/822,500	Nov 27, 2017	10,290,337	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ALL-CONNECTED BY VIRTUAL WIRES NETWORK OF DATA PROCESSING NODES	US	Issued	15/011,538	Jan 30, 2016	10,644,958	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ALL-CONNECTED BY VIRTUAL WIRES NETWORK OF DATA PROCESSING NODES	US	Issued	16/829,792	Mar 25, 2020	11,218,375	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING WRITE-BACKS TO MEMORY BY CONTROLLING THE AGE OF CACHE LINES IN L	US	Issued	15/958,563	Apr 20, 2018	10,552,325	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ANTI-REFLECTION WAVEGUIDE FOR HEAT-ASSISTED MAGNETIC RECORDING	US	Issued	14/871,648	Sep 30, 2015	9,558,769	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Method for Controlled Switching of a MRAM Device	US	Issued	15/009,448	Jan 28, 2016	9,721,636	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Bottom Pinned SOT-MRAM Bit Structure and Method of Fabrication	US	Issued	14/920,853	Oct 22, 2015	9,768,229	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Bottom Pinned SOT-MRAM Bit Structure and Method of Fabrication	US	Issued	15/684,892	Aug 23, 2017	10,490,601	Nov 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED POWER CONTROL OF DATA STORAGE ARRAYS	US	Issued	14/811,297	Jul 28, 2015	10,372,185	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO-DIMENSIONAL MAGNETIC RECORDING DEVICE WITH CENTER SHIELD STABILIZED	US	Issued	14/918,829	Oct 21, 2015	9,570,100	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable-RPM hard Disk Drive Control	US	Issued	14/989,560	Jan 6, 2016	10,073,625	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERATION OF RANDOM ADDRESS MAPPING IN NON-VOLATILE MEMORIES USING LC	US	Issued	14/967,169	Dec 11, 2015	9,921,969	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING CONTROL STATES FOR ADDRESS MAPPING IN NON-VOLATILE MEMORIE	US	Issued	15/627,042	Jun 19, 2017	10,445,232	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCESS NETWORK FOR ADDRESS MAPPING IN NON-VOLATILE MEMORIES	US	Issued	15/449,612	Mar 3, 2017	10,452,533	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN NON-VOLATILE MEMORIES	US	Issued	15/627,091	Jun 19, 2017	10,452,560	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN NON-VOLATILE MEMORIES	US	Issued	15/627,135	Jun 19, 2017	10,445,251	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Cross Device Redundancy Implementation on High Performance Direct Attach	US	Issued	15/058,461	Mar 2, 2016	10,275,376	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Switching Period Control of Microwave Assisted Magnetic Recording for Pole Erasure S	US	Issued	14/950,938	Nov 24, 2015	9,799,369	Oct 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SWITCHING PERIOD CONTROL OF MICROWAVE ASSISTED MAGNETIC RECORDING FOR	US	Issued	15/788,173	Oct 19, 2017	10,020,020	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SWITCHING PERIOD CONTROL OF MICROWAVE ASSISTED MAGNETIC RECORDING FOR	US	Issued	16/003,413	Jun 8, 2018	10,283,159	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH EXTENDED THREE-DIMENSIONAL AIR BEARING SURFACE	US	Issued	15/164,811	May 25, 2016	9,886,976	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRICATION PROCESS FOR SLIDER WITH EXTENDED THREE-DIMENSIONAL AIR BEARIN	US	Issued	15/164,817	May 25, 2016	9,865,284	Jan 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH TUNNEL FEATURE	US	Issued	15/164,822	May 25, 2016	9,704,523	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Monitoring and controlling the electrochemical wear at the head-disk interface	US	Issued	14/954,514	Nov 30, 2015	9,460,739	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ADAPTIVE PARTITIONING IN DISTRIBUTED CACHE MEMO	US	Issued	14/941,125	Nov 13, 2015	9,832,277	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-Intrusive Restart of a Task Manager	US	Issued	15/058,571	Mar 2, 2016	10,474,475	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Texture-Control Layer Spin Torque Oscillator	US	Issued	14/952,682	Nov 25, 2015	9,728,210	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Texture-Control Layer for Spin Torque Oscillator	US	Issued	15/666,533	Aug 1, 2017	9,990,943	Jun 5, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin-Orbit Torque Bit Cell Design for Improved Switching Efficiency	US	Issued	14/971,911	Dec 16, 2015	9,837,602	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Acoustic Attenuation In Data Storage Enclosures	US	Issued	15/011,338	Jan 29, 2016	10,403,328	Sep 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKFLOW STOPPER WITH ACOUSTIC BARRIER	US	Issued	15/011,413	Jan 29, 2016	10,151,324	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COLLISION DETECTION FOR SLAVE STORAGE DEVICES	US	Issued	15/139,988	Apr 27, 2016	10,019,306	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COLLISION DETECTION FOR SLAVE STORAGE DEVICES	US	Issued	16/022,542	Jun 28, 2018	10,761,923	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR LOCATION POINTERS FOR NON-VOLATILE MEMORY	US	Issued	14/924,671	Oct 27, 2015	10,025,652	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR OFFLOADING PROCESSING FROM A HOST TO STORAGE P	US	Issued	15/084,333	Mar 29, 2016	10,095,445	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR OFFLOADING PROCESSING FROM A HOST TO STORAGE P	US	Issued	16/149,091	Oct 1, 2018	10,725,709	Jul 28, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE PROCESSING UNIT ARRAYS AND METHODS OF USE	US	Issued	14/941,198	Nov 13, 2015	10,108,377	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE PRIORITY RATIOS FOR MULTIPLE TASK QUEUES	US	Issued	15/052,946	Feb 25, 2016	9,898,341	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT INTERFACE BETWEEN GRAPHICS PROCESSING UNIT AND DATA STORAGE UNIT	US	Issued	14/993,531	Jan 12, 2016	10,216,419	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE BUFFER PROTECTION	US	Issued	14/979,278	Dec 22, 2015	10,025,664	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED LATENCY MONITORING	US	Issued	14/977,269	Dec 21, 2015	10,379,747	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RELIABLE TRANSPORTATION MECHANISM FOR MICRO SOLDER BALLS	US	Issued	15/001,724	Jan 20, 2016	10,730,128	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE COVER SEAL FOR HERMETICALLY-SEALED DATA STORAGE DEVICE	US	Issued	15/168,895	May 31, 2016	9,870,803	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE COVER SEAL FOR HERMETICALLY-SEALED DATA STORAGE DEVICE	US	Issued	15/169,018	May 31, 2016	9,953,684	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE COVER SEAL FOR HERMETICALLY-SEALED DATA STORAGE DEVICE	US	Issued	15/831,283	Dec 4, 2017	10,290,326	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE COVER SEAL FOR HERMETICALLY-SEALED DATA STORAGE DEVICE	US	Issued	15/849,598	Dec 20, 2017	10,170,159	Jan 1, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Accelerated Atomic Resource Allocation on a Multiprocessor Platform	US	Issued	15/014,007	Feb 2, 2016	10,108,456	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MTJ Memory array subgrouping method and related drive circuitry	US	Issued	14/879,313	Oct 9, 2015	9,997,564	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYNCHRONIZATION METHOD AND APPARATUS FOR AN INTERCONNECTION NETWORK	US	Issued	15/011,541	Jan 30, 2016	10,222,992	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular Magnetic Recording Media with Lateral Exchange Control Layer	US	Issued	14/946,648	Nov 19, 2015	9,672,856	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Extending Representational State Transfer Application Program Interface (REST API) Fu	US	Issued	15/176,953	Jun 8, 2016	10,298,656	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Automatic RAID provisioning	US	Issued	15/243,692	Aug 22, 2016	10,365,837	Jul 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Coupled Soft Bias Scissor Type Sensor	US	Issued	14/987,568	Jan 4, 2016	9,799,356	Oct 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Coupled Soft Bias Scissor Type Sensor	US	Issued	15/709,359	Sep 19, 2017	10,096,331	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION PAD FOR HEAD-GIMBAL ASSEMBLY THAT INHIBITS FORMATION OF AN INT	US	Issued	15/016,149	Feb 4, 2016	9,728,211	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR EFFICIENT COMMON PROCESSING IN MEMOR DEVICE CONT	US	Issued	14/992,353	Jan 11, 2016	9,886,196	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR A COMMON PROCESSING FRAMEWORK FOR MEMORY DEV	US	Issued	14/992,701	Jan 11, 2016	10,108,340	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Using a Proprietary Framework on a Standards-Based Embedded Device	US	Issued	15/052,023	Feb 24, 2016	10,055,377	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC DISCOVERY OF MANAGEMENT NODES AND GENERATION OF CLI USING HA	US	Issued	15/400,702	Jan 6, 2017	10,574,724	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Outdated Resource Handling and Multiple-Version Upgrade of Cloud Software	US	Issued	15/258,642	Sep 7, 2016	10,289,400	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	LINEAR PUSH-PUSH MECHANISM FOR REMOVABLE STORAGE CARTRIDGE SYSTEM	US	Issued	15/077,302	Mar 22, 2016	9,772,662	Sep 26, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	INSERTION/EJECTION ASSIST MECHANISM FOR REMOVABLE STORAGE CARTRIDGE SYST	US	Issued	15/077,695	Mar 22, 2016	9,703,333	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR UPDATING A SYSTEM ON CHIP (SOC) IMAGE FROM A H	US	Issued	15/040,962	Feb 10, 2016	9,934,120	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Rule-Based Monitoring Engine With Tracing Capabilities for Multi-Threaded Logging	US	Issued	15/621,901	Jun 13, 2017	10,372,466	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Unified Paging Scheme for Dense and Sparse Translation Tables on Flash Storage Syst	US	Issued	15/197,116	Jun 29, 2016	10,229,048	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Unified Paging Scheme for Dense and Sparse Translation Tables on Flash Storage Syste	US	Issued	16/051,370	Jul 31, 2018	10,725,903	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Incremental snapshot based technique on paged translation systems	US	Issued	15/197,131	Jun 29, 2016	10,175,896	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Incremental snapshot based technique on paged translation systems	US	Issued	16/041,713	Jul 20, 2018	10,725,669	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Error Detecting Code with Partial Update	US	Issued	15/245,079	Aug 23, 2016	10,177,785	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Translation Lookup and Garbage Collection Optimizations on Storage System with Page	US	Issued	15/197,183	Jun 29, 2016	11,216,361	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Management of Paged Translation Maps in Memory and Flash	US	Issued	15/197,196	Jun 29, 2016	10,235,287	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Data Management Through Compressed Data Interfaces	US	Issued	15/621,960	Jun 13, 2017	10,572,153	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Data Management Through Compressed Data Interfaces	US	Issued	16/739,058	Jan 9, 2020	10,915,247	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SIGNATURE-BASED SERVICE MANAGER WITH DEPENDENCY CHECKING	US	Issued	15/243,708	Feb 22, 2016	10,394,619	Aug 27, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE LEAK CHANNEL STRUCTURE FOR HERMETIC SEALING OF A HARD DISK DRIVE	US	Issued	15/013,491	Feb 2, 2016	9,734,874	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALING WITH HIGH-SPEED TRANSMISSION FOR HARD DISK DRIVE	US	Issued	15/080,487	Mar 24, 2016	9,558,790	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALING WITH HIGH-SPEED TRANSMISSION FOR HARD DISK DRIVE	US	Issued	15/406,204	Jan 13, 2017	9,870,806	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETIC SEALED ELECTRICAL CONNECTOR WITH HIGH-SPEED TRANSMISSION FOR HA	US	Issued	16/086,513	Feb 20, 2017	10,575,424	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Diffused resistive memory cell with buried active zone	US	Issued	15/145,648	May 3, 2016	10,069,068	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Diffused resistive memory cell with buried active zone	US	Issued	16/110,079	Aug 23, 2018	10,446,748	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Nonvolatile Bipolar Junction Memory Cell	US	Issued	15/141,761	Apr 28, 2016	9,711,718	Jul 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE, METHOD AND SYSTEM, AND CONTROL OF DATA STORAGE DEV	US	Issued	15/065,001	Mar 9, 2016	10,636,065	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device, Method and System, and Control of Data Storage Device Based o	US	Issued	16/827,597	Mar 23, 2020	11,205,206	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED WRITE POLE AND RETURN POLE FOR IMPROVED AREAL DENSITY	US	Issued	15/078,963	Mar 23, 2016	9,805,753	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED WRITE POLE AND RETURN POLE FOR IMPROVED AREAL DENSITY	US	Issued	15/727,953	Oct 9, 2017	9,953,675	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	USING WINDOW UNDERLAYER STRUCTURES TO PROTECT NEAR FIELD TRANSDUCERS O	US	Issued	15/085,875	Mar 30, 2016	9,947,346	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	USING WINDOW UNDERLAYER STRUCTURES TO PROTECT NEAR FIELD TRANSDUCERS O	US	Issued	15/915,300	Mar 8, 2018	10,354,680	Jul 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR REDUCING STORAGE CLASS MEMORY WRITE BACKS	US	Issued	15/061,595	Mar 4, 2016	10,289,558	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CLUSTER AND METHOD THAT EFFICIENTLY STORE SMALL OBJECTS WITH ERAS	US	Issued	15/065,025	Mar 9, 2016	10,120,576	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Single IO operation integer-value database	US	Issued	15/063,253	Mar 7, 2016	10,437,802	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMABLE INPUT/OUTPUT (PIO) ENGINE INTERFACE ARCHITECTURE WITH DIRE	US	Issued	15/355,851	Nov 18, 2016	10,318,164	Jun 11, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Inter-Cell Interference reduction in flash memory devices	US	Issued	15/047,113	Feb 18, 2016	9,704,594	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-DIAGNOSIS OF DEVICE DRIVE-DETECTED ERRORS AND AUTOMATIC DIAGNOSTIC D	US	Issued	15/058,834	Mar 2, 2016	10,042,688	Aug 7, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient and dynamically sized reverse map to handle variable size data	US	Issued	15/062,456	Mar 7, 2016	10,001,924	Jun 19, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficiently and Dynamically Sized Reverse Map to Handle Variable Size Data	US	Issued	15/995,945	Jun 1, 2018	10,254,963	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Generalized Write Operations Verification Method	US	Issued	15/146,685	May 4, 2016	10,380,069	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE OPERATION VERIFICATION METHOD AND APPARATUS	US	Issued	16/455,564	May 27, 2019	11,544,223	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERALIZED VERIFICATION SCHEME FOR SAFE METADATA MODIFICATION	US	Issued	15/140,241	Apr 27, 2016	10,380,100	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERALIZED VERIFICATION SCHEME FOR SAFE METADATA MODIFICATION	US	Issued	16/523,960	Jul 26, 2019	11,347,717	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF PREVENTING METADATA CORRUPTION BY USING A NAMESPACE AND A M	US	Issued	15/058,538	Mar 2, 2016	10,310,925	Jun 4, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed Computing System Configuration	US	Issued	15/337,925	Oct 28, 2016	10,389,580	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT WIDE PORT PHY USAGE	US	Issued	15/061,768	Mar 4, 2016	9,959,068	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT WIDE PORT PHY USAGE	US	Issued	15/967,522	Apr 30, 2018	10,725,683	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT WIDE PORT PHY USAGE	US	Issued	16/928,954	Jul 14, 2020	11,422,722	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RELIABILITY INFORMATION IN A NON-VOLATILE MEMORY DEVICE	US	Issued	15/073,409	Mar 17, 2016	10,459,793	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	BASE FOR PROTECTING EXTERNAL WELDS OF HERMETICALLY SEALED ELECTRONIC DEVI	US	Issued	15/053,459	Feb 25, 2016	9,747,956	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH A PER	US	Issued	15/002,543	Jan 21, 2016	9,530,445	Dec 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MITIGATION OF LASER POWER VARIATION INDUCED PHASE SHIFT IN HEAT ASSISTED M	US	Issued	15/083,135	Mar 28, 2016	9,934,814	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH NOVEL HOT SEED DESIGN TO MITIGATE ADJACENT TRAC	US	Issued	15/047,585	Feb 18, 2016	9,536,548	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT OF STORAGE DEVICES	US	Issued	15/071,038	Mar 15, 2016	10,254,985	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	STACKABLE SLEDS FOR STORING ELECTRONIC DEVICES	US	Issued	15/189,921	Jun 22, 2016	9,861,011	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STACKABLE SLEDS FOR STORING ELECTRONIC DEVICES	US	Issued	15/859,085	Dec 29, 2017	10,212,854	Feb 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Switchable mechanical constraint for electrical connector with compliant mounting	US	Issued	15/132,651	Apr 19, 2016	9,743,547	Aug 22, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING HEAD WITH TRAILING SHIELD HEAT SIN	US	Issued	15/132,155	Apr 18, 2016	9,691,416	Jun 27, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING SYSTEM HAVING AT LEAST THREE POSSIBLE MA	US	Issued	15/194,412	Jun 27, 2016	9,818,440	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING RECESSED TRAILING SHIELD AND TRAILING RETURN P	US	Issued	15/077,831	Mar 22, 2016	9,899,049	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SURFACE TREATMENT OF MAGNETIC RECORDING HEADS FOR IMPROVING THE ROBUST	US	Issued	15/199,781	Jun 30, 2016	9,886,973	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Stream Journalled Replay	US	Issued	15/953,373	Apr 13, 2018	10,635,341	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Stream Journalled Replay	US	Issued	16/824,581	Mar 19, 2020	11,182,091	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Reference Set Construction for Data Deduplication	US	Issued	15/604,567	May 24, 2017	11,599,505	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Indirection-Based Storage System Backups Using Markers Including Sets Of Serial Num	US	Issued	15/587,403	May 5, 2017	10,565,057	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN STORAGE DEVICES	US	Issued	15/098,668	Apr 14, 2016	9,842,059	Dec 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SHIELD FOR EXTERNAL WELDS OF HERMETICALLY SEALED ELECTRONIC DEVICES	US	Issued	15/003,195	Jan 21, 2016	9,786,330	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE ARRAY ELECTRICAL LAPPING GUIDE DESIGN FOR SMALL STRIPE TMR SENSOR	US	Issued	15/169,589	May 31, 2016	9,865,286	Jan 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Residual Capacitance Performance Booster	US	Issued	15/145,575	May 3, 2016	9,508,399	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	3D CROSS-POINT MEMORY DEVICE	US	Issued	15/080,525	Mar 24, 2016	9,735,151	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	3D CROSS-POINT MEMORY MANUFACTURING PROCESS HAVING LIMITED LITHOGRAPH	US	Issued	15/628,317	Jun 20, 2017	10,586,794	Mar 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	3D CROSS-POINT MEMORY MANUFACTURING PROCESS HAVING LIMITED LITHOGRAPH	US	Issued	15/629,152	Jun 21, 2017	10,121,782	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Cell Located Pulse Generator	US	Issued	15/068,213	Mar 11, 2016	10,127,979	Nov 13, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-SITU SMEAR DETECTION AND MITIGATION IN HEAT-ASSISTED MAGNETIC RECORDIN	US	Issued	15/160,945	May 20, 2016	9,601,140	Mar 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER WITH ADJACENT HIGH-REFRACTIVE INDEX MATERIAL LAYER	US	Issued	15/146,791	May 4, 2016	10,204,646	Feb 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RESISTIVE MEMORY DEVICE BY SUBSTRATE REDUCTION	US	Issued	15/162,332	May 23, 2016	10,020,346	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Resistive Memory Device By Substrate Reduction	US	Issued	16/017,811	Jun 25, 2018	10,553,645	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SIDEWALL INSULATED RESISTIVE MEMORY DEVICES	US	Issued	16/009,075	Jun 14, 2018	10,644,066	May 5, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	BIT-LEVEL INDIRECTION DEFRAGMENTATION	US	Issued	15/222,504	Jul 28, 2016	9,946,490	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPRESSION OF INDIRECTION TABLES	US	Issued	15/208,118	Jul 12, 2016	9,946,463	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Nano-Imprinted Self-aligned Multi-level Processing Method	US	Issued	15/098,253	Apr 13, 2016	9,812,506	Nov 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Nano-Imprinted Self-aligned Multi-level Processing Method	US	Issued	15/477,739	Apr 3, 2017	9,929,214	Nov 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL AWARE WORKLOAD SCHEDULING	US	Issued	15/197,410	Jun 29, 2016	10,528,098	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY-SEALED DATA STORAGE DEVICE FOR INCREASED DISK DIAMETER	US	Issued	15/189,998	Jun 22, 2016	9,818,454	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY-SEALED DATA STORAGE DEVICE FOR INCREASED DISK DIAMETER	US	Issued	15/793,854	Oct 25, 2017	10,134,448	Nov 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY-SEALED DATA STORAGE DEVICE FOR INCREASED DISK DIAMETER	US	Issued	16/178,525	Nov 1, 2018	10,636,454	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual OTS Memory Cell Selection Means and Method	US	Issued	15/098,963	Apr 14, 2016	9,837,471	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVISIONING THE HYPER-CONVERGED INFRASTRUCTURE BARE METAL SYSTEMS FROM	US	Issued	15/189,901	Jun 22, 2016	10,372,464	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Anomaly Detection	US	Issued	15/222,854	Jul 28, 2016	10,372,524	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING TABLES FOR STORAGE DEVICES	US	Issued	15/214,345	Jul 19, 2016	10,289,544	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) DISK DRIVE WITH DISK HAVING MULTI	US	Issued	15/164,636	May 25, 2016	9,601,144	Mar 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) DISK WITH MULTIPLE CONTINUOUS M	US	Issued	15/164,685	May 25, 2016	9,601,145	Mar 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL-PORTED PCI EXPRESS-BASED STORAGE CARTRIDGE INCLUDING SINGLE-PORTED S	US	Issued	15/215,304	Jul 20, 2016	10,082,957	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONING OF LOGICAL TO PHYSICAL DATA ADDRESS TRANSLATION TABLES WITH PARALL	US	Issued	15/147,465	May 5, 2016	9,940,261	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Viral System Discovery and Installation for Distributed Networks	US	Issued	15/660,763	Jul 26, 2017	10,382,258	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Viral System Discovery and Installation for Distributed Networks	US	Issued	16/511,477	Jul 15, 2019	10,855,528	Dec 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED BULKHEAD ELECTRICAL FEED-THROUGH POSITIONING CONTROL	US	Issued	15/174,906	Jun 6, 2016	10,741,223	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED BULKHEAD ELECTRICAL FEED-THROUGH POSITIONING CONTROL	US	Issued	16/933,997	Jul 20, 2020	11,264,059	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ HEAD WITH FLOATING TRAILING SHIELD	US	Issued	15/068,476	Mar 11, 2016	10,008,224	Jun 26, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR thermal sensor with fast response time	US	Issued	15/160,325	May 20, 2016	10,175,122	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR THERMAL SENSOR WITH FAST RESPONSE TIME	US	Issued	16/229,855	Dec 21, 2018	10,564,053	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD FOR PROVIDING SPIN-TORQUE-ASSISTED WRITE FIELD ENHAN	US	Issued	15/659,767	Jul 26, 2017	10,366,714	Jul 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD FOR PROVIDING SPIN-TORQUE-ASSISTED WRITE FIELD ENHAN	US	Issued	16/440,922	Jun 13, 2019	10,546,603	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD FOR PROVIDING SPIN-TORQUE-ASSISTED WRITE FIELD ENHAN	US	Issued	16/748,881	Jan 22, 2020	10,811,039	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	High Availability State Machine and Recovery	US	Issued	15/236,818	Aug 15, 2016	10,467,100	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	High Availability State Machine and Recovery	US	Issued	16/455,654	Jun 27, 2019	11,182,252	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STO BIAS CONTROL FOR MAMR HEAD RELIABILITY	US	Issued	15/188,808	Jun 21, 2016	9,672,846	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Hierarchical Storage Policy for Distributed Object Storage Systems	US	Issued	15/394,559	Dec 29, 2016	10,078,552	Sep 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Hierarchical Storage Policy for Distributed Object Storage Systems	US	Issued	16/129,364	Sep 12, 2018	10,379,951	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Recovery and Regeneration Using Parity Code	US	Issued	15/626,027	Jun 16, 2017	10,379,952	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	POSITION-AWARE PRIMARY COMMAND QUEUE MANAGEMENT	US	Issued	15/257,431	Sep 6, 2016	10,228,880	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	OVONIC THRESHOLD SWITCH (OTS) DRIVER/SELECTOR USES UNSELECTED BIAS TO PRE CH	US	Issued	15/194,675	Jun 28, 2016	10,192,616	Jan 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Bi-directional RRAM Decoder-Driver	US	Issued	15/194,678	Jun 28, 2016	9,887,004	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Bi-directional RRAM Decoder-Driver	US	Issued	15/869,751	Jan 12, 2018	10,255,953	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	LINKED STORAGE SYSTEM AND HOST SYSTEM ERROR CORRECTING CODE	US	Issued	15/351,620	Nov 15, 2016	10,284,230	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermal Management of Selector	US	Issued	15/221,407	Jul 27, 2016	9,876,054	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermal Management of Selector	US	Issued	15/874,977	Jan 19, 2018	10,249,680	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC DATA RECORDING HEAD WITH HEAT SINK	US	Issued	15/369,730	Dec 5, 2016	10,360,932	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC DATA RECORDING HEAD WITH HEAT SINK	US	Issued	15/498,326	Apr 26, 2017	10,438,617	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WITHIN-ROW WEDGE ANGLE CONTROL FOR MAGNETIC RECORDING READ-WRITE HEAD	US	Issued	15/190,859	Jun 23, 2016	9,881,639	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Within-Row Stripe Height And Wedge Angle Control For Magnetic Recording Read-Wri	US	Issued	15/847,738	Dec 19, 2017	10,850,364	Dec 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Actuator Tilt Interposer For Within-Row Lapping Mount Tool For Magnetic Recording R	US	Issued	15/847,805	Dec 19, 2017	10,702,969	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUX-GUIDED TUNNELING MAGNETORESISTIVE (TMR) SENSOR FOR MAGNETIC TAPE W	US	Issued	15/094,134	Apr 8, 2016	9,786,302	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROGRAMMING DATA TO STORAGE DEVICES	US	Issued	15/219,220	Jul 25, 2016	9,892,793	Feb 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BINARY ENCODING FOR NON-VOLATILE MEMORY	US	Issued	15/662,158	Jul 27, 2017	10,530,391	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Transformation of Binary Data to Non-Binary Data For Storage in Non-Volatile Memory	US	Issued	16/714,601	Dec 13, 2019	10,965,321	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Transformation of Data to Non-Binary Data For Storage in Non-Volatile Memories	US	Issued	17/182,157	Feb 22, 2021	11,545,999	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPRESSION AND CACHING FOR LOGICAL-TO-PHYSICAL STORAGE ADDRESS MAPPING	US	Issued	15/183,657	Jun 15, 2016	10,067,881	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING HEAD HAVING SPIN TORQUE OSCILLAT	US	Issued	15/199,833	Jun 30, 2016	9,858,952	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Metadata Load Distribution Management	US	Issued	15/629,497	Jun 21, 2017	10,372,370	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENSIBLE STORAGE SYSTEM AND METHOD	US	Issued	16/452,465	Jun 25, 2019	10,642,503	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENSIBLE STORAGE SYSTEM AND METHOD	US	Issued	16/821,918	Mar 17, 2020	10,990,293	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENSIBLE STORAGE SYSTEM AND METHOD	US	Issued	17/210,277	Mar 23, 2021	11,314,418	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLING ACCESS TO NAMESPACES OF A STORAGE DEVICE	US	Issued	15/198,963	Jun 30, 2016	10,089,134	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW MAGNETIC FLUX DENSITY INTERFACE LAYER FOR SPIN TORQUE OSCILLATOR	US	Issued	15/195,876	Jun 28, 2016	9,805,746	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW MAGNETIC FLUX DENSITY INTERFACE LAYER FOR SPIN TORQUE OSCILLATOR	US	Issued	15/714,992	Sep 25, 2017	10,037,772	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CLASSIFYING DATA IN SOLID STATE DRIVES	US	Issued	15/214,185	Jul 19, 2016	10,067,683	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	INCREMENTAL BACKGROUND MEDIA SCAN	US	Issued	15/264,391	Sep 13, 2016	9,971,515	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR MITIGATION FOR 3D NAND FLASH MEMORY	US	Issued	15/257,598	Sep 6, 2016	10,290,353	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSOR IN NON-VOLATILE STORAGE MEMORY	US	Issued	15/395,474	Dec 30, 2016	10,885,985	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING AN EXTREMELY LOW HK LAYE	US	Issued	15/226,830	Aug 2, 2016	9,966,095	May 8, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Atomic Execution Unit for Object Storage	US	Issued	15/390,889	Dec 27, 2016	11,210,134	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR LIMITERS FOR MULTIPLE DISK STACK, SHARED ACTUATOR HARD DISK DRIVE	US	Issued	15/199,892	Jun 30, 2016	9,704,521	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR LIMITERS FOR MULTIPLE DISK STACK, SHARED ACTUATOR HARD DISK DRIVE	US	Issued	15/199,920	Jun 30, 2016	9,552,835	Jan 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE SYSTEM MULTI-SENSOR SIGNAL PREDICTION HEALTH CONTROLLE	US	Issued	15/346,818	Nov 9, 2016	10,032,476	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Shielded Three-layer Patterned Ground Structure	US	Issued	15/220,175	Jul 26, 2016	9,786,331	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING BER-LIST MODULATION CODE FOR HARD DISK DRIVES	US	Issued	15/395,150	Dec 30, 2016	9,886,979	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDING PROTOCOL PARAMETERS IN DATA STREAMS BETWEEN HOST DEVICES AND	US	Issued	15/257,541	Sep 6, 2016	11,003,614	May 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSOR IN NON-VOLATILE STORAGE MEMORY	US	Issued	15/395,415	Dec 30, 2016	10,114,795	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYNCHRONOUS DRIVE TELEMETRY DATA NOTIFICATION	US	Issued	15/265,317	Sep 14, 2016	9,996,477	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STREAM MANAGEMENT FOR STORAGE DEVICES	US	Issued	15/266,690	Sep 15, 2016	10,031,689	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATABASE READ CACHE OPTIMIZATION	US	Issued	15/701,481	Sep 12, 2017	11,403,176	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATABASE TRANSACTION LOG MIGRATION	US	Issued	15/701,483	Sep 12, 2017	11,347,600	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PERVASIVE DRIVE OPERATING STATISTICS ON SAS DRIVES	US	Issued	15/277,545	Sep 27, 2016	10,042,585	Aug 7, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WIRE BONDING ELECTRICAL LAPPING GUIDES FOR TAPE HEAD MODULE	US	Issued	15/237,345	Aug 15, 2016	9,767,833	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION (MTJ) FREE LAYER DAMPING REDUCTION	US	Issued	15/195,947	Jun 28, 2016	9,734,850	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION (MTJ) FREE LAYER DAMPING REDUCTION	US	Issued	15/673,816	Aug 10, 2017	9,911,439	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION (MTJ) FREE LAYER DAMPING REDUCTION	US	Issued	15/884,480	Jan 31, 2018	10,026,426	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION (MTJ) FREE LAYER DAMPING REDUCTION	US	Issued	16/005,835	Jun 12, 2018	10,121,500	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Performance Enhancement by Enabling Read from Secondary in Highly Availab	US	Issued	15/465,782	Mar 22, 2017	10,917,469	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TRIM MANAGEMENT IN SOLID STATE DRIVES	US	Issued	15/261,061	Sep 9, 2016	9,927,999	Mar 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COHERENT CONTROLLER	US	Issued	15/423,205	Feb 2, 2017	10,152,435	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIFIED INDIRECTION IN A MULTI-DEVICE HYBRID STORAGE UNIT	US	Issued	15/621,932	Jun 13, 2017	10,474,397	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Double-Barrier Vacuum Seal For Sealed Data Storage System	US	Issued	15/384,785	Dec 20, 2016	9,916,872	Mar 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Double-Barrier Vacuum Seal For Sealed System	US	Issued	15/916,254	Mar 8, 2018	10,141,032	Nov 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage System Enclosure With Decoupled Dividers	US	Issued	15/390,408	Dec 23, 2016	9,977,473	May 22, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage System Enclosure With Central Mounting Plate	US	Issued	15/390,433	Dec 23, 2016	10,127,947	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD TEST FIXTURE FOR HEAT ASSISTED MAGNETIC RECORDIN	US	Issued	15/334,197	Oct 25, 2016	9,858,954	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESSURE DETECTION OF HERMETICALLY SEALED DEVICE	US	Issued	15/362,332	Nov 28, 2016	10,074,404	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL FEED-THROUGH AND CONNECTOR CONFIGURATION	US	Issued	15/282,783	Sep 30, 2016	10,164,358	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED BULKHEAD ELECTRICAL FEED-THROUGH X-Y POSITIONING CONTROL	US	Issued	15/282,908	Sep 30, 2016	9,672,870	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA WITH ATOM IMPLANTED MAGNETIC LAYER	US	Issued	15/354,980	Nov 17, 2016	9,940,963	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Bitmap Processing for Log-Structured Data Store	US	Issued	15/647,108	Jul 11, 2017	10,678,446	Jun 9, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Slider Air Bearing Surface Structures with Efficiency-Flattening Hole	US	Issued	15/335,631	Oct 27, 2016	9,691,422	Jun 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and Apparatus for Smart Archiving and Analytics	US	Issued	15/468,245	Mar 24, 2017	10,360,193	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Management of Reference Blocks Used in Data Deduplication	US	Issued	15/657,224	Jul 24, 2017	10,503,608	Dec 10, 2019

WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Layer Integrated Zone Partition System Error Correction	US	Issued	15/497,879	Apr 26, 2017	10,275,309	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	BI-DIRECTIONAL CABLE INTERCONNECT SYSTEM	US	Issued	15/392,938	Dec 28, 2016	10,084,262	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR OFFLOADING DATA PROCESSING TO HYBRID STORAGE	US	Issued	15/382,564	Dec 16, 2016	10,359,953	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR LOW-LATENCY READ OF FLASH STORAGE DEVICES USING	US	Issued	15/388,737	Dec 22, 2016	10,290,346	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPERED VARIABLE NODE MEMORY	US	Issued	15/396,367	Dec 30, 2016	10,289,348	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODER SUPPORTING MULTIPLE CODE RATES AND CODE LENGTHS	US	Issued	15/396,366	Dec 30, 2016	9,838,033	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CPU Error Remediation During Erasure Code Encoding	US	Issued	15/626,043	Jun 16, 2017	10,243,583	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Partitioning Nodes in a Hyper-Converged Infrastructure	US	Issued	15/617,021	Jun 8, 2017	10,496,447	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK ERASE SCHEMES FOR CROSS-POINT NON-VOLATILE MEMORY DEVICES	US	Issued	15/418,178	Jan 27, 2017	9,928,907	Mar 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK ERASE SCHEMES FOR CROSS-POINT NON-VOLATILE MEMORY DEVICES	US	Issued	15/903,355	Feb 23, 2018	10,283,199	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	OVERLAPPING WRITE SCHEMES FOR CROSS-POINT NON-VOLATILE MEMORY DEVICES	US	Issued	15/403,800	Jan 11, 2017	9,911,494	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	OVERLAPPING WRITE SCHEMES FOR CROSS-POINT NON-VOLATILE MEMORY DEVICES	US	Issued	15/899,615	Feb 20, 2018	10,290,350	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BINARY ECCs FOR LOW-LATENCY READ, FRACTIONAL BITS PER CELL OF NAND FLASH	US	Issued	15/388,623	Dec 22, 2016	10,175,890	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	READ OPERATION AND SOFT DECODING TIMING	US	Issued	15/426,949	Feb 7, 2017	10,222,996	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT SAS PHY POWER MANAGEMENT	US	Issued	15/383,047	Dec 19, 2016	10,635,154	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BAD PAGE MANAGEMENT IN STORAGE DEVICES	US	Issued	15/388,883	Dec 22, 2016	10,445,199	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT BASED ON I/O TRAFFIC PROFILING	US	Issued	15/392,512	Dec 28, 2016	10,254,966	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CONDITIONAL JOURNAL FOR STORAGE CLASS MEMORY DEVICES	US	Issued	15/395,144	Dec 30, 2016	10,467,074	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHODOLOGY THAT FACILITATES ERROR MANAGEMENT WITHIN A SHARED	US	Issued	15/396,238	Dec 30, 2016	10,514,867	Dec 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHODOLOGY FOR LOW-LATENCY ERROR MANAGEMENT WITHIN A SHARED	US	Issued	15/428,745	Feb 9, 2017	10,254,982	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHODOLOGY FOR ERROR MANAGEMENT WITHIN A SHARED NON-VOLATILE	US	Issued	15/469,384	Mar 24, 2017	10,216,571	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING HEAD GIMBAL ASSEMBLY AND HARD DISK DRIVE	US	Issued	15/393,011	Dec 28, 2016	9,966,093	May 8, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Wrapped Data Storage Device For Reducing Vibration	US	Issued	15/388,633	Dec 22, 2016	10,037,783	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INCLUDING TEMPORARY STORAGE LOCATIONS	US	Issued	15/392,760	Dec 28, 2016	10,268,386	Apr 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX-HGA CONNECTOR ASSEMBLY FOR HARD DISK DRIVE	US	Issued	15/452,045	Mar 7, 2017	9,704,520	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE DATA PROTECTION AT EMERGENCY POWER OFF	US	Issued	15/494,716	Apr 24, 2017	10,635,158	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE DATA PROTECTION AT EMERGENCY POWER OFF	US	Issued	16/831,004	Mar 26, 2020	10,996,740	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CONNECTOR MITIGATING CROSSTALK FOR HIGH SPEED COMMUNICATION	US	Issued	15/390,566	Dec 26, 2016	9,881,650	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY APPARATUS AND METHODS THEREOF FOR WRITE AMPLIFICATION AWARE WRITE	US	Issued	15/396,548	Dec 31, 2016	10,289,317	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REFRESHING COMPUTER MEMORY BLOCKS	US	Issued	15/396,547	Dec 31, 2016	10,204,693	Feb 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR MONITORING NON-VOLATILE MEMORY READ ERRORS	US	Issued	15/388,603	Dec 22, 2016	10,545,810	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR READ DISTURB DETECTION BASED ON LOGICAL DOMAINS	US	Issued	15/394,560	Dec 29, 2016	10,372,382	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR READ DISTURB DETECTION AND HANDLING	US	Issued	15/396,206	Dec 30, 2016	10,373,695	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	GARBAGE COLLECTION READ THROTTLING	US	Issued	15/396,361	Dec 30, 2016	10,255,179	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY HANDLING	US	Issued	15/396,371	Dec 30, 2016	10,496,470	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY HANDLING	US	Issued	16/693,134	Nov 22, 2019	11,086,712	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY HANDLING	US	Issued	17/357,856	Jun 24, 2021	11,630,720	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERY OF VALIDITY DATA FOR A DATA STORAGE SYSTEM	US	Issued	15/396,411	Dec 30, 2016	10,380,028	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERY OF VALIDITY DATA FOR A DATA STORAGE SYSTEM	US	Issued	16/455,569	Jun 27, 2019	10,846,238	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERY OF VALIDITY DATA FOR A DATA STORAGE SYSTEM	US	Issued	17/086,152	Oct 30, 2020	11,500,780	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULING ACCESS COMMANDS FOR DATA STORAGE DEVICES	US	Issued	15/395,161	Dec 30, 2016	10,740,042	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULING ACCESS COMMANDS FOR DATA STORAGE DEVICES	US	Issued	16/937,420	Jul 23, 2020	11,630,609	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD BALANCING BY DYNAMICALLY TRANSFERRING MEMORY RANGE ASSIGNMENTS	US	Issued	15/388,768	Dec 22, 2016	10,235,069	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT DECODING SCHEDULING	US	Issued	15/426,951	Feb 7, 2017	10,180,794	Jan 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MANAGING NON-VOLATILE MEMORY	US	Issued	15/396,405	Dec 30, 2016	10,452,468	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System For Managing Memory Device	US	Issued	16/586,756	Sep 27, 2019	11,010,239	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System For Managing Memory Device	US	Issued	17/227,231	Apr 9, 2021	11,301,318	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR WRITING TO MAGNETIC MEDIA USING AN AC BIAS CURRENT	US	Issued	15/919,025	Mar 12, 2018	10,388,305	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR WRITING TO MAGNETIC MEDIA USING AN AC BIAS CURRENT	US	Issued	16/459,064	Jul 1, 2019	10,643,642	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-BANDWIDTH STO BIAS ARCHITECTURE WITH INTEGRATED SLIDER VOLTAGE POTENTIAL	US	Issued	15/918,060	Mar 12, 2018	10,424,323	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-BANDWIDTH STO BIAS ARCHITECTURE WITH INTEGRATED SLIDER VOLTAGE POTENTIAL	US	Issued	16/537,594	Aug 11, 2019	10,629,229	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-BANDWIDTH STO BIAS ARCHITECTURE WITH INTEGRATED SLIDER VOLTAGE POTENTIAL	US	Issued	16/816,211	Mar 11, 2020	10,891,973	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR WITH MULTILAYER SEED LAYER BETWEEN THE WRITE POLE	US	Issued	15/976,750	May 10, 2018	10,460,752	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE (STT) DEVICE WITH TEMPLATE LAYER FOR HEUSLER ALLOY MATERIAL	US	Issued	15/976,606	May 10, 2018	10,566,015	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR USING INVERSE SPIN HALL EFFECT	US	Issued	15/385,595	Dec 20, 2016	9,947,347	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING I/O OPERATIONS OF LARGE DATA OBJECTS IN A CACHE MEMORY DEVICE BY	US	Issued	15/470,787	Mar 27, 2017	10,289,315	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Data in a Storage System	US	Issued	15/492,221	Apr 20, 2017	10,282,127	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing I/O Operations in a Storage Network	US	Issued	15/608,945	May 30, 2017	10,540,323	Jan 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PSEUDO FLEXURE FOR DISK DRIVE AND METHOD OF TESTING ELECTRONIC CIRCUIT FOR	US	Issued	15/340,582	Nov 1, 2016	9,841,457	Dec 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	BURST WRITING FOR CLEARANCE CALIBRATION IN A HEAT ASSISTED MAGNETIC DATA RECORDING	US	Issued	15/396,235	Dec 30, 2016	9,881,641	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL TRACKING AND OPTIMIZATION	US	Issued	15/665,200	Jul 31, 2017	10,236,070	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL TRACKING AND OPTIMIZATION	US	Issued	16/354,039	Mar 14, 2019	10,748,628	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL TRACKING AND OPTIMIZATION	US	Issued	16/921,804	Jun 6, 2020	11,101,006	Aug 24, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL TRACKING AND OPTIMIZATION	US	Issued	17/359,352	Jun 25, 2021	11,621,043	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR SCANNING FOR ERASED FLASH MEMORY PAGES	US	Issued	15/662,199	Jul 27, 2017	10,387,246	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR IDENTIFYING ERASED MEMORY AREAS	US	Issued	16/455,664	Jun 27, 2019	10,884,854	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR IDENTIFYING ERASED MEMORY AREAS	US	Issued	17/127,306	Dec 18, 2020	11,327,837	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CALCULATING THE OPTIMAL NUMBER OF LBNS TO PREFETCH PER CPU	US	Issued	15/474,340	Mar 30, 2017	10,565,115	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CALCULATING THE OPTIMAL NUMBER OF LBNS TO PREFETCH PER CPU	US	Issued	16/748,790	Jan 21, 2020	11,422,941	Mar 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LBNS Prefetching Per CPU	US	Issued	17/857,224	Jul 5, 2022	11,656,993	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	RUN-TIME FLASH DIE FAILURE DETECTION ENHANCEMENT	US	Issued	15/600,673	May 19, 2017	10,453,548	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Run-Time Memory Device Failure Detection Enhancement	US	Issued	16/586,861	Sep 27, 2019	10,984,882	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER FAIL HANDLING USING STOP COMMANDS	US	Issued	15/610,423	May 31, 2017	10,379,979	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER FAIL HANDLING USING STOP COMMANDS	US	Issued	16/523,945	Jul 26, 2019	11,068,366	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	GEOMETRY-AWARE COMMAND SCHEDULING	US	Issued	15/677,941	Aug 15, 2017	10,379,765	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	GEOMETRY-AWARE COMMAND SCHEDULING	US	Issued	16/455,577	Jun 27, 2019	10,846,000	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	GEOMETRY-AWARE COMMAND SCHEDULING	US	Issued	17/086,159	Oct 30, 2020	11,435,908	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING SYSTEM DATA FOR A DATA STORAGE SYSTEM	US	Issued	15/664,667	Jul 31, 2017	10,379,758	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Data for a Data Storage System	US	Issued	16/523,956	Jul 26, 2019	10,901,632	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Data for a Data Storage System	US	Issued	17/153,713	Jan 20, 2021	11,474,709	Oct 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTEXT-AWARE DYNAMIC COMMAND SCHEDULING FOR A DATA STORAGE SYSTEM	US	Issued	15/600,672	May 19, 2017	10,635,617	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTEXT-AWARE DYNAMIC COMMAND SCHEDULING FOR A DATA STORAGE SYSTEM	US	Issued	16/827,591	Mar 23, 2020	11,061,842	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Command Scheduling for Storage System	US	Issued	17/330,286	May 25, 2021	11,645,217	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESERVING DATA UPON A POWER SHUTDOWN	US	Issued	15/593,206	May 11, 2017	10,289,551	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESERVING DATA UPON A POWER SHUTDOWN	US	Issued	16/387,413	Apr 17, 2019	11,048,589	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CAPACITY-AWARE WEAR LEVELING IN SOLID-STATE STORAGE DEVICES	US	Issued	15/459,339	Mar 15, 2017	10,228,862	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITY-BASED INTERNAL DATA MOVEMENT	US	Issued	15/604,575	May 24, 2017	10,503,412	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Priority-Based Data Movement	US	Issued	16/695,052	Nov 25, 2019	10,990,296	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Priority-Based Data Movement	US	Issued	17/222,861	Apr 5, 2021	11,487,437	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY AND ROTARY DISK STORAGE DEVICE	US	Issued	10/821,478	Apr 9, 2004	7,317,595	Jan 8, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	WIRE SUPPORT MEMBER AND ROTARY DISK STORAGE DEVICE	US	Issued	10/821,417	Apr 9, 2004	7,154,712	Dec 26, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	CONCURRENT DATA RECORDING AND REPRODUCING METHOD, SEEK OPERATION CONTROL	US	Issued	11/012,460	Dec 14, 2004	7,126,784	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR ASSEMBLY AND ROTATING DISK STORAGE DEVICE WITH EFFICIENT WRITE CONTROL	US	Issued	11/046,323	Jan 27, 2005	9,368,140	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA AND MAGNETIC STORAGE APPARATUS	US	Issued	10/977,552	Oct 29, 2004	7,368,185	May 6, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK APPARATUS WITH DUAL STAGE ACTUATOR	US	Issued	11/200,999	Aug 9, 2005	7,173,790	Feb 6, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE WITH FEEDBACK CONTROL	US	Issued	11/083,887	Mar 18, 2005	7,161,761	Jan 9, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SUSPENSION WITH BRIDGE PORTION SEPARATING APERTURES NEAR LIFT TAB	US	Issued	11/097,817	Mar 31, 2005	7,450,347	Nov 11, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM, MANUFACTURING PROCESS OF THE	US	Issued	11/107,588	Apr 15, 2005	7,875,371	Jan 25, 2011

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE HEAD SUSPENSION HAVING A LIFT TAB WHICH ENGAGES A LIMIT	US	Issued	11/200,562	Aug 9, 2005	7,489,478	Feb 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE, WIRING CONNECTION STRUCTURE AND TERMINAL STRUCTURE	US	Issued	12/079,700	Mar 27, 2008	7,724,478	May 25, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM AND MAGNETIC MEMORY DEVICE FOR HIGH DENSIT	US	Issued	11/223,603	Sep 9, 2005	7,532,436	May 12, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	PROTECTION OF HARD DRIVE INTERFACE CONNECTOR	US	Issued	11/218,389	Sep 2, 2005	7,163,422	Jan 16, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	ARM CHAMFER FOR COMB TYPE ACTUATOR IN ROTATING DISK STORAGE DEVICE AND	US	Issued	11/290,652	Nov 29, 2005	7,486,484	Feb 3, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	BEARING MECHANISM FOR SPINDLE MOTOR IN MAGNETIC DISK DRIVE	US	Issued	11/312,986	Dec 19, 2005	7,441,959	Oct 28, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE, AND METHOD FOR REWRITING DATA IN NONVOLATILE MEMO	US	Issued	11/388,640	Mar 23, 2006	7,487,392	Feb 3, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION FOR HARD DISK DRIVE WHICH ENABLES EASY DYNAMIC ELECTRIC TESTING	US	Issued	11/480,040	Jun 30, 2006	7,719,796	May 18, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY, SLIDER AND METHOD OF MANUFACTURING A HEAD GIMBAL	US	Issued	11/509,972	Aug 25, 2006	8,503,132	Aug 6, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND MAGNETIC STORAGE APPARAT	US	Issued	11/651,922	Jan 9, 2007	7,701,667	Apr 20, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM INCLUDING A PLURALITY OF DATA STORAGE DEVICES CONNECTED VIA NETWO	US	Issued	11/906,612	Oct 2, 2007	8,078,921	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK APPARATUS	US	Issued	11/801,502	May 9, 2007	7,894,158	Feb 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING SHIELD LAYER(S) WITH LOW COEFFICIENT OF THERMAL EXPA	US	Issued	11/807,744	May 29, 2007	8,830,635	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE APPARATUS	US	Issued	11/726,099	Mar 20, 2007	8,709,618	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DEVICE	US	Issued	11/811,383	Jun 7, 2007	7,876,527	Jan 25, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD ASSEMBLY THAT FACILITATES RECOVERY OF A MAGNETIC HEAD SLIDE	US	Issued	11/804,035	May 15, 2007	7,859,793	Dec 28, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE AND METHOD FOR PRODUCTION THEREOF	US	Issued	12/006,642	Jan 4, 2008	7,957,092	Jun 7, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE MAGNETORESISTIVE HEAD	US	Issued	11/890,004	Aug 3, 2007	8,547,666	Oct 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ROTATING DISK STORAGE DEVICE HAVING A SPOILER	US	Issued	11/903,010	Sep 19, 2007	7,944,644	May 17, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DETECTION ELEMENT	US	Issued	12/012,635	Feb 4, 2008	8,432,646	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEVICE AND MANUFACTURING METHOD THEREOF	US	Issued	12/008,544	Jan 10, 2008	7,876,528	Jan 25, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCE LEAKAGE OF LOW-DENSITY GAS DURING LOW-DENSITY GAS INJECTION INTO A	US	Issued	12/009,376	Jan 17, 2008	7,986,490	Jul 26, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCE LEAKAGE OF LOW-DENSITY GAS DURING LOW-DENSITY GAS INJECTION INTO A	US	Issued	13/190,470	Jul 25, 2011	8,705,202	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEVICE	US	Issued	12/008,275	Jan 9, 2008	7,872,836	Jan 18, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY INCLUDING A LIMITER HAVING A GROSS LENGTH LARGER THAN	US	Issued	11/998,624	Nov 29, 2007	8,130,470	Mar 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD USING A SYNTHETIC FERRI FREE STRUCTURE	US	Issued	12/011,334	Jan 25, 2008	9,245,548	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC RECORDING HEAD, RECORDING SYSTEM, AND RECOR	US	Issued	12/072,004	Feb 21, 2008	8,351,144	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING MAGNETIC HEAD	US	Issued	12/079,223	Mar 24, 2008	8,054,580	Nov 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSOR SHAPE OF CPP MAGNETIC HEAD FOR IMPROVING THE MR RATIO	US	Issued	12/011,904	Jan 29, 2008	8,355,224	Jan 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE FEED THROUGH SOLDER CONNECTION WITH SOLDER FILLET FO	US	Issued	12/148,697	Apr 21, 2008	8,179,631	May 15, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING WRITE POLE, FIRST SOFT MAGNETIC FILS SEPARATELY DISPO	US	Issued	12/070,155	Feb 15, 2008	8,300,358	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA AND MAGNETIC STORAGE APPARATUS	US	Issued	12/156,317	May 30, 2008	7,892,663	Feb 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SLIDER WITH DIFFUSION STOP FILMS EACH OF WHICH IS DISPOSED B	US	Issued	12/150,147	Apr 25, 2008	8,144,429	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Hermetically sealed disk drive device with flow amount adjuster and low-density gas se	US	Issued	12/157,425	Jun 9, 2008	8,564,900	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEVICE AND DATA REWRITE METHOD THEREOF	US	Issued	12/079,496	Mar 26, 2008	8,068,299	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND MANAGEMENT METHOD OF CRYPTOGRAPHIC KEY THEREO	US	Issued	12/079,699	Mar 27, 2008	8,239,691	Aug 7, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROACTUATOR, HEAD GIMBAL ASSEMBLY, AND MAGNETIC DISK DEVICE	US	Issued	12/284,252	Sep 19, 2008	8,213,127	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND MANUFACTURING METHOD TH	US	Issued	12/150,165	Apr 25, 2008	8,647,755	Feb 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SLIDER	US	Issued	12/231,256	Aug 28, 2008	8,102,625	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK HAVING ALIGNING PATTERN AND METHOD FOR ALIGNING T	US	Issued	12/156,338	May 29, 2008	8,259,414	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD AND METHOD FOR MANUFACTURING T	US	Issued	12/231,246	Aug 28, 2008	8,064,161	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND MAGNETIC RECORDING/REPR	US	Issued	12/288,654	Oct 21, 2008	8,771,849	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	12/287,467	Oct 8, 2008	8,035,923	Oct 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DEVICE AND HEAD STACK ASSEMBLY	US	Issued	12/313,291	Nov 18, 2008	8,094,412	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND DATA MANAGEMENT METHOD IN DATA STORAGE DEVICE	US	Issued	12/380,116	Feb 23, 2009	8,082,409	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE AND CONTROL METHOD THEREOF	US	Issued	12/290,970	Nov 4, 2008	7,808,740	Oct 5, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD, MAGNETIC HEAD, AND MAGNETIC DISK	US	Issued	12/313,410	Nov 19, 2008	8,339,749	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR MECHANISM FOR MAGNETIC DISK DRIVE	US	Issued	12/286,084	Sep 25, 2008	8,289,657	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROACTUATOR, HEAD GIMBAL ASSEMBLY, AND DISK DRIVE DEVICE	US	Issued	12/271,820	Nov 14, 2008	8,068,313	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE AND VOICE COIL MOTOR	US	Issued	12/321,187	Jan 16, 2009	8,064,171	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANT SUITABLE FOR USE WITH MAGNETIC DISK	US	Issued	13/188,423	Jul 21, 2011	8,623,800	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEVICE	US	Issued	12/313,641	Nov 20, 2008	8,031,437	Oct 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING MAGNETIC RECORDING MEDIUM	US	Issued	12/288,538	Oct 20, 2008	8,993,071	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD AND MAGNETIC RECORDING APPARATUS	US	Issued	12/315,525	Dec 3, 2008	8,238,064	Aug 7, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTENT DATA MANAGEMENT SYSTEM AND METHOD	US	Issued	12/288,954	Oct 24, 2008	9,400,876	Jul 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD AND MAGNETIC DISK APPARATUS	US	Issued	12/315,523	Dec 3, 2008	8,717,708	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK UNIT AND MANUFACTURING METHOD THEREOF	US	Issued	12/290,361	Oct 29, 2008	7,852,595	Dec 14, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING METHOD OF HERMETIC CONNECTION TERMINAL USED IN A DISK DR	US	Issued	12/313,615	Nov 21, 2008	8,098,454	Jan 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SLIDER AND DISK DRIVE	US	Issued	12/386,235	Apr 14, 2009	8,218,405	Jul 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING METHOD OF BASE AND MANUFACTURING METHOD OF DISK DRIVE	US	Issued	12/381,879	Mar 16, 2009	8,196,284	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE AND METHOD OF RE-INJECTING LOW DENSITY GAS IN A HERMETICALLY SEA	US	Issued	12/488,501	Jan 19, 2009	8,248,724	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD AND METHOD FOR MANUFACTURING T	US	Issued	12/380,302	Feb 25, 2009	8,842,388	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND MAGNETIC STORAGE DEVICE U	US	Issued	12/384,850	Apr 8, 2009	8,440,332	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD RECORDING DEVICE HAVING HEATING MECHANISM POSITIONED NEAR A T	US	Issued	12/537,141	Aug 6, 2009	8,264,918	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD-DISK DRIVE AND CONTROL METHOD FOR MAGNETIC RECORDING ON A PATTERN	US	Issued	12/505,085	Jul 17, 2009	8,107,180	Jan 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD, METHOD OF MANUFACTURING THE SAME AND MAGNE	US	Issued	12/559,349	Sep 14, 2009	8,351,153	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM HAVING ION-IMPLANTED PARTS	US	Issued	12/378,894	Feb 20, 2009	8,361,640	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM AND MANUFACTURING METHOD THEREOF	US	Issued	12/378,777	Feb 18, 2009	8,383,253	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM UTILIZING A RECORDING LAYER HAVING MORE AND	US	Issued	12/378,120	Feb 10, 2009	8,257,845	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CPP STRUCTURE MAGNETORESISTIVE HEAD	US	Issued	12/547,394	Aug 25, 2009	8,537,503	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE HAVING DUAL ACTUATOR	US	Issued	12/482,213	Jun 10, 2009	7,869,157	Jan 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE SLIDER HAVING A TRAILING EDGE EXTENDED REAR SURFACE	US	Issued	12/549,300	Aug 27, 2009	8,184,402	May 22, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DEVICE AND MAGNETIC RECORDING METHOD THEREOF	US	Issued	12/622,064	Nov 19, 2009	8,018,672	Sep 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA TRANSFER SYSTEM, DATA TRANSFER METHOD, DATA TRANSMISSION DEVICE AND	US	Issued	12/613,459	Nov 5, 2009	8,345,868	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ HEAD	US	Issued	12/579,854	Oct 15, 2009	8,223,463	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION AND DISK DRIVE	US	Issued	12/386,755	Apr 21, 2009	8,027,128	Sep 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROL METHOD FOR MAGNETIC DISK DEVICE, MAGNETIC DISK DEVICE AND MAGNE	US	Issued	12/543,845	Aug 19, 2009	8,049,986	Nov 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	CPP MAGNETORESISTIVE HEAD	US	Issued	12/536,255	Aug 5, 2009	8,335,057	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL JUNCTION TYPE MAGNETO-RESISTIVE HEAD	US	Issued	12/563,943	Sep 21, 2009	8,254,067	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC-RECORDING HEAD HAVING A MAGNETIC-RECORDING AS	US	Issued	12/573,069	Oct 2, 2009	8,248,893	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-GIMBAL ASSEMBLY INCLUDING A TRANSMISSION-LINE STRUCTURE FOR HIGH-DE	US	Issued	12/564,885	Sep 22, 2009	8,248,732	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/559,365	Sep 14, 2009	8,507,115	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A FACING ELECTRODE PAIR FOR GENERATING AN ELECTROM	US	Issued	12/547,964	Aug 26, 2009	8,373,940	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICALLY CONDUCTIVE SPACER AND DISK DRIVE INCLUDING THE ELECTRICALLY CO	US	Issued	12/558,343	Sep 11, 2009	8,189,289	May 29, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIAL MAGNETORESISTIVE EFFECT HEAD AND MAGNETIC RECORDING/READIN	US	Issued	12/628,577	Dec 1, 2009	8,570,689	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A HOST INTERFACE SUPPORTING DIFFERENT SIZES OF DATA SEC	US	Issued	12/545,788	Aug 21, 2009	8,291,190	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-GIMBAL ASSEMBLY, MICROACTUATOR, AND MANUFACTURING METHOD OF THE	US	Issued	12/622,093	Nov 19, 2009	8,427,783	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS FOR INTERCONNECTING CONNECTION PADS OF A HEAD-GIMBAL ASSEMBL	US	Issued	12/576,715	Oct 9, 2009	8,881,967	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL-CURRENT-TYPE REPRODUCING MAGNETIC HEAD AND METHOD OF MANUFAC	US	Issued	12/615,222	Nov 9, 2009	8,270,123	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE HEAD WITH A CPP STRUCTURE HAVING SUPPRESSED SIDE READIN	US	Issued	12/631,295	Dec 4, 2009	9,230,574	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-SLIDER CONFIGURED TO HAVE MULTIPLE DEPTH SURFACES TO AVOID CONTACT	US	Issued	12/646,108	Dec 23, 2009	8,325,445	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING/REPRODUCING USING A PATTERNED MEDIUM	US	Issued	12/635,629	Dec 10, 2009	8,169,729	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-STACK ASSEMBLY INCLUDING HEAD-DISSIPATION AND IMPEDANCE-MATCHING S	US	Issued	12/644,358	Dec 22, 2009	8,194,356	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING MAGNETIC HEAD WITH A VARYING INTERVAL BETWEEN T	US	Issued	12/636,659	Dec 11, 2009	8,351,154	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-SLIDER WITH PROTRUSION CONTROL STRUCTURE AND MANUFACTURING METH	US	Issued	12/616,033	Nov 10, 2009	8,254,061	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CUSHIONING RAMP HAVING A STEPPED STRUCTURE FOR MAGNETIC DISK APPARATUS	US	Issued	12/547,027	Aug 25, 2009	8,169,747	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING HEAD-SLIDER CONFIGURED TO SUPPRESS LUBRICANT DROLET A	US	Issued	12/634,660	Dec 9, 2009	8,116,037	Feb 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD-DISK DRIVE WITH VAPOR-PHASE LUBRICANT SUPPLY SYSTEM	US	Issued	12/634,624	Dec 9, 2009	8,184,397	May 22, 2012

WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-SLIDER INCLUDING THIN-FILM MAGNETIC-RECORDING HEAD HAVING REDUCED	US	Issued	12/642,739	Dec 18, 2009	8,786,986	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL ENERGY ASSISTED MEDIUM	US	Issued	12/630,707	Dec 3, 2009	9,099,140	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A LATCH CONFIGURED TO LOCK AN ACTUATOR IN RESPONSE TO	US	Issued	12/635,664	Dec 10, 2009	8,320,085	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH A HEATING ELEMENT BETWEEN THE READ AND WRITE ELEMENTS	US	Issued	12/623,151	Nov 20, 2009	9,484,048	Nov 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIUM HAVING AN ARTIFICIAL PATTERN STRUCTURE USING A GRADIENT	US	Issued	12/630,728	Dec 3, 2009	8,169,728	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE (CPP) MAGNETIC READ HEAD	US	Issued	12/642,269	Dec 18, 2009	8,064,159	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-SLIDER INCLUDING A LOW-SURFACE-ENERGY FILM THAT PERVENTS LUBRICANT	US	Issued	12/639,013	Dec 16, 2009	8,427,785	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A MAGNETIC LAYER OVERHANG	US	Issued	12/636,667	Dec 11, 2009	8,335,051	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MAGNETIC HEAD HAVING A CPP ELEMENT USING A HEUSLER ALLOY	US	Issued	12/636,649	Dec 11, 2009	8,189,304	May 29, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING METHOD FOR A HEAD-STACK ASSEMBLY, APPARATUS FOR INTERCO	US	Issued	12/642,683	Dec 18, 2009	8,699,187	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH AIR-FLOW CONTROL COMPONENT	US	Issued	12/630,807	Dec 3, 2009	9,196,312	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE USING AN AIRFLOW REDUCTION PLATE AND METHODS OF MANUFACTURING	US	Issued	12/642,332	Dec 18, 2009	8,570,682	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SLIDER INHIBITING A SIDE ERASE AND METHOD OF MANUFACTURING	US	Issued	12/633,588	Dec 8, 2009	8,270,109	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING DEVICE AND METHOD OF FORMATION	US	Issued	12/698,834	Feb 2, 2010	8,363,355	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING DEVICE AND METHOD OF FORMATION	US	Issued	13/724,914	Dec 21, 2012	9,305,586	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICALLY ASSISTED MAGNETIC RECORDING HEAD HAVING A WAVEGUIDE CORE WITH	US	Issued	12/636,672	Dec 11, 2009	8,270,260	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A MAIN POLE AND FIRST AND	US	Issued	12/638,911	Dec 15, 2009	8,351,156	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY AND DISK DRIVE	US	Issued	12/726,282	Mar 17, 2010	8,179,745	May 15, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH ADHESIVELY BONDED PIVOT-BEARING ASSEMBLY	US	Issued	12/784,384	May 20, 2010	8,363,360	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM (PMRM) AND MAGNETIC STORAGE	US	Issued	12/828,073	Jun 30, 2010	8,705,208	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM HAVING FCC SEED LAYERS	US	Issued	12/793,608	Jun 3, 2010	8,390,956	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK DRIVE AND DATA REWRITE METHODS	US	Issued	12/822,130	Jun 23, 2010	9,142,252	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO CONTROL OF A DISK DRIVE	US	Issued	12/876,802	Sep 7, 2010	8,737,010	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM USING LAYERS HAVING HIGHER- AND LOWER-HK ANI	US	Issued	12/938,214	Nov 2, 2010	8,298,688	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PRODUCING A MAGNETIC DISK DEVICE	US	Issued	12/910,752	Oct 22, 2010	9,202,504	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A MULTILAYER MAGNETIC FILM AND METHOD FOR PRODUC	US	Issued	12/941,953	Nov 8, 2010	8,373,943	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MAGNETIC HEAD HAVING A NON-MAGNETIC PART ON A MEDIUM	US	Issued	12/904,954	Oct 14, 2010	8,514,526	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEADS HAVING A GRADED DOMAIN CONTROL FILM AND METHODS OF MA	US	Issued	12/957,229	Nov 30, 2010	8,284,527	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING AN ASYMMETRICAL SHAPE AND SYSTEMS THEREOF	US	Issued	12/756,947	Apr 8, 2010	8,223,458	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD AND METHOD FOR PRODUCING THE SA	US	Issued	12/911,413	Oct 25, 2010	8,320,073	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTANCE READ HEAD HAVING A COFE INTERFACE LAYER AND	US	Issued	12/948,072	Nov 17, 2010	8,351,163	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE WITH A FLOATING HEAD HAVING A HEATER ELEMENT	US	Issued	12/970,775	Dec 16, 2010	8,711,520	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE EFFECT HEAD HAVING A MULTILAYERED PINNED LAYER AND/OR F	US	Issued	12/955,767	Nov 29, 2010	8,514,527	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING JUNCTION MAGNETORESISTIVE EFFECT ELEMENT AND MANUFACTURING	US	Issued	12/955,746	Nov 29, 2010	8,284,526	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM HAVING NON-MAGNETIC SEPARATING REGIONS AND	US	Issued	12/917,372	Nov 1, 2010	8,599,509	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE AND METHOD FOR DATA CONVERSION PROCESS IN A DISK DRIVE	US	Issued	12/962,545	Dec 7, 2010	8,429,499	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SLIDER AND MAGNETIC DISK DRIVE	US	Issued	12/973,301	Dec 20, 2010	8,767,338	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD DRIVE DEVICE	US	Issued	12/963,111	Dec 8, 2010	8,699,166	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY AND DISK DRIVE WITH A PIEZOELECTRIC ELEMENT	US	Issued	12/973,745	Dec 20, 2010	8,593,765	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD FOR PERPENDICULAR RECORDING	US	Issued	12/965,277	Dec 10, 2010	8,537,493	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC-RECORDING HEAD WITH FIRST THERMAL FLY-HEIGHT CONTROL ELEMENT A	US	Issued	12/909,694	Oct 21, 2010	8,773,801	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	NOISE AND PARTICLE SHIELD FOR CONTACT SENSOR IN A SLIDER	US	Issued	12/947,796	Nov 16, 2010	8,477,455	Jul 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTACT DETECTION BETWEEN A DISK AND MAGNETIC HEAD	US	Issued	12/948,221	Nov 17, 2010	8,711,508	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND MAGNETIC STORAGE APPARAT	US	Issued	12/903,135	Oct 12, 2010	8,703,307	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	VOICE-COIL MOTOR WITH VOICE COILS CONFIGURED ORIENTED IN THE SAME DIRECT	US	Issued	12/978,320	Dec 23, 2010	8,305,714	Nov 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM HAVING RECORDING REGIONS AND SEPARATING RE	US	Issued	12/961,430	Dec 6, 2010	8,767,350	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TMR SENSOR FILM USING A TANTALUM INSERTION LAYER AND SYSTEMS THEREOF	US	Issued	13/082,098	Apr 7, 2011	8,570,691	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD WITH DOMAIN CONTROLLED SIDE SHIE	US	Issued	12/961,421	Dec 6, 2010	8,254,059	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING PARTICLES ADHERING TO A HARD DISK	US	Issued	12/980,192	Dec 28, 2010	8,482,878	Jul 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO PATTERN COMPATIBLE WITH PLANARIZATION CONSTRAINTS OF PATTERNED ME	US	Issued	13/176,956	Jul 6, 2011	8,743,496	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH AN ALTERNATING SERIES OF CONCENTRIC SERVO ZONES AND	US	Issued	13/177,396	Jul 6, 2011	8,625,219	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH AN ALTERNATING SERIES OF CONCENTRIC SERVO ZONES AND	US	Issued	13/177,413	Jul 6, 2011	8,531,794	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH AN ALTERNATING SERIES OF CONCENTRIC SERVO ZONES AND	US	Issued	13/177,435	Jul 6, 2011	8,630,051	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH AN ALTERNATING SERIES OF CONCENTRIC SERVO ZONES AND	US	Issued	13/177,445	Jul 6, 2011	8,619,379	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THIN-FEMTO MAGNETIC HEAD SLIDER AND METHOD FOR PRODUCING THE SAME	US	Issued	13/104,830	May 10, 2011	8,786,975	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING LOW MEDIUM NOISE AND SY	US	Issued	12/975,197	Dec 10, 2010	8,592,060	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD HAVING A NON-CONFORMAL SIDE GAP AND METHODS O	US	Issued	12/976,998	Dec 22, 2010	8,767,344	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PROFILE DAMPER PLATES FOR A YOKE COIL MOTOR	US	Issued	12/980,125	Dec 28, 2010	8,767,353	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A CONTACT DETECTION SENSOR	US	Issued	13/085,417	Apr 12, 2011	8,767,345	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TRACK PITCH VARIATION MEASUREMENT METHOD USING SPIRAL DC PATTERN WRITIN	US	Issued	13/196,022	Aug 2, 2011	8,861,116	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITER HAVING A SHIELD STRUCTURE FOR ADJACENT AND FAR TRACK INTERFERENC	US	Issued	13/154,343	Jun 6, 2011	8,411,384	Apr 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A GROOVED WRAP AROUND S	US	Issued	13/096,775	Apr 28, 2011	8,189,293	May 29, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SHIELD STRUCTURE FOR REDUCING THE MAGNETIC INDUCTION RATE OF THE TRAILIN	US	Issued	13/330,570	Dec 19, 2011	8,830,623	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH NOVEL SHIELD STRUCTURE HAVING LATERALLY EXTEN	US	Issued	13/294,816	Nov 11, 2011	8,630,064	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A THERMAL FLY-HEIGHT CONTROL (TFC) STRUCTURE UNDER	US	Issued	13/310,428	Dec 2, 2011	8,760,787	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HALF METAL TRILAYER TMR READER WITH NEGATIVE INTERLAYER COUPLING	US	Issued	13/333,981	Dec 21, 2011	8,879,214	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH WIDE SENSOR BACK EDGE, LOW RESISTANCE, AND HIGH SIGNA	US	Issued	13/245,708	Sep 26, 2011	8,339,752	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-GIMBAL ASSEMBLY WITH A SUSPENSION-LEAD PAD HAVING A FORM THAT IS CO	US	Issued	13/229,631	Sep 9, 2011	8,477,457	Jul 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK-ENCLOSURE BASE CONFIGURED TO INHIBIT FORMATION OF ADHERENT SOLDER-F	US	Issued	13/228,363	Sep 8, 2011	8,749,914	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NON-CONFORMAL SIDE SHIELD GAP	US	Issued	13/419,283	Mar 13, 2012	8,570,686	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING (SMR) HEAD WITH BENT TRAILING SHIELD AND MET	US	Issued	13/226,377	Sep 6, 2011	8,472,139	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY BASED ON APPLYING CURRENT/VOLTAGE TO A HEATING ELEMENT O	US	Issued	13/310,502	Dec 2, 2011	8,810,953	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR SHINGLED MAGNETIC RECORDING IN DISK DR	US	Issued	13/338,658	Dec 28, 2011	8,559,121	Oct 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH ADJACENT TRACK INTERFERENCE SUPPRESSION B	US	Issued	13/226,435	Sep 6, 2011	8,553,362	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL REVERSE MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) AND SYSTEMS I	US	Issued	13/191,563	Jul 27, 2011	8,634,163	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW CLEARANCE MAGNETIC HEAD HAVING A CONTACT DETECTION SENSOR	US	Issued	13/247,931	Sep 28, 2011	8,717,711	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC BIAS STRUCTURE FOR MAGNETORESISTIVE SENSOR	US	Issued	13/271,015	Oct 11, 2011	8,339,753	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SLIDER HAVING SHARED HEATER AND CONTACT SENSOR TERMINAL P	US	Issued	13/358,367	Jan 25, 2012	8,879,189	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANT LAYER THAT PROVIDES A STABLE HEAD-TO-DISK INTERFACE IN HUMID CON	US	Issued	13/252,962	Oct 4, 2011	8,663,822	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY RESEALABLE HARD-DISK DRIVE CONFIGURED FOR RECHARGING WITH A	US	Issued	13/340,332	Dec 29, 2011	8,659,849	Feb 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DOMAIN CONTROL FOR AN EMBEDDED CONTACT SENSOR FOR A MAGNETIC	US	Issued	13/339,317	Dec 28, 2011	8,643,981	Feb 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA AND MAGNETIC RECORDING DEVICES USING FLUORINE COMPOUND	US	Issued	13/361,896	Jan 30, 2012	8,628,869	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING HEAD HAVING A CURRENT CARRYING ELEMEN	US	Issued	13/416,784	Mar 9, 2012	8,472,135	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD HAVING A CURRENT CARRYING ELEMENT FOR	US	Issued	13/297,106	Nov 15, 2011	8,786,984	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING WEDGE ANGLE WITH A THIRD ELECTRIC LAPPING GUIDE (ELG) DURING MA	US	Issued	13/369,199	Feb 8, 2012	8,254,057	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HDD DISK DRIVE WITH WRITE ASSIST BASED ON DETECTED CONDITIONS	US	Issued	13/323,704	Dec 12, 2011	8,982,502	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR (STO) FOR MICROWAVE-ASSISTED MAGNETIC RECORDING (US	Issued	13/401,650	Feb 21, 2012	8,547,656	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD-UNLOAD RAMP STRUCTURE WITH CANTILEVERED FIN PORTION CONFIGURED TO	US	Issued	13/340,586	Dec 29, 2011	8,493,690	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	READ SENSOR HAVING A STRUCTURE FOR REDUCING MAGNETIC COUPLING BETWEEN	US	Issued	13/472,326	May 15, 2012	8,786,988	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD FOR THERMALLY ASSISTED MAGNETIC RECORDING	US	Issued	13/725,545	Dec 21, 2012	8,995,091	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CORROSION-RESISTANT BIT PATTERNED MEDIA (BPM) AND DISCRETE TRACK MEDIA (D	US	Issued	13/466,970	May 8, 2012	8,717,710	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS OF PRODUCTION FOR CORROSION-RESISTANT BIT PATTERNED MEDIA (BPM)	US	Issued	14/223,851	Mar 24, 2014	9,275,670	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING HEAD AND SYSTEMS THEREOF WITH ENVIRC	US	Issued	13/341,098	Dec 30, 2011	8,760,779	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING HEAD WITH OPTICAL SPOT-SIZE CONVERTER FA	US	Issued	13/568,001	Aug 6, 2012	8,619,511	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED MAGNETIC RECORDING HEAD THAT SUPPRESSES EFFECTS OF M	US	Issued	14/165,367	Jan 27, 2014	8,908,481	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING HEAD WITH LEADING BUMP IN THE MAIN POLE HAVING	US	Issued	13/526,418	Jun 18, 2012	8,941,948	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTICLE-CAPTURING DEVICE CONFIGURED TO REMOVE PARTICLES FROM A PLURALIT	US	Issued	13/557,159	Jul 24, 2012	8,638,525	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC TRACK PITCH CONTROL FOR SHINGLED MAGNETIC RECORDING (SMR)	US	Issued	13/523,657	Jun 14, 2012	8,797,672	Aug 5, 2014

WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE RAMP IN A HARD DISK DRIVE	US	Issued	13/669,231	Nov 5, 2012	8,730,620	May 20, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) HEAD EMPLOYING ADVANCED	US	Issued	14/106,390	Dec 13, 2013	9,007,723	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A MAIN POLE AND A SUB-POLE	US	Issued	13/530,027	Jun 21, 2012	8,964,331	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MAINTAINING DATA INTEGRITY ON A STORAGE MEDIUM	US	Issued	13/550,149	Jul 16, 2012	9,055,711	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) HEAD WITH HIGHLY RESISTIVE	US	Issued	13/830,810	Mar 14, 2013	8,842,387	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EASY AXIS HARD BIAS STRUCTURE	US	Issued	13/605,934	Sep 6, 2012	8,964,336	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AN APPARATUS FOR COUNTING MICROPARTICLES USING A GAS RESERVOIR TO INCREASE	US	Issued	13/617,456	Sep 14, 2012	8,943,883	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING A CAP LAYER ABOVE A GRANUL	US	Issued	13/725,219	Dec 21, 2012	8,614,862	Dec 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPIN TORQUE EFFICIENCY SPIN TORQUE OSCILLATOR (STO) WITH DUAL SPIN POL	US	Issued	13/675,796	Nov 13, 2012	8,879,205	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR FOR MICROWAVE ASSISTED MAGNETIC RECORDING	US	Issued	13/629,401	Sep 27, 2012	8,970,996	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	READ SENSOR WITH A HARD BIAS LAYER HAVING A HIGH STATIC FIELD RESISTANCE	US	Issued	13/653,301	Oct 16, 2012	8,867,178	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) HEAD HAVING AN OFFSET SPIN	US	Issued	13/725,354	Dec 21, 2012	8,705,206	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANTS PROVIDING MAGNETIC HEAD WEAR REDUCTION AND MAGNETIC SPACING	US	Issued	14/137,878	Dec 20, 2013	9,384,771	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING NOVEL MAGNETIC UNDER-LAY	US	Issued	13/903,849	May 28, 2013	9,472,228	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR DATA TRACK USAGE SEQUENCE TO REDUCE A	US	Issued	13/712,057	Dec 12, 2012	8,879,180	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING NOVEL SEED LAYER	US	Issued	13/890,168	May 8, 2013	9,117,477	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA WITH A LOW MOLECULAR WEIGHT LUBRICATING LAYER FOR USE IN	US	Issued	13/742,286	Jan 15, 2013	9,202,503	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY STABLE LOW RADIATION TELEGRAPH NOISE SENSOR	US	Issued	13/893,248	May 13, 2013	9,245,549	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGHER STABILITY READ HEAD USING A READ SENSOR WITH A FLAT BACK EDGE	US	Issued	13/776,553	Feb 25, 2013	8,760,821	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A SOFT MAGNETIC LAYER FORMED BEHIND A TUNNELING M	US	Issued	13/724,529	Dec 21, 2012	8,873,203	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING OPTIMAL FREE LAYER BACK EDGE SHAPE AND EXTENDED R	US	Issued	14/178,179	Feb 11, 2014	9,099,123	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE TRACK SHIFT CONTROL IN SHINGLED-MICROWAVE ASSISTED MAGNETIC RECORD	US	Issued	13/675,836	Nov 13, 2012	8,553,507	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC TRAILING SHIELD WRITER FOR SHINGLED MAGNETIC RECORDING (SMR)	US	Issued	13/722,978	Dec 20, 2012	9,076,466	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SHIELD HAVING IMPROVED RESISTANCE TO THE HARD BIAS MAGNETIC FIEL	US	Issued	13/644,343	Oct 4, 2012	8,630,069	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) HEAD WITH A CURRENT CONFI	US	Issued	14/032,157	Sep 19, 2013	8,837,088	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN ACCUMULATION MAGNETIC READ SENSOR	US	Issued	13/714,226	Dec 13, 2012	8,717,715	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR HEAD ADAPTED FOR HIGH SPEED SWITCHING	US	Issued	13/723,070	Dec 20, 2012	9,047,888	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DATA RECORDING SYSTEM WITH MIRROR IMAGE ASYMMETRIC MAGNETIC	US	Issued	13/725,593	Dec 21, 2012	8,848,317	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A LONG THROAT HEIGHT PINNED LAYER WITH A SHORT HEIG	US	Issued	14/037,254	Sep 25, 2013	9,042,060	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR HEAD WITH A MULTI-LAYERED SIDE GAP FOR STABLE OSCILLATION OF THE STO	US	Issued	13/723,010	Dec 20, 2012	8,988,826	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FLY-HEIGHT CONTROL AND TOUCHDOWN DETECTION	US	Issued	13/830,776	Mar 14, 2013	8,873,191	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-SPEED TRANSPORTATION MECHANISM FOR MICRO SOLDER BALLS	US	Issued	13/767,023	Feb 14, 2013	9,227,260	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ANTIFERROMAGNETIC (AFM) GRAIN GROWTH CONTROLLED RANDOM TELEGRAPH NOIS	US	Issued	13/893,252	May 13, 2013	9,341,685	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A HYBRID MATERIAL MAIN POLE FOR HIGH FREQUEN	US	Issued	13/865,071	Apr 17, 2013	8,804,282	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING HEAD WITH ASYMMETRIC SIDE GAP FOR	US	Issued	14/042,459	Sep 30, 2013	8,964,332	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING HEAD WITH HIGH SATURATION MAGNETI	US	Issued	14/604,649	Jan 23, 2015	9,099,102	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD PROVIDING WRITE PROTRUSION SUPPRESSION AND METHODS OF FO	US	Issued	13/915,539	Jun 11, 2013	9,245,581	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING (MAMR) HEAD WITH AN INCLINED AND	US	Issued	14/051,372	Oct 10, 2013	9,390,733	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE WITH CONTACT DETECTION USING A SPIN TORQUE OSCILLATOR	US	Issued	13/899,334	May 21, 2013	9,355,668	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED ESD PREVENTION FOR HARD DISK DRIVES USING SPIN-TOR	US	Issued	13/975,660	Aug 26, 2013	8,797,693	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE BYPASS CHANNEL HAVING A CLOSE-SIDED VOICE COIL MOTOR	US	Issued	13/858,791	Apr 8, 2013	8,854,771	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE ASSISTED MAGNETIC RECORDING HEAD WITH STABLE OSCILLATION	US	Issued	14/055,769	Oct 16, 2013	9,330,688	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED PINNING PROPERTY BY INSERTED SI SEED LAYER	US	Issued	13/923,518	Jun 21, 2013	8,902,549	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GRADED SIDE SHIELD GAP READER	US	Issued	14/850,984	Sep 11, 2015	9,406,322	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A SHORT YOKE WITH A TAPERED COIL STRUCTURE	US	Issued	14/095,952	Dec 3, 2013	9,076,462	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM LUBRICANT MIXTURE AND SYSTEMS THEREOF	US	Issued	13/918,719	Jun 14, 2013	9,245,565	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ SENSOR WITH NOVEL PINNED LAYER AND SIDE SHIELD DESIGN FOR IM	US	Issued	14/103,719	Dec 11, 2013	8,976,493	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-READ SENSOR HAVING A NARROW READ GAP STRUCTURE	US	Issued	14/085,734	Nov 20, 2013	8,953,284	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	A MAGNETIC HEAD HAVING A SOFT MAGNETIC LAYER WITH A CLOSE-PACKED PLANE TH	US	Issued	13/949,126	Jul 23, 2013	9,030,786	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC SENSITIVITY READER	US	Issued	14/067,483	Oct 30, 2013	9,082,434	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR HEAD WITH RECESSED STO	US	Issued	14/040,151	Sep 27, 2013	9,202,528	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BIT PATTERNED MEDIA MAGNETIC RECORDING DISK WITH TWO SIZES OF DOTS AND IM	US	Issued	14/025,615	Sep 13, 2013	8,873,179	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GRANULAR MEDIA WITH A HIGH-HK ASSIST LAYER FOR MICROWAVE ASSISTED MAGNETIC	US	Issued	14/015,824	Aug 30, 2013	9,406,327	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC RECORDING HEAD	US	Issued	14/099,787	Dec 6, 2013	9,093,086	Jul 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC RECORDING HEAD	US	Issued	14/748,173	Jun 23, 2015	9,390,732	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE WITH FEEDTHROUGH CONNECTOR	US	Issued	14/046,424	Oct 4, 2013	9,819,129	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM HAVING A L10-TYPE REGULAR ALLOY	US	Issued	14/608,095	Jan 28, 2015	9,595,282	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	13/940,132	Jul 11, 2013	10,276,192	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Heat-Assisted Magnetic Recording (HAMR) Disk Drive And Method For Writing	US	Issued	13/922,616	Jun 20, 2013	8,767,327	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL CONTACT FOR AN ENERGY ASSISTED MAGNETIC RECORDING LASER SUB-M	US	Issued	14/011,468	Aug 27, 2013	8,837,261	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGHER STABILITY READ HEAD UTILIZING A PARTIAL MILLING PROCESS	US	Issued	14/226,673	Mar 26, 2014	9,349,397	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPERED WRITE HEAD FOR MAMR	US	Issued	14/075,710	Nov 8, 2013	9,135,933	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBALS ASSEMBLY, METHOD FOR MANUFACTURING THERMAL ASSISTED MAGNETI	US	Issued	14/095,013	Dec 3, 2013	9,165,572	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBALS ASSEMBLY, METHOD FOR MANUFACTURING THERMAL ASSISTED MAGNETI	US	Issued	14/846,539	Sep 4, 2015	9,343,095	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING TWO DOMAIN CONTROL LAYERS FOR STABILIZING MAGNETIC	US	Issued	14/066,523	Oct 29, 2013	8,976,492	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ZIG-ZAG MIMO HEAD REDUCING SPACE BETWEEN THREE SENSORS	US	Issued	14/173,758	Feb 5, 2014	9,082,436	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ZIG-ZAG MIMO HEAD REDUCING SPACE BETWEEN THREE SENSORS	US	Issued	14/743,145	Jun 18, 2015	9,336,802	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-CONTROLLED LASER PULSING FOR THERMALLY ASSISTED RECORDING	US	Issued	14/081,651	Nov 15, 2013	9,025,420	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD FOR MICROWAVE ASSISTED MAGNETIC RECORDING	US	Issued	14/073,751	Nov 6, 2013	9,311,945	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A SPIN TORQUE OSCILLATOR (STO) WITH A HYBRID HEUSLER	US	Issued	14/070,401	Nov 1, 2013	9,230,597	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL ASSISTED MAGNETIC RECORDING HEAD WITH OPTICAL SPOT SIZE CONVERTER	US	Issued	14/493,299	Sep 22, 2014	9,280,994	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD WHICH HAS A CONTROLLED MAGNETIZATION	US	Issued	14/526,627	Oct 29, 2014	9,230,566	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	AF-MODE STO WITH NEGATIVE HK SPIN POLARIZATION LAYER	US	Issued	14/179,358	Feb 12, 2014	9,406,315	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT MAGNETIC UNDERLAYER HAVING HIGH TEMPERATURE ROBUSTNESS FOR HIGH A	US	Issued	14/446,193	Jun 29, 2014	9,406,328	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WITH TILTED MEDIA IN THE CROSS TRACK DIRECTION	US	Issued	14/062,155	Oct 24, 2013	8,976,484	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROSTATIC MICROACTUATOR WITH ELECTRICALLY ISOLATED MOVABLE PORTION A	US	Issued	10/367,022	Feb 13, 2003	6,853,517	Feb 8, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO THE PLANES (CPP) SENSOR WITH A HIGHLY CONDUCTIVE	US	Issued	10/630,817	Jun 29, 2003	7,038,890	May 2, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC THIN FILM MEDIA WITH A PRE-SEED LAYER OF CRITICAL	US	Issued	10/608,866	Jun 26, 2003	6,872,478	Mar 29, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	BALANCE CLIP HOLDER FEATURE ON A SPINDLE MOTOR WITH NICKEL-TEFLON COATING	US	Issued	10/462,339	Jun 16, 2003	7,035,045	Apr 25, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, APPARATUS, AND METHOD OF ASSEMBLING HARD DISK DRIVE INTEGRATED L	US	Issued	10/600,638	Jun 20, 2003	7,110,222	Sep 19, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCALIZED POLE-TIP HEATING DEVICE FOR MAGNETIC HEAD FOR HARD DISK DRIVE	US	Issued	10/624,656	Jul 21, 2003	7,023,660	Apr 4, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS FOR PATTERNING A SELF-ALIGNED COIL USING A DAMASCENE PROCESS	US	Issued	10/652,877	Aug 29, 2003	7,075,750	Jul 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TRANSDUCER FOR PERPENDICULAR MAGNETIC RECORDING WITH SINGLE P	US	Issued	10/675,046	Sep 29, 2003	7,009,812	Mar 7, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC THIN FILM MEDIA WITH A BI-LAYER STRUCTURE OF CRTI/NIP	US	Issued	10/651,634	Aug 29, 2003	6,858,331	Feb 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR SPARING IN RAID-1 SYSTEM	US	Issued	10/441,176	May 19, 2003	7,062,673	Jun 13, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR HAVING BIAS MAGNET WITH STEEP ENDWALLS	US	Issued	10/464,254	Jun 17, 2003	7,019,950	Mar 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	AERODYNAMIC DIFFUSER, CONTRACTION, AND FAIRING FOR DISK BASE AND RE-ACCEL	US	Issued	10/644,706	Aug 20, 2003	7,123,439	Oct 17, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN VALVE SENSOR HAVING ONE OF TWO AP PINNED LAYERS MADE OF COBALT	US	Issued	10/675,782	Sep 30, 2003	7,145,755	Dec 5, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-DISK INTERACTION SENSOR INTEGRATED WITH SUSPENSION	US	Issued	10/664,295	Sep 17, 2003	6,958,871	Oct 25, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	GMR ENHANCING SEED LAYER FOR SELF PINNED SPIN VALVES	US	Issued	10/671,377	Sep 24, 2003	6,961,224	Nov 1, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SKREW-TOLERANT GRAY CODE FOR A MOVEABLE OBJECT	US	Issued	10/735,541	Dec 12, 2003	7,119,975	Oct 10, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD FOR PERPENDICULAR MAGNETIC RECORDING WITH A SHIELD STRUCTURE CONN	US	Issued	10/676,742	Sep 30, 2003	7,002,775	Feb 21, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DEVICE WITH IMPROVED ANTIFERROMAGNETICALLY COUPLING FILM	US	Issued	10/602,504	Jun 24, 2003	6,893,741	May 17, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROVIDING MAGNETOSTRICTION CONTROL IN A FREEL	US	Issued	11/751,361	May 21, 2007	7,505,235	Mar 17, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR SPECULATIVE STREAMING DATA FROM A DISK DRIVE	US	Issued	10/651,461	Aug 29, 2003	6,891,740	May 10, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD BUILT USING AN AIR-BEARING SURFACE	US	Issued	10/778,265	Feb 13, 2004	7,271,982	Sep 18, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD WITH SELF-PINNED STRUCTURE HAVING PINNED LAYER EXTENDING BEYOND TRA	US	Issued	10/622,936	Jul 18, 2003	7,035,059	Apr 25, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR ACTIVELY CONTROLLING ELECTRIC POTENTIAL AT THE HEAD/DISK INTERF	US	Issued	10/691,742	Oct 22, 2003	7,233,451	Jun 19, 2007

WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS FOR AUTOMATICALLY DEBONDING, PROCESSING, AND HANDLING FRAGILE	US	Issued	10/675,190	Sep 30, 2003	6,843,298	Jan 18, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD WITH TRAILING SHIELD THROAT HEIGHT	US	Issued	10/672,094	Sep 26, 2003	7,199,973	Apr 3, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	INCREASING HEAD-DISK INTERFACE RELIABILITY USING CONTROLLED HEATING	US	Issued	10/656,023	Sep 5, 2003	6,972,919	Dec 6, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR AUTONOMOUS DATA SCRUBBING IN A HARD DISK DRIVE	US	Issued	10/629,675	Jul 29, 2003	7,137,038	Nov 14, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR WRITING HDD DEPENDING ON DIRECTION OF HEAD SKEW	US	Issued	10/674,155	Sep 29, 2003	6,967,810	Nov 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	THIN FILM MEDIA WITH A DUAL SEED LAYER OF Ru/AlNiAlB	US	Issued	10/676,735	Sep 30, 2003	6,863,993	Mar 8, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR CALIBRATING A VACUUM THERMOGRAVIMETRIC ANALYZER FOR DETERM	US	Issued	10/632,507	Aug 1, 2003	6,871,998	Mar 29, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROVIDING WRITE PRECOMPENSATION USING A READ	US	Issued	10/787,308	Feb 26, 2004	7,123,429	Oct 17, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROVIDING WRITE PRECOMPENSATION USING A READ	US	Issued	11/122,519	May 5, 2005	7,123,430	Oct 17, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTER SYSTEM HAVING DRIVE TEMPERATURE SELF-ADJUSTMENT FOR TEMPERATU	US	Issued	10/675,286	Sep 30, 2003	6,865,506	Mar 8, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT LOW DROPOUT LINEAR REGULATOR	US	Issued	10/788,433	Feb 27, 2004	7,298,567	Nov 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MULTILEVEL PERPENDICULAR MAGNETIC RECORDING MEDIA	US	Issued	10/727,826	Dec 3, 2003	6,947,235	Sep 20, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAGNETIC RECORDING ON PATTERNED MULTILEVEL PERPENDICULAR M	US	Issued	10/728,231	Dec 3, 2003	6,865,044	Mar 8, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DEPOSITING A PINNED LAYER STRUCTURE IN A SELF-PINNED SPIN VALVE	US	Issued	10/782,208	Feb 18, 2004	7,151,653	Dec 19, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD WITH FLARE AND TAPER CONFIGURATI	US	Issued	10/815,286	Mar 31, 2004	7,212,379	May 1, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR WITH ANTIFERROMAGNETIC EXCHANGE COUPLED STRU	US	Issued	10/791,927	Mar 2, 2004	7,339,769	Mar 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR WITH ANTIFERROMAGNETIC EXCHANGE-COUPLED STRU	US	Issued	11/356,891	Feb 16, 2006	7,433,162	Oct 7, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR POLE HAVING AND ADJACENT NON-MAGNETIC CMP RESISTANT STRU	US	Issued	10/882,507	Jun 30, 2004	7,251,103	Jul 31, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR OXIDIZING CONDUCTIVE REDEPOSITION IN TMR SENS	US	Issued	11/558,532	Nov 10, 2006	8,045,299	Oct 25, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE MAGNETORESISTIVE SENSOR WITH FREE LAYER S	US	Issued	10/856,102	May 27, 2004	7,106,561	Sep 12, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED SWITCHING IN A MRAM CELL UTILIZING THE ANTIFERROMAGNETIC TO	US	Issued	10/869,315	Jun 16, 2004	7,372,116	May 13, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	SHOCK MOUNT ASSEMBLY FOR ATTACHMENT OF AN ELECTRONIC DEVICE TO A SUPPOR	US	Issued	10/882,940	Jun 30, 2004	7,106,582	Sep 12, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASUREMENT OF SLIDER CLEARANCE BY INDUCING COLLISION OF THE SLIDER WITH	US	Issued	10/882,882	Jun 30, 2004	7,119,979	Oct 10, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND APPARATUS FOR CONTINUOUS REFERENCE PLANE FOR WIRELESS SUSPEN	US	Issued	10/930,271	Aug 31, 2004	7,349,184	Mar 25, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH SELECTABLE POWER SOURCE FOR HEATER IN A SLIDER	US	Issued	10/903,988	Jul 30, 2004	7,126,777	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING OF MAGNETIC MEDIA USING A RESONANT CAVITY A	US	Issued	10/955,691	Sep 30, 2004	7,310,205	Dec 18, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	A METHOD OF PERFORMING SELF-SERVO WRITE USING A HELIUM ENVIRONMENT	US	Issued	10/928,074	Aug 27, 2004	7,199,963	Apr 3, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD, APPARATUS AND PROGRAM STORAGE DEVICE THAT PROVIDES A SHIFT PRO	US	Issued	11/068,206	Feb 28, 2005	8,209,366	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NARROW TRACK EXTRAORDINARY MAGNETO RESISTIVE [EMR] DEVICE	US	Issued	10/897,454	Jul 22, 2004	7,295,406	Nov 13, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROVIDING A READ CHANNEL HAVING COMBINED PAR	US	Issued	11/067,851	Feb 28, 2005	7,694,205	Apr 6, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR REDUCING CROSS-TALK AND SIGNAL LOSS IN FLEXING	US	Issued	11/035,429	Jan 13, 2005	7,352,535	Apr 1, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH ROTARY PIEZOELECTRIC MICROACTUATOR	US	Issued	10/927,926	Aug 26, 2004	7,345,851	Mar 18, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR OPTIMIZING FLYING HEIGHT CONTROL USING HEATED	US	Issued	11/048,009	Jan 31, 2005	7,190,543	Mar 13, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE POLE RECORDING HEAD HAVING TRAPEZOIDAL MAIN POLE AND BEVEL ANGLE	US	Issued	10/981,354	Nov 4, 2004	7,253,992	Aug 7, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR REDUCING SOLDER PAD SIZE IN AN ELECTRICAL LEAD S	US	Issued	11/035,295	Jan 13, 2005	7,433,157	Oct 7, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR REDUCING HEAT ABSORPTION AROUND SOLDER PADS	US	Issued	11/037,752	Jan 18, 2005	7,450,346	Nov 11, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR USING INTERLEAVED ENCODERS TO OBTAIN MODULATION CONSTRA	US	Issued	11/049,403	Feb 1, 2005	7,126,502	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	AN ELECTRICAL LEAD SUSPENSION HAVING PARTITIONED AIR SLOTS	US	Issued	11/037,906	Jan 18, 2005	7,489,479	Feb 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANT WITH NON-TERMINAL FUNCTIONAL GROUPS	US	Issued	13/910,909	Jun 5, 2013	8,722,213	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTILAYER NARROW PITCH TAPE HEAD ARRAY	US	Issued	11/046,413	Jan 28, 2005	7,567,409	Jul 28, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR APPLYING MODULATION CONSTRAINTS TO DATA FOR USING PERIOD	US	Issued	11/002,970	Dec 1, 2004	7,030,789	Apr 18, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	BIPHASE MAGNETIC PATTERN DETECTOR USING MULTIPLE MATCHED FILTERS FOR HAR	US	Issued	10/974,075	Oct 27, 2004	7,206,146	Apr 17, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	LAMINATED MAGNETIC THIN FILMS WITH WEAK ANTIFERROMAGNETIC COUPLING FOR	US	Issued	11/134,746	May 19, 2005	7,529,065	May 5, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	LAMINATED WRITE GAP TO IMPROVE WRITER PERFORMANCE	US	Issued	11/104,333	Apr 11, 2005	7,525,760	Apr 28, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, METHOD, AND SYSTEM FOR FABRICATING SERVO PATTERNS ON HIGH DEN	US	Issued	11/252,457	Oct 18, 2005	7,236,324	Jun 26, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING OF MAGNETIC MEDIA USING AN OPTICAL RESONAN	US	Issued	11/398,144	Apr 4, 2006	7,729,085	Jun 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	ANTI-PARALLEL MAGNETIZATION LAYERS IN THE FREE LAYERS AND MAGNETIZATION LA	US	Issued	11/398,170	Apr 4, 2006	7,649,677	Jan 19, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALED HEAD DISK ASSEMBLY	US	Issued	11/351,440	Feb 9, 2006	7,729,083	Jan 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	Flexure for implementation on a suspension in a hard disk drive for resisting windage e	US	Issued	11/120,218	May 2, 2005	8,929,033	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INTERNAL TEMPERATURE CONTROL SYSTEM	US	Issued	11/329,591	Jan 10, 2006	8,773,804	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR WETTING SLURRY DELIVERY TUBES IN A CHEM	US	Issued	11/099,397	Apr 5, 2005	7,108,588	Sep 19, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINDLE MOTOR HAVING VARIABLY GROOVED RADIAL AND THRUST BEARING WITH RE	US	Issued	11/336,078	Jan 20, 2006	7,465,098	Dec 16, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	RECORDING MEDIUM COMPRISING LAMINATED UNDERLAYER STRUCTURES	US	Issued	11/192,387	Jul 27, 2005	7,722,967	May 25, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	LAMINATED MAGNETIC THIN FILMS FOR MAGNETIC RECORDING WITH WEAK FERROM	US	Issued	11/475,281	Jun 26, 2006	8,263,239	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH METAMAGNETIC ANTIFERRO	US	Issued	11/185,659	Jul 19, 2005	7,514,162	Apr 7, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL SIGNAL-PROCESSING DEVICE INTEGRATING A FLUX SENSOR WITH A FLUX G	US	Issued	11/598,886	Nov 13, 2006	7,839,605	Nov 23, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODING TECHNIQUES FOR CORRECTING ERRORS USING SOFT IMPLEMENTATION	US	Issued	11/198,945	Aug 5, 2005	7,725,800	May 25, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CALIBRATING AND CONTROLLING A FLY-HEIGHT ACTUATOR	US	Issued	11/320,425	Dec 27, 2005	7,180,692	Feb 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY ARRAY HAVING MEMORY CELLS FORMED FROM METALLIC MATERIAL	US	Issued	11/380,498	Apr 27, 2006	7,615,771	Nov 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	MTJ DEVICE WITH PARTIALLY MILLED ANTI-PARALLEL COUPLED BOTTOM FREE LAYER	US	Issued	11/340,222	Jan 26, 2006	7,502,211	Mar 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROVIDING IMPROVED PINNING STRUCTURE FOR TUN	US	Issued	11/351,768	Feb 10, 2006	7,821,747	Oct 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RANDOM ACCESS MEMORY (MRAM) HAVING INCREASED REFERENCE LAYER	US	Issued	11/542,086	Oct 2, 2006	7,446,984	Nov 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIUM HAVING A SOFT UNDERLAYER WITH A MAGNETIC ANISOTROPY	US	Issued	11/615,885	Dec 22, 2006	7,466,515	Dec 16, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	END POINT DETECTION FOR DIRECT ION MILLING TO INDUCE MAGNETIC ANISOTROPY	US	Issued	11/615,865	Dec 22, 2006	7,833,388	Nov 16, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	INCREASED ANISOTROPY INDUCED BY DIRECT ION ETCH FOR TELECOMMUNICATIONS/D	US	Issued	11/845,239	Aug 27, 2007	8,004,374	Aug 23, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALED HEAD DISK ASSEMBLY AND METHOD OF SEALING WITH SOLDER	US	Issued	11/351,782	Feb 9, 2006	7,911,732	Mar 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALED HEAD DISK ASSEMBLY AND METHOD OF SEALING WITH SOLDER	US	Issued	11/352,101	Feb 9, 2006	7,692,891	Apr 6, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL-LAYER FREE LAYER IN A TUNNELING MAGNETORESISTANCE (TMR) ELEMENT	US	Issued	11/536,891	Sep 29, 2006	7,751,156	Jul 6, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH DENSITY SPIN TORQUE THREE DIMENSIONAL (3D) MEMORY ARRAYS ADDRESSED	US	Issued	11/642,277	Dec 19, 2006	7,652,915	Jan 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR WRITE ENABLE AND INHIBIT FOR HIGH DENSITY SPIN T	US	Issued	12/262,273	Oct 31, 2008	7,872,905	Jan 18, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED PERPENDICULAR MAGNETIC RECORDING SYSTEM WITH WRITE P	US	Issued	11/532,084	Sep 14, 2006	7,791,839	Sep 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK AND DISK DRIVE WITH PATTERNED PHASE-TYPE SERVO FI	US	Issued	11/837,503	Aug 11, 2007	7,848,039	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE SENSOR HAVING A HIGH IRON CONCENTRATION FREE	US	Issued	11/645,462	Dec 26, 2006	7,791,845	Sep 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A CPP SENSOR WITH TUNNEL BARRIER LAYER AND ELG MAT	US	Issued	11/703,383	Feb 6, 2007	9,275,661	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING OF MAGNETIC MEDIA USING AN OPTICAL RESONAN	US	Issued	11/644,290	Dec 22, 2006	7,724,470	May 25, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH FREQUENCY INTERCONNECT SIGNAL TRANSMISSION LINES	US	Issued	11/643,269	Dec 20, 2006	7,804,663	Sep 28, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR WRITE HEAD HAVING A STEPPED FLARE STRUCTURE AND METHOD OF	US	Issued	11/683,972	Mar 8, 2007	8,634,162	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR WRITE HEAD HAVING A STEPPED FLARE STRUCTURE AND METHOD OF	US	Issued	12/646,879	Dec 23, 2009	8,797,685	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	A METHOD FOR MANUFACTURING A MAGNETIC WRITE HEAD	US	Issued	12/646,884	Dec 23, 2009	8,230,583	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CPP MAGNETORESISTIVE HEAD WITH DIFFERENT THICKNESS FREE LAYERS FOR IMPROV	US	Issued	11/612,942	Dec 19, 2006	7,746,603	Jun 29, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR ENHANCING THE FUNCTIONALITY OF FILE SYSTEMS	US	Issued	11/566,978	Dec 5, 2006	7,853,822	Dec 14, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROACTUATOR SUBSTRATE	US	Issued	11/701,274	Jan 31, 2007	7,855,489	Dec 21, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR SPRING CLIP LATCH FOR RETAINING HARD DISK DRIVE	US	Issued	11/701,313	Jan 31, 2007	7,881,016	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCRYPTION METHODS FOR PATTERNED MEDIA WATERMARKING	US	Issued	11/731,454	Mar 30, 2007	8,369,562	Feb 5, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR WRITE HEAD WITH INDEPENDENT TRAILING SHIELD DESIGNS	US	Issued	11/737,707	Apr 19, 2007	7,894,159	Feb 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING AD-SAMPLED DATA OF READ/WRITE CHANNEL INTO ECC SRAM	US	Issued	11/638,969	Dec 13, 2006	7,697,224	Apr 13, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED-MEDIA MAGNETIC RECORDING DISK AND DISK DRIVE WITH DATA ZONES H	US	Issued	11/852,252	Sep 7, 2007	6,775,699	Mar 9, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) SENSOR WITH A CO-Fe-B FREE LAYER HAVING	US	Issued	11/736,521	Apr 17, 2007	7,830,641	Nov 9, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH UPPER RETURN POLE OPTIMIZATION FOR REDUCED TRA	US	Issued	11/675,516	Feb 15, 2007	7,835,111	Nov 16, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH HELICAL COIL STRUCTURE USING MULTIPLE MATERIALS	US	Issued	11/672,483	Feb 7, 2007	7,633,711	Dec 15, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTANCE SENSORS PINNED BY AN ETCH INDUCED MAGNETIC ANISOTROP	US	Issued	13/020,430	Feb 3, 2011	8,300,367	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC RECORDING MEDIUM WITH DATA ISLAND PATTERN FOR IMPRO	US	Issued	11/680,398	Feb 28, 2007	7,782,561	Aug 24, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH IMPROVED METHOD FOR OPERATING A THERMAL HEAD FLY-HEIGHT	US	Issued	11/679,794	Feb 27, 2007	7,375,914	May 20, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR CORRECTING ERRORS USING ITERATIVE DECODING	US	Issued	11/694,676	Mar 30, 2007	8,341,506	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER OVERCOAT FOR NOISE REDUCTION OF TMR MAGNETIC TRANSDUCER	US	Issued	11/799,296	Apr 30, 2007	7,911,741	Mar 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL CONTENT MODIFICATION FOR CONTENT PROTECTION	US	Issued	11/361,510	Feb 24, 2006	8,243,922	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROTECTING SOFTWARE	US	Issued	11/599,656	Nov 14, 2006	9,177,111	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-ETCH ABS DESIGN WITH A CLOSED FRONT CHANNEL	US	Issued	11/707,302	Feb 15, 2007	7,898,769	Mar 1, 2011

WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM HAVING AN INTERLAYER FORMED F	US	Issued	11/681,693	Mar 2, 2007	7,736,767	Jun 15, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM HAVING A MULTI-LAYER INTERLAYER	US	Issued	11/736,428	Apr 17, 2007	7,662,492	Feb 16, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR REDUCING TURBULENCE OF AIRFLOW IN A HARD DISK	US	Issued	11/824,197	Jun 28, 2007	7,869,159	Jan 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	A DISK DRIVE WITH A SOLDER PREFORM HERMETIC SEAL	US	Issued	11/732,683	Apr 3, 2007	8,335,050	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALING A DISK DRIVE ASSEMBLY	US	Issued	13/684,509	Nov 24, 2012	9,412,420	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE ASSEMBLY FOR ROBUST RIGHT ANGLE INTERCONNECT	US	Issued	11/784,135	Apr 4, 2007	8,213,124	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED LEAD SUSPENSION FOR VIBRATION DAMPING IN MAGNETIC STORAGE DE	US	Issued	11/735,744	Apr 16, 2007	7,903,376	Mar 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND APPARATUS FOR VIBRATION DAMPING OF INTEGRATED LEAD SUSPENSIO	US	Issued	12/902,738	Oct 12, 2010	8,730,618	May 20, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PERFORMING CALCULATIONS USING FIXED POINT MICROP	US	Issued	12/004,250	Dec 19, 2007	8,280,941	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	A POST-ASSEMBLY HEAD/DISK OFFSET ADJUSTER	US	Issued	11/805,498	May 22, 2007	8,169,749	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH PATTERNED MEDIA AND SYSTEM FOR CLOCK	US	Issued	11/759,959	Jun 8, 2007	7,675,703	Mar 9, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	OUTER ACTUATOR ARM CONSTRAINED FLOW DAMPERS	US	Issued	11/824,166	Jun 28, 2007	7,859,795	Dec 28, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING THE OBSTRUCTION OF AIR FLOW THROUGH A BYPASS CHANNEL ASSOCIATE	US	Issued	13/173,780	Jun 30, 2011	8,390,950	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY INSULATING BONDING PAD STRUCTURE FOR SOLDER REFLOW CONNECTIO	US	Issued	11/891,530	Aug 10, 2007	7,893,534	Feb 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH PATTERNED MAGNETIC ISLAN	US	Issued	11/743,140	May 1, 2007	7,670,696	Mar 2, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK DRIVE WITH PATTERNED DISK HAVING C	US	Issued	12/687,187	Jan 14, 2010	7,846,565	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR GENERATING BIT RELIABILITY INFORMATION IN A POST-PROCESSOR	US	Issued	11/771,783	Jun 29, 2007	8,037,394	Oct 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A MASTER DISK FOR NANOIMPRINTING PATTERNED MAGNETIC	US	Issued	11/782,664	Jul 25, 2007	7,758,981	Jul 20, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A MASTER DISK FOR NANOIMPRINTING PATTERNED MAGNETIC	US	Issued	13/151,981	Jun 2, 2011	8,323,515	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH FLUX SHAPING LAYERS ON	US	Issued	11/939,503	Nov 13, 2007	7,889,456	Feb 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	IN A DISK DRIVE APPARATUS HAVING A DIVERTER FOR PROVIDING STREAMLINED CONT	US	Issued	11/695,080	Apr 2, 2007	7,787,219	Aug 31, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS FOR CONTROLLING AND SEALING AIRFLOW AROUND DISK DRIVE BYPASS V	US	Issued	11/765,662	Jun 20, 2007	7,907,365	Mar 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CHANGING RESONANT FREQUENCY IN HARD DISK DRIVE CO	US	Issued	11/904,961	Sep 28, 2007	8,315,009	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A NOTCHED TRAILING SHIELD	US	Issued	11/877,570	Oct 23, 2007	8,111,479	Feb 7, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD HAVING A NOVEL SHIELD STRUCTURE	US	Issued	13/339,310	Dec 28, 2011	8,503,131	Aug 6, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING EXCHANGE-SPRING TYPE MEDIUM WITH A LA	US	Issued	12/534,181	Aug 3, 2009	7,846,563	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	CPP SENSORS WITH HARD BIAS STRUCTURES THAT SHUNT SENSE CURRENT TOWARDS	US	Issued	11/957,466	Dec 16, 2007	8,335,056	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE SENSOR WITH CO	US	Issued	11/781,576	Jul 23, 2007	7,826,182	Nov 2, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) DEVICE WITH IMPROVED FERROMAGNETIC UN	US	Issued	12/553,864	Sep 3, 2009	8,154,829	Apr 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE SENSOR WITH CO	US	Issued	12/904,060	Oct 13, 2010	8,351,165	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	FABRICATING MAGNETIC RECORDING MEDIA ON PATTERNED SEED LAYERS	US	Issued	11/850,165	Sep 5, 2007	7,776,388	Aug 17, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR PERFORMING METROLOGY ON PATTERNED M	US	Issued	12/871,156	Aug 30, 2010	8,379,338	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, SYSTEM AND METHOD FOR CONTROLLING OUT-GASSING AND HUMIDITY	US	Issued	11/934,571	Nov 2, 2007	8,254,055	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER SAVING OPTIMIZATION FOR DISK DRIVES WITH EXTERNAL CACHE	US	Issued	11/974,275	Oct 12, 2007	8,495,276	Jul 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH HEAD-POSITIONING SERVO CONTROL SYSTEM	US	Issued	11/765,335	Jun 19, 2007	7,466,506	Dec 16, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR IMPLEMENTING VIRTUAL STORAGE DEVICES	US	Issued	11/777,850	Jul 13, 2007	7,886,115	Feb 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR AN INDEPENDENT FLEXIBLE CABLE DAMPER F	US	Issued	11/838,350	Aug 14, 2007	7,903,377	Mar 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PURE ROTARY MICROACTUATOR	US	Issued	11/904,928	Sep 28, 2007	8,223,461	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD FOR PERPENDICULAR RECORDING HAVING STEPPED WRAP AROUND	US	Issued	12/005,557	Dec 26, 2007	8,049,989	Nov 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK AND DISK DRIVE WITH AMPLITUDE-TYPE SERVO FIELDS H	US	Issued	11/840,900	Aug 17, 2007	7,848,040	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE GMR AND TMR SENSORS WITH IMPROVED MAGN	US	Issued	11/862,119	Sep 26, 2007	8,068,315	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE SOLDERING USING FIBER OPTIC DEVICE	US	Issued	11/982,258	Oct 31, 2007	8,822,881	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GANGED REMOVAL OF COMPONENT DEVICE COVER SCREWS	US	Issued	12/004,666	Dec 19, 2007	8,141,236	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	VOICE COIL DAMPER	US	Issued	11/897,699	Aug 30, 2007	7,848,058	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE ASSEMBLY DAMPER	US	Issued	11/998,511	Nov 30, 2007	8,270,120	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DESIGNED ROUGHNESS AND SURFACE TREATMENTS FOR CAPILLARY BUFFER OF FLUID	US	Issued	11/897,712	Aug 30, 2007	8,194,347	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CHALLENGE AND RESPONSE ACCESS CONTROL PROVIDING DATA SECURITY IN DATA STG	US	Issued	11/946,714	Nov 28, 2007	8,312,269	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS THAT IMPLEMENT SECOR SETS	US	Issued	11/843,602	Aug 22, 2007	7,694,105	Apr 6, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR ENCRYPTING DATA ON STORAGE DEVICES USING AN INTERMEDIATE	US	Issued	11/923,123	Oct 24, 2007	8,315,394	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR DATA STORAGE DEVICE VIRTUALIZATION	US	Issued	11/959,293	Dec 18, 2007	8,032,689	Oct 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MAGNETIC MEMORY WITH MULTI-LAYER DATA STORAGE LAYERS	US	Issued	11/957,476	Dec 16, 2007	8,911,888	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MAGNETIC MEMORY WITH MULTI-LAYER DATA STORAGE LAYERS	US	Issued	14/555,235	Nov 26, 2014	10,014,045	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIAL CURRENT PERPENDICULAR TO PLANE GIANT MAGNETORESISTIVE SENSO	US	Issued	11/850,570	Sep 5, 2007	7,881,018	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUID DYNAMIC BEARING WITH A LABYRINTH SEAL	US	Issued	11/973,822	Oct 9, 2007	8,353,630	Jan 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HGA SUSPENSION PAD BARRIER FOR ELIMINATION OF SOLDER BRIDGING DEFECT	US	Issued	11/973,668	Oct 9, 2007	8,213,121	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL DIRECTION POWER AND DATA TRANSFER PROTOCOL AND SAFETY DETECTION	US	Issued	12/023,882	Jan 31, 2008	7,907,062	Mar 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING HELICAL COIL WITH A FIN STRUCTURE FOR REDUCED	US	Issued	11/955,277	Dec 12, 2007	8,031,432	Oct 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK HAVING A PERMEABILITY GRADIENT	US	Issued	11/935,189	Nov 5, 2007	8,982,510	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE WRITING PROCESS FOR MAGNETIC BIT-PATTERNED MEDIA	US	Issued	12/004,915	Dec 21, 2007	7,880,998	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	TREE-STRUCTURE MEMORY DEVICE	US	Issued	12/006,439	Dec 31, 2007	7,663,900	Feb 16, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TREE-STRUCTURE MEMORY DEVICE	US	Issued	12/683,422	Jan 6, 2010	8,169,809	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	A SYSTEM AND METHOD TO ELECTRICALLY GROUND FLUID DYNAMIC BEARINGS	US	Issued	11/973,664	Oct 9, 2007	8,248,725	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	A HIGH ASPECT RATIO MOTION LIMITER OF A MICROACTUATOR AND METHOD FOR FA	US	Issued	11/986,245	Nov 19, 2007	8,553,368	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD WITH STITCHED NOTCHED TRAILING SHIELD	US	Issued	11/944,157	Nov 21, 2007	8,068,312	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD HAVING INDEPENDENT SIDE SHIELD AND TRAILING SHIELD THROAT HIGH	US	Issued	11/966,086	Dec 28, 2007	8,139,320	Mar 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FORMING AN MGO BARRIER LAYER IN A TUNNELING MAGNETORESISTIV	US	Issued	11/941,763	Nov 16, 2007	7,488,609	Feb 10, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH MULTIPLE FERROMAG	US	Issued	12/056,195	Mar 26, 2008	8,164,863	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CARD INSULATOR WITH PROVISION FOR CONFORMANCE TO COMPONENT HEIGHT CHAN	US	Issued	11/877,797	Oct 24, 2007	7,786,388	Aug 31, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTING THE QUALITY OF LIFT-OFF PROCESSES IN WATER FABRICATION	US	Issued	11/957,483	Dec 17, 2007	7,713,762	May 11, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPONENTS AND ASSEMBLY PROCEDURE FOR THERMAL ASSISTED RECORDING	US	Issued	12/075,419	Mar 10, 2008	7,986,592	Jul 26, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC MEDIA HAVING AN EXCHANGE BRIDGE STRUCTURE CONNECTIN	US	Issued	11/964,685	Dec 26, 2007	7,867,406	Jan 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MOTOR MOUNT FOR INTERFERENCE SUPPRESSION IN A HARD DISK DRIVE	US	Issued	12/011,716	Jan 28, 2008	8,174,788	May 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE VOICE COIL MOTOR DRIVER	US	Issued	12/005,955	Dec 28, 2007	7,888,902	Feb 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTANCE (MR) READ ELEMENTS HAVING AN ACTIVE SHIELD	US	Issued	11/965,532	Dec 27, 2007	8,305,715	Nov 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM AND METHOD FOR OPPORTUNISTIC WRITE-VERIFY	US	Issued	12/005,448	Dec 26, 2007	7,774,540	Aug 10, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	NAND FLASH MODULE REPLACEMENT FOR DRAM MODULE	US	Issued	12/002,188	Dec 14, 2007	8,185,685	May 22, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR WRITE HEAD HAVING A MODIFIED WRAP AROUND SHIELD TO IMPROV	US	Issued	11/966,023	Dec 28, 2007	8,120,874	Feb 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR HAVING QUANTUM WELL STRUCTURE AND A P-DOPED T	US	Issued	13/420,474	Mar 14, 2012	8,274,763	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND APPARATUS FOR PATTERNED MEDIA WITH REDUCED MAGNETIC TRENCH	US	Issued	11/957,981	Dec 17, 2007	8,130,468	Mar 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A BIT PATTERNED MEDIA ON A MAGNETIC MEDIA DISK	US	Issued	13/362,510	Jan 31, 2012	9,058,832	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH MULTIPLE REFERENCE	US	Issued	11/964,673	Dec 26, 2007	8,094,421	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND SYSTEM WITH LOW-CURIE-TEM	US	Issued	12/041,930	Mar 4, 2008	7,862,912	Jan 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL JUNCTION MAGNETORESISTIVE SENSOR HAVING A NEAR ZERO MAGNETOSTRI	US	Issued	11/959,374	Dec 18, 2007	8,270,125	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING HEAD CONTROL MEANS FOR PROTRUSION MANAGE	US	Issued	12/217,379	Jul 3, 2008	7,990,647	Aug 2, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING SYSTEMS WITH LOW LOSS LIGHT REDIRECTION STRU	US	Issued	12/024,011	Jan 31, 2008	8,270,257	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD, SYSTEM AND COMPUTER PROGRAM PRODUCT FOR THERMALLY ASSISTED RE	US	Issued	12/024,018	Jan 31, 2008	7,880,995	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH MAGNETIC SHIELDS SEPAR	US	Issued	11/952,019	Dec 6, 2007	7,920,358	Apr 5, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW RESISTANCE TUNNEL MAGNETORESISTANCE (TMR) STRUCTURE	US	Issued	12/332,010	Dec 10, 2008	8,325,450	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	READ TRANSDUCER AND MAGNETIC STORAGE SYSTEM IMPLEMENTING SAME	US	Issued	11/966,003	Dec 28, 2007	8,780,507	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING HEAD WITH MAGNETIC POLE INTEGRATED INTO OP	US	Issued	12/154,517	May 22, 2008	7,652,954	Jan 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	LASER POWER SENSOR FOR THERMALLY ASSISTED MAGNETIC RECORDING	US	Issued	12/042,230	Mar 4, 2008	8,406,090	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE (TMR) STRUCTURES WITH MGO BARRIER AND METHOD	US	Issued	12/110,681	Apr 28, 2008	8,373,948	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A TUNNEL JUNCTION MAGNETORESISTIVE SENSOR W	US	Issued	12/060,006	Mar 31, 2008	7,820,455	Oct 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS USING LOW DENSITY PARITY CHECK CODES FOR CORRECTING ERRORS	US	Issued	12/046,108	Mar 11, 2008	8,209,578	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DENSITY MULTIPLICATION AND IMPROVED LITHOGRAPHY BY DIRECTED BLOCK COPOLY	US	Issued	12/329,484	Dec 5, 2008	9,183,870	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DENSITY MULTIPLICATION AND IMPROVED LITHOGRAPHY BY DIRECTED BLOCK COPOLY	US	Issued	14/935,914	Nov 9, 2015	10,438,626	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE WITH BIASED NEUTRAL AXIS	US	Issued	12/108,055	Apr 23, 2008	7,812,258	Oct 12, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR REDUCING POWER CONSUMPTION BY COMMAND SELECTI	US	Issued	12/323,072	Nov 25, 2008	8,364,992	Jan 29, 2013

WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE WITH RECESSED ACTUATOR JOINT	US	Issued	12/098,909	Apr 7, 2008	8,149,544	Apr 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR DISK DRIVE RECIRCULATION FILTER HAVING IN	US	Issued	12/041,759	Mar 4, 2008	8,102,618	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR WITH SUB-LAYERING OF PINNED LAYERS	US	Issued	12/101,761	Apr 11, 2008	8,675,316	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Minimizing Flow Induced Vibration In A Hard Disk Drive With A Hybrid Planar Plate Hav	US	Issued	12/109,829	Apr 25, 2008	8,619,386	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD HAVING A NOVEL TRAILING RETURN POLE FO	US	Issued	12/040,717	Feb 29, 2008	8,068,311	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPLIANT AIR BEARING SLIDER	US	Issued	12/120,176	May 13, 2008	8,300,360	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ROBOTIC END-EFFECTOR FOR COMPONENT CENTER ALIGNMENT AND ASSEMBLY	US	Issued	12/277,762	Nov 25, 2008	8,458,896	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING HARD DISK SHROUDS WITH AERODYNAMIC FE	US	Issued	12/054,244	Mar 24, 2008	8,199,426	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ROBUST OVER-CENTER LATCH ASSEMBLY	US	Issued	12/103,623	Apr 15, 2008	8,240,724	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR INTEGRATED BYPASS CHANNEL AND DIVERTER	US	Issued	12/117,944	May 9, 2008	8,274,754	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUID DYNAMIC BEARING WITH AN IMMISCIBLE FLUID BARRIER	US	Issued	12/107,625	Apr 22, 2008	8,619,388	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA MAGNETIC RECORDING DISK DRIVE WITH WRITE CLOCK PHASE ADJ	US	Issued	12/056,178	Mar 26, 2008	7,848,047	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CONTROL IN A FLASH MEMORY DEVICE	US	Issued	12/196,758	Aug 22, 2008	8,213,229	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	READ/WRITE ELEMENTS FOR A THREE-DIMENSIONAL MAGNETIC MEMORY	US	Issued	12/191,956	Aug 14, 2008	7,821,822	Oct 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH BANDWIDTH AND MECHANICAL STRENGTH BETWEEN A DISK DRIVE FLEXIBLE CIR	US	Issued	12/181,175	Jul 28, 2008	8,363,356	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH SMOOTHENED MULTI	US	Issued	12/129,120	May 29, 2008	8,081,405	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR FLEXURE-INTEGRATED MICROACTUATOR	US	Issued	12/058,096	Mar 28, 2008	8,085,508	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSORING-TYPE CURRENT-PERPENDICULAR-TO-PLANE GIANT MAGNETORESISTA	US	Issued	12/101,453	Apr 11, 2008	8,233,247	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	POSITIONING WEIGHT ASSEMBLIES ALONG A DYNAMIC LOOP SECTION OF A FLEX CABLE	US	Issued	12/183,407	Jul 31, 2008	8,233,241	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF UTILIZING A SOLDER REFLOW CHANNEL IN THE FORMATION OF A HARD D	US	Issued	12/233,153	Sep 18, 2008	8,243,395	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CIRCUIT ASSEMBLY WITH A DUMMY TRACE BETWEEN TWO SIGNAL TRACES	US	Issued	12/242,408	Sep 30, 2008	8,247,699	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE AND METHOD FOR LOWERING FLEX CABLE IMPEDANCE	US	Issued	12/323,329	Nov 25, 2008	8,045,297	Oct 25, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYMMETRICALLY TAPERED CONSTRAINED LAYER DAMPER FOR A FLEX CABLE ASSEMBL	US	Issued	12/183,845	Jul 31, 2008	8,228,639	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE MAGNETORESISTIVE SENSOR EMPLOYING HALF N	US	Issued	12/119,961	May 13, 2008	8,810,973	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE MAGNETORESISTIVE SENSOR EMPLOYING HALF N	US	Issued	14/339,368	Jul 23, 2014	8,988,834	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED LEAD SUSPENSION WITH MULTIPLE CROSSOVER COPLANAR CONNECTION	US	Issued	12/172,933	Jul 14, 2008	8,154,827	Apr 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL INTERCONNECT SYSTEM WITH INTEGRATED TRANSMISSION LINE COMPEN	US	Issued	12/317,547	Dec 23, 2008	8,107,177	Jan 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR TO PLANE MAGNETORESISTANCE READ HEAD DESIGN USING	US	Issued	13/314,449	Dec 8, 2011	8,284,525	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR DESIGN FOR SIGNAL NOISE PICKUP REDUCTION FOR USE	US	Issued	12/129,991	May 30, 2008	8,223,462	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC FIELD SENSING SYSTEM USING SPIN-TORQUE DIODE EFFECT	US	Issued	12/188,183	Aug 7, 2008	8,416,539	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH DELAYED CONNECTION HEATER SHUNTING	US	Issued	12/124,997	May 21, 2008	7,969,687	Jun 28, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD WITH INTEGRATED COIL AND SHIELD STRUCTURE	US	Issued	12/194,168	Aug 19, 2008	8,035,922	Oct 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING BLOCK COPOLYMERS FOR MAKING A MASTER MOLD WITH HIGH BIT-A	US	Issued	12/141,062	Jun 17, 2008	8,119,017	Feb 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC RECORDING DISK WITH HIGH BIT-ASPECT RATIO AND HIGH BIT-A	US	Issued	13/152,254	Jun 2, 2011	8,822,047	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING BLOCK COPOLYMERS FOR MAKING A MASTER MOLD WITH HIGH BIT-A	US	Issued	13/351,385	Jan 17, 2012	8,257,598	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR USING RESISTIVITY OF SENSOR FILM IN AN ELEMENT SHU	US	Issued	12/130,389	May 30, 2008	8,274,762	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MONITORING GAS IN SEALED HARD DISK DRIVES WITH FE	US	Issued	12/128,512	May 28, 2008	8,094,409	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE FOR A HARD DISK DRIVE HAVING AN INTERROGATION TRACE	US	Issued	12/266,715	Nov 7, 2008	8,072,709	Dec 6, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED DIGITAL SIGNALING APPARATUS AND METHOD USING REFLECTED SIGNALS	US	Issued	12/283,225	Sep 9, 2008	7,786,754	Aug 31, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK HAVING PRE-PATTERNED SURFACE FEATURES AND PLANA	US	Issued	12/136,640	Jun 10, 2008	8,338,006	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE CIRCULATOR WITH THIN-FILM EXCHANGE-COUPLED MAGNETIC STRUCTU	US	Issued	12/260,001	Oct 28, 2008	7,816,994	Oct 19, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTANCE READ SENSOR WITH DUAL SENSE LAYERS	US	Issued	12/587,155	Oct 2, 2009	8,243,401	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING REDUCED COST ELECTROSTATIC DISCHARGE SHUNT	US	Issued	12/237,220	Sep 24, 2008	8,270,124	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	READ SENSORS WITH IMPROVED ORIENTATION OF THE HARD BIASED LAYER AND HAVING	US	Issued	12/166,126	Jul 1, 2008	8,213,131	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUE FOR MEASURING PROCESS INDUCED MAGNETIC ANISOTROPY IN A MAGNE	US	Issued	12/345,745	Dec 30, 2008	8,254,066	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	A CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH FERROMAGNETIC A	US	Issued	12/276,003	Nov 21, 2008	8,169,753	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR ONSET MAGNETIC OXIDE LAYER FOR HIGH PE	US	Issued	12/210,603	Sep 15, 2008	9,082,442	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PIVOT-CARRIAGE HAVING A CENTER-BORE WITH AN INTEGRATED BEARING-SPACER PO	US	Issued	12/192,344	Aug 15, 2008	8,363,358	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED SLIDER BIAS CONTROL	US	Issued	12/328,483	Dec 4, 2008	8,049,984	Nov 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL ASSISTED RECORDING (TAR) DISK DRIVE CAPABLE OF CONTROLLING THE WR	US	Issued	12/209,089	Sep 11, 2008	7,852,587	Dec 14, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED-MEDIA MAGNETIC RECORDING DISK WITH OPTICAL CONTRAST ENHANCEM	US	Issued	12/248,806	Oct 9, 2008	7,796,353	Sep 14, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER HAVING A LUBRICANT-ACCUMULATION BARRIER	US	Issued	12/324,624	Nov 26, 2008	8,169,744	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER HAVING A LUBRICANT-ACCUMULATION BARRIER INCLUDING A PLURALITY OF LU	US	Issued	12/324,727	Nov 26, 2008	8,174,794	May 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH POCKETS IN FRONT OF AIR BEARING SURFACE	US	Issued	12/250,730	Oct 14, 2008	8,094,411	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	GRAPHENE ELECTRONICS FABRICATION	US	Issued	12/345,760	Dec 30, 2008	8,193,455	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING GRAPHENE ELECTRONICS	US	Issued	13/461,696	May 1, 2012	8,650,749	Feb 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR CONTROLLING CONTACT LOCATION DURING TFC TOUCHDOWN AND METH	US	Issued	12/253,459	Oct 17, 2008	8,149,541	Apr 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD WITH SELF-ALIGN LAYER AND A METHOD FOR MAKING THE SAME	US	Issued	12/347,058	Dec 31, 2008	8,259,413	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS HAVING WRITER WITH DEEPER WRAP AROUND SHIELD AND METHODS FOR M	US	Issued	12/975,157	Dec 21, 2010	8,634,161	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD WITH DIFFERENT UPPER AND LOWER YOKE LENGTHS AND METHODS FOR	US	Issued	12/341,908	Dec 22, 2008	8,218,263	Jul 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A SELF-ALIGNED SIDE WRAP AROUND SHIELD WITH M	US	Issued	12/343,709	Dec 24, 2008	8,422,168	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-RELEASING RESIST MATERIAL FOR NANO-IMPRINT PROCESSES	US	Issued	12/268,823	Nov 11, 2008	8,262,975	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC AND ENCAPSULATION CONTAMINATION CONTROL FOR DISK DRIVES	US	Issued	12/324,778	Nov 26, 2008	8,149,535	Apr 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MULTI-ANGLED BUMPS PROCESSING FOR MAGNETIC POLE FABRICATION A	US	Issued	12/341,834	Dec 22, 2008	8,085,497	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SLANTED BUMPS DESIGN FOR MAGNETIC SHIELDS IN PERPENDICULAR WRITE HEADS AN	US	Issued	12/569,957	Sep 30, 2009	8,724,258	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STEPPED MAIN POLE FOR PERPENDICULAR WRITE HEADS IN HARD DISK DRIVES AND M	US	Issued	12/342,647	Dec 23, 2008	8,233,234	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR CREATING A MAGNETIC MAIN POLE WITH SIDE SHIELD AND SYSTEMS T	US	Issued	12/341,925	Dec 22, 2008	8,059,367	Nov 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED-MEDIA MAGNETIC RECORDING DISK WITH CRYPTOGRAPHICALLY SCRAMBL	US	Issued	12/332,287	Dec 10, 2008	7,880,990	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR INTERNAL POLARIZATION ROTATION FOR HOR	US	Issued	12/346,930	Dec 31, 2008	8,213,271	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR INTERNAL POLARIZATION ROTATION FOR HOR	US	Issued	13/439,994	Apr 5, 2012	8,379,495	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR FABRICATING A C-APERTURE OR E-ANTENNA	US	Issued	13/306,582	Nov 29, 2011	8,486,289	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR MASTER PATTERN GENERATION, INCLUDING	US	Issued	13/906,648	May 31, 2013	8,908,309	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING HEAD HAVING RECESSED WAVEGUIDE WITH NEAR F	US	Issued	12/347,084	Dec 31, 2008	8,169,881	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING HEAD HAVING RECESSED WAVEGUIDE WITH NEAR F	US	Issued	13/438,811	Apr 3, 2012	8,619,535	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	RIDGE WAVE-GUIDE FOR THERMAL ASSISTED MAGNETIC RECORDING	US	Issued	12/347,194	Dec 31, 2008	7,880,996	Feb 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER HAVING MAIN BODY AND WINGS EXTENDING THEREFROM AN	US	Issued	12/347,134	Dec 31, 2008	8,472,286	Jan 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED-MEDIA PERPENDICULAR MAGNETIC RECORDING DISK WITH SERVO REGION	US	Issued	13/103,143	May 9, 2011	8,252,153	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR STRAIN-ASSISTED MAGNETIC RECORDING FOR	US	Issued	12/423,258	Apr 14, 2009	8,129,043	Mar 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR BEARING FOR DISK DRIVES	US	Issued	12/477,755	Jun 3, 2009	8,279,556	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE CONTAMINATION CONTROL	US	Issued	12/419,221	Apr 6, 2009	8,159,778	Apr 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-TERMINAL DESIGN FOR SPIN ACCUMULATION MAGNETIC SENSOR	US	Issued	12/470,827	May 22, 2009	8,760,817	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED HALF COIL STRUCTURE FOR WRITE ASSIST OF HIGH COERCIVITY MEDIA	US	Issued	12/589,038	Oct 16, 2009	8,411,390	Apr 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SIGNALING METHOD AND APPARATUS FOR WRITE ASSIST OF HIGH COERCIVITY MEDIA	US	Issued	12/589,042	Oct 16, 2009	8,638,527	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	OFF-AXIS ION MILLING DEVICE FOR MANUFACTURE OF MAGNETIC RECORDING MEDIA	US	Issued	12/489,873	Jun 23, 2009	8,232,532	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR MULTIPLE ANISOTROPY LAYERED MAGNETIC	US	Issued	12/412,403	Mar 27, 2009	8,163,405	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING MULTIPLE DISK SURFACES ACCESSIBLE BY A READ/WRITE HEAD AN	US	Issued	12/356,070	Jan 19, 2009	8,112,580	Feb 7, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH SPIN TORQUE OSCILLATOR	US	Issued	12/542,677	Aug 17, 2009	8,446,690	May 21, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH WRITE DRIVER TO WRITE HEAD TRANSMISSI	US	Issued	12/641,362	Dec 18, 2009	8,189,281	May 29, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH ENHANCEMENT CAPACITO	US	Issued	12/615,087	Nov 9, 2009	8,081,399	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING SYSTEM WITH SPIN TORQUE OSCILLATOR AND	US	Issued	12/542,682	Aug 17, 2009	8,351,155	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ABS WITH LUBRICANT CONTROL TRENCHES FOR HARD DISK DRIVES	US	Issued	12/398,909	Mar 5, 2009	8,203,805	Jun 19, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNABLE MICROSTRIP SIGNAL TRANSMISSION PATH IN A HARD DISK DRIVE	US	Issued	12/646,612	Dec 23, 2009	8,305,712	Nov 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR EMULATING SEQUENTIAL DEVICE WITH CONSTRAINED DISK DRIVE	US	Issued	12/368,929	Feb 10, 2009	8,208,215	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR STORING SHINGLE BLOCKS IN A CACHE MEMORY USING A DATA STOR	US	Issued	12/402,415	Mar 11, 2009	7,965,465	Jun 21, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING SURFACE OF A HEAD SLIDER IN A HARD DISK DRIVE	US	Issued	12/533,870	Jul 31, 2009	8,649,126	Feb 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRICAL AIR BEARING SURFACE FOR A HEAD SLIDER IN HARD DISK DRIVES	US	Issued	12/474,164	May 28, 2009	8,270,115	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TMR SENSOR WITH A MULTILAYERED REFERENCE LAYER	US	Issued	12/507,618	Jul 22, 2009	8,218,271	Jul 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CORRECTING ERRORS IN POSITION OF AN HDD WRITE-HEAD	US	Issued	12/435,220	May 4, 2009	8,094,403	Jan 10, 2012

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE ELECTROSTATIC DISCHARGE (ESD) DETECTOR	US	Issued	12/511,780	Jul 29, 2009	8,264,233	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	AN AIRFLOW DIVERTER IN A HARD DISK DRIVE SYSTEM	US	Issued	12/409,378	Mar 23, 2009	8,085,494	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK STACK ASSEMBLY WITH SPINDLE MOTOR HUB HAVING IMPROVED DISK-SUPPORT	US	Issued	12/402,476	Mar 11, 2009	8,077,432	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING MEDIA WITH SUBLAYERS OF OXIDE DOPANT MAGNETIC	US	Issued	12/540,397	Aug 13, 2009	8,168,309	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING SLIDER BOUNCE IN A HARD DISK DRIVE	US	Issued	12/511,840	Jul 29, 2009	8,958,178	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH ADAPTIVE ERROR-CORRECTING CODE FOR IMPROVED AREAL E	US	Issued	12/538,367	Aug 10, 2009	8,301,948	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA MAGNETIC RECORDING DISK DRIVE WITH WRITE CLOCK PHASE ADJ	US	Issued	12/477,765	Jun 3, 2009	7,848,048	Dec 7, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO PATTERNING AND WRITING COMPATIBLE WITH PLANARIZATION OF PATTERNED	US	Issued	12/699,501	Feb 3, 2010	8,467,143	Jun 18, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH ORDERED NUCLEATION LAYER AND	US	Issued	12/639,975	Dec 16, 2009	8,048,546	Nov 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR SENSOR	US	Issued	12/492,050	Jun 25, 2009	8,259,409	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR SENSOR ENHANCED BY MAGNETIC ANISOTROPY	US	Issued	12/884,080	Sep 16, 2010	8,432,644	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF ALIGNED DOUBLE FLUX GUIDED TMR SENSOR	US	Issued	12/508,843	Jul 24, 2009	8,472,148	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH FLARED WRITE POLE WITH MULTIPLE NON-MAGNETIC LAYERS	US	Issued	12/634,480	Dec 9, 2009	8,451,560	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PMR WRITER HAVING A TAPERED WRITE POLE AND BUMP LAYER AND METHOD OF FAB	US	Issued	12/634,514	Dec 9, 2009	8,233,235	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTING OPERATIONAL PROBLEMS IN A HARD-DISK DRIVE (HDD)	US	Issued	12/549,135	Aug 27, 2009	8,085,488	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD WITH WRAP-AROUND SHIELD, SLANTED POL	US	Issued	12/634,456	Dec 9, 2009	8,441,757	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE FOR GENERATING HIGH FREQUENCY MAGNETIC FIELDS IN A REST-FRAME OF A	US	Issued	12/603,443	Oct 21, 2009	8,514,519	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	QUANTUM WELL GRAPHENE STRUCTURE	US	Issued	12/563,446	Sep 21, 2009	8,227,842	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD MANUFACTURED BY DAMASCENE PROCESS PRODUCING A TAR	US	Issued	12/634,490	Dec 9, 2009	8,347,488	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR MANUFACTURING MAGNETIC RECORDING M	US	Issued	12/567,277	Sep 25, 2009	8,899,957	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR MANUFACTURING MAGNETIC RECORDING M	US	Issued	14/525,590	Oct 28, 2014	9,266,258	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA HAVING A DUAL ONSET LAYER	US	Issued	12/614,598	Nov 9, 2009	8,580,409	Nov 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER FLY-HEIGHT CONTROL IN A HARD DISK DRIVE	US	Issued	12/646,848	Dec 23, 2009	8,085,490	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	INHIBITING OXIDATION OF ORGANIC CONTAMINANTS IN A HARD DISK DRIVE (HDD)	US	Issued	12/648,548	Dec 29, 2009	8,405,929	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH INTEGRATED LEAD SUSPENSION HAVING MU	US	Issued	12/635,606	Dec 10, 2009	8,233,240	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR EMPLOYING NITROGENATED CU/AG UNDER-LAYERS WITH	US	Issued	12/581,045	Oct 16, 2009	8,648,589	Feb 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING GRAM LOAD CHANGE IN ACTUATOR ARM IN A HARD DISK DRIVE	US	Issued	12/629,802	Dec 2, 2009	8,520,341	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A STEPPED OR SEGMENTED WRAP AROUND SHIELD AND ME	US	Issued	12/508,860	Jul 24, 2009	8,089,725	Jan 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION FOR PROTECTING A COMPONENT FROM MECHANICAL SHOCK	US	Issued	12/578,754	Oct 14, 2009	8,351,159	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ISOLATING UNSTABLE AIR PRESSURE IN A HARD DISK DRIVE (HDD)	US	Issued	12/629,573	Dec 2, 2009	8,351,150	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH FLARED WRITE POLE HAVING MULTIPLE TAPERED REGIONS	US	Issued	12/634,533	Dec 9, 2009	8,498,078	Jul 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE READ HEAD WITH	US	Issued	12/565,721	Sep 23, 2009	8,208,228	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD HAVING WRITE POLE WITH HIGHER MAGNETIC MOMENT	US	Issued	12/634,547	Dec 9, 2009	8,553,360	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD AND SYSTEM WITH IMPROVED S	US	Issued	12/632,787	Dec 7, 2009	7,982,996	Jul 19, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING RECESSION BY HEATING A MAGNETIC TAPE HEAD	US	Issued	12/629,709	Dec 2, 2009	8,508,887	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH DATA ISLANDS HA	US	Issued	12/577,344	Oct 12, 2009	8,748,018	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE SYNCHRONIZATION IN PATTERNED MAGNETIC MEDIA	US	Issued	12/639,838	Dec 16, 2009	8,213,103	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC WRITER FOR SHINGLED MAGNETIC RECORDING	US	Issued	12/556,472	Sep 9, 2009	8,310,786	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC WRITER FOR SHINGLED MAGNETIC RECORDING	US	Issued	13/612,704	Sep 12, 2012	8,792,210	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC RECORDING DISK WITH PATTERNED SERVO SECTORS HAVING C	US	Issued	12/604,333	Oct 22, 2009	8,059,350	Nov 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH MULTIPLE-USE FIELDS IN SERVO PATTERN	US	Issued	12/653,874	Dec 18, 2009	9,311,942	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH MULTIPLE-USE FIELDS IN SERVO PATTERN	US	Issued	12/653,862	Dec 18, 2009	9,314,779	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	READ/WRITE STRUCTURES FOR A THREE-DIMENSIONAL MEMORY	US	Issued	12/638,627	Dec 15, 2009	8,164,940	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) READ HEAD WITH LOW MAGNETIC NOISE	US	Issued	12/545,776	Aug 21, 2009	8,385,026	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO PATTERNING COMPATIBLE WITH PLANARIZATION OF PATTERNED MAGNETIC DI	US	Issued	12/699,581	Feb 3, 2010	8,526,132	Sep 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC WRITE HEAD HAVING A WRAP AROUND	US	Issued	12/641,242	Dec 17, 2009	8,201,320	Jun 19, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD MANUFACTURED BY AN ENHANCED DAMASCENE PROCESS PR	US	Issued	12/641,251	Dec 17, 2009	8,547,660	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CONDUCTOR SUSPENSION STRUCTURE AND ELECTRICAL CONNECTION ASSEMBLY FOR TR	US	Issued	12/645,217	Dec 22, 2009	8,310,789	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	JOINT DESIGN OF THERMALLY-ASSISTED MAGNETIC RECORDING HEAD AND PATTERNED	US	Issued	12/607,933	Oct 28, 2009	8,031,561	Oct 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPPRESSING ADJACENT TRACK INTERFERENCE/FAR TRACK INTERFERENCE (ATI/FTI) IN	US	Issued	12/641,292	Dec 17, 2009	8,169,730	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING RECORDING DENSITY IN A CIRCUMFERENTIAL DIRECTION	US	Issued	12/622,109	Nov 19, 2009	9,047,921	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPPORTING MEMBRANES ON NANOMETER-SCALE SELF-ASSEMBLED FILMS	US	Issued	12/641,782	Dec 18, 2009	8,206,601	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPPORTING MEMBRANES ON NANOMETER-SCALE SELF-ASSEMBLED FILMS	US	Issued	13/482,944	May 29, 2012	8,658,271	Feb 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DATA CONFIDENTIALITY AND INTEGRITY OF SHINGLED WRITTEN DATA	US	Issued	12/622,400	Nov 19, 2009	8,271,801	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA WITH OXIDE-CONTAINING EXCHANGE	US	Issued	12/638,905	Dec 15, 2009	8,168,310	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA WITH OXIDE-CONTAINING EXCHANGE	US	Issued	13/438,804	Apr 3, 2012	8,747,628	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ONSET LAYER FOR PERPENDICULAR MAGNETIC RECORDING MEDIA	US	Issued	12/638,894	Dec 15, 2009	9,412,404	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTILEVEL FREQUENCY ADDRESSABLE FIELD DRIVEN MRAM	US	Issued	12/640,081	Dec 17, 2009	8,199,553	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING DATA STORAGE AND DUAL PORT, DUAL-ELEMENT STORAGE DEVICE	US	Issued	12/646,726	Dec 23, 2009	8,850,128	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A PERPENDICULAR MAGNETIC WRITE HEAD HAVING A	US	Issued	12/641,138	Dec 17, 2009	8,223,727	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SECURE ERASE FOR SOLID STATE DRIVES	US	Issued	12/640,730	Dec 17, 2009	8,250,380	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DEVICES AND MAGNETIC MEDIA WITH GRAPHENE OVERCOAT	US	Issued	12/646,851	Dec 23, 2009	9,305,571	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVES USING A BI-PRODUCT OF MANUFACTURING A ZTMD LUBRICANT TO	US	Issued	12/646,814	Dec 23, 2009	8,300,354	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ABS WITH A LUBRICATION CONTROL DAM FOR HARD DISK DRIVES	US	Issued	12/707,484	Feb 17, 2010	8,289,653	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	UPSTREAM SPOILER WITH INTEGRATED CRASH STOP	US	Issued	12/637,523	Dec 14, 2009	8,355,220	Jan 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	USE OF CARBON NANOTUBES TO FORM CONDUCTIVE GASKETS DEPLOYED IN SENSITIVE	US	Issued	12/638,173	Dec 15, 2009	8,274,756	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ALL-OPTICAL MAGNETIC RECORDING SYSTEM USING CIRCULARLY POLARIZED LIGHT AN	US	Issued	12/707,402	Feb 17, 2010	8,164,988	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA FOR SELF-SERVOWRITING INTEGRATED SERVO FIELDS	US	Issued	12/800,300	May 11, 2010	8,477,442	Jul 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL READ/WRITE OFFSET COMPENSATION	US	Issued	12/827,752	Jun 30, 2010	8,699,165	Oct 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALING A HARD DISK DRIVE	US	Issued	12/820,945	Jun 22, 2010	8,279,552	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFLUOROPOLYETHER LUBRICANT AND SYSTEMS COMPRISING SAME	US	Issued	12/760,877	Apr 15, 2010	8,518,564	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK HAVING PRE-PATTERNED SURFACE FEATURES AND PLANA	US	Issued	12/753,683	Apr 2, 2010	8,168,311	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTICLE-CAPTURING DEVICE INCLUDING A COMPONENT CONFIGURED TO PROVIDE A	US	Issued	12/827,994	Jun 30, 2010	8,427,775	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	READ PATH COMPENSATION FOR SNR AND SIGNAL TRANSFER	US	Issued	12/851,827	Aug 6, 2010	9,570,096	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED RECORDING HEAD WITH NEAR FIELD TRANSDUCER HAVING INTE	US	Issued	12/807,296	Aug 31, 2010	8,339,739	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH FERROMAGNETIC BUF	US	Issued	12/884,100	Sep 16, 2010	8,451,566	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH FERROMAGNETIC BUF	US	Issued	12/884,091	Sep 16, 2010	8,537,504	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS TO MAKE PMR WRITER WITH LEADING EDGE SHIELD (LES) AND LEADING EDG	US	Issued	12/954,422	Nov 24, 2010	8,400,733	Mar 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A WRAP AROUND TRAILING SHIELD WITH AN ASYMET	US	Issued	12/766,764	Apr 23, 2010	8,339,734	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC WRITE HEAD HAVING A WRAP AROUND	US	Issued	12/766,769	Apr 23, 2010	8,451,562	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A PERPENDICULAR MAGNETIC WRITE HEAD HAVING A	US	Issued	12/748,182	Mar 26, 2010	8,318,031	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MATERIAL FOR USE IN A TMR READ GAP WITHOUT ADVERSELY AFFECTING THE TMR EF	US	Issued	12/916,256	Oct 29, 2010	8,804,287	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MATERIAL FOR USE IN A TMR READ GAP WITHOUT ADVERSELY AFFECTING THE TMR EF	US	Issued	14/449,119	Jul 31, 2014	10,297,278	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA MAGNETIC RECORDING DISK DRIVE WITH DATA ISLAND MISPLAC	US	Issued	12/782,383	May 18, 2010	8,427,772	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SILICON/GOLD SEED STRUCTURE FOR CRYSTALLINE ALIGNMENT IN A FILM STACK	US	Issued	12/772,179	May 1, 2010	8,492,010	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CLAMPING DEVICE FOR A ROTATABL COMPONENT OF A MACHINE INCLUDING A BALA	US	Issued	12/887,461	Sep 21, 2010	8,929,025	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED STRUCTURE IN A STORAGE MEDIA	US	Issued	12/925,365	Oct 19, 2010	8,482,880	Jul 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER WITH THERMAL SENSOR AND SYSTEM FOR CLOCKING WRITE	US	Issued	12/862,633	Aug 24, 2010	8,514,672	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STRUCTURE FOR THERMALLY-ASSISTED RECORDING (TAR) DISK DRIVE	US	Issued	12/942,010	Nov 8, 2010	8,194,512	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER PATTERNED WITH THERMALLY-ASSISTED RECORDING (TAR)	US	Issued	13/457,328	Apr 26, 2012	8,451,707	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH OFFSET PES SERVO SEGMENTS WITH LENGTH ENCODED TRAC	US	Issued	12/924,881	Oct 7, 2010	8,335,047	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MEDIA WITH STRUCTURED PES SERVO SEGMENTS ENCODING LOCAL TRAC	US	Issued	12/924,880	Oct 7, 2010	8,363,348	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC WRITE HEAD EMPLOYING A NEAR FIELD TRANSDUCER	US	Issued	12/938,234	Nov 2, 2010	8,351,151	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC WRITE HEAD EMPLOYING A PLASMONIC ANTENNA CO	US	Issued	12/954,461	Nov 24, 2010	8,553,505	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC WRITE HEAD EMPLOYING A PLASMONIC ANTENNA CO	US	Issued	14/018,310	Sep 4, 2013	8,804,469	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEADS WITH BI-LAYER WRAP AROUND SHIELDS HAVING DISSIMILAR	US	Issued	12/914,543	Oct 28, 2010	8,619,391	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT PERPENDICULAR MAGNETORESISTIVE SENSOR WITH A DUMMY SHIELD FOR	US	Issued	12/870,561	Aug 27, 2010	8,472,146	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO WRITE ROBUST AND GOOD ALTITUDE PERFORMANCE ABS	US	Issued	12/908,789	Oct 20, 2010	8,164,860	Apr 24, 2012

WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SLIDER AND HARD DISK DRIVE	US	Issued	12/868,610	Aug 25, 2010	8,493,688	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR WRITE HEAD WITH WRAP AROUND SHIELD AND CONFORMAL SIDE GA	US	Issued	12/954,458	Nov 24, 2010	8,470,186	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED TOUCH-DOWN PAD AND TOUCH-DOWN SENSOR	US	Issued	12/914,883	Oct 28, 2010	8,335,053	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CONICAL FLUID DYNAMIC BEARINGS WITH IMPROVED STIFFNESS FOR USE IN HARD-DIS	US	Issued	12/910,488	Oct 22, 2010	8,189,291	May 19, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH MEANS FOR SUPPLYING A BENEFICIAL VAPOR VIA A	US	Issued	12/855,441	Aug 12, 2010	8,693,135	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EARLY DETECTION OF DEGRADATION IN NOR FLASH MEMORY	US	Issued	12/930,019	Dec 22, 2010	8,369,143	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH VARIABLE INCREMENTED COUNTING OF WRITES TO THE DATA TRACK	US	Issued	12/839,391	Jul 19, 2010	8,531,793	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	WET ETCHING SILICON OXIDE DURING THE FORMATION OF A DAMASCENE POLE AND A	US	Issued	12/943,880	Nov 10, 2010	8,432,637	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC TAPE HEAD USING A TMR SENSOR	US	Issued	12/973,791	Dec 20, 2010	8,333,898	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR WI	US	Issued	12/881,162	Sep 13, 2010	8,514,525	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC WRITE POLE USING A MULTI-LAYERED H	US	Issued	12/953,269	Nov 23, 2010	8,889,018	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL FLY HEIGHT CONTROL MAGNETIC RECORDING HEAD HAVING A NOVEL HEAT	US	Issued	12/904,943	Oct 14, 2010	8,259,412	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) PATTERNED-MEDIA DISK DRIVE WITH OPTICA	US	Issued	12/898,381	Oct 5, 2010	8,355,300	Jan 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDED CAVITY VCSEL MOUNTED TO SUBSTRATE WITH ELECTRICAL AND THERMAL C	US	Issued	13/033,489	Feb 23, 2011	9,053,731	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC WRITE HEAD HAVING A LAMINATED TRAILING RETURN PO	US	Issued	12/975,121	Dec 21, 2010	8,929,028	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) DISK DRIVE WITH PATTERNED MULTILEVEL M	US	Issued	12/942,206	Nov 9, 2010	8,081,542	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION HAVING A MAGNETIC INSERTION LAYER AND METHODS	US	Issued	12/953,233	Nov 23, 2010	8,427,791	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR STORAGE ARCHITECTURE FOR BIT PATTERNED	US	Issued	12/912,324	Oct 26, 2010	8,432,633	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR STORAGE ARCHITECTURE FOR BIT PATTERNED	US	Issued	13/854,621	Apr 1, 2013	8,786,985	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLEAVED CONDUCTOR STRUCTURE WITH OFFSET TRACES	US	Issued	12/976,821	Dec 22, 2010	8,598,460	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED PERPENDICULAR MAGNETIC RECORDING DISK DRIVE AND MEDIUM WITH	US	Issued	12/906,909	Oct 18, 2010	8,541,116	Sep 24, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	BASEPLATE WITH RECESSED REGION IN A HARD-DISK DRIVE (HDD)	US	Issued	12/881,017	Sep 13, 2010	8,339,732	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-PLANE (CPP) READ SENSOR WITH DUAL SEED AND CAP L	US	Issued	12/976,932	Dec 22, 2010	8,675,317	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH INTEGRATED THERMALLY-ASSISTED RECORDING (TAR) HEAD AND INTEGR	US	Issued	12/946,420	Nov 15, 2010	8,107,326	Jan 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH INTEGRATED THERMALLY-ASSISTED RECORDING (TAR) HEAD AND LONG L	US	Issued	12/969,307	Dec 15, 2010	8,184,507	May 22, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH INTEGRATED THERMALLY-ASSISTED RECORDING (TAR) HEAD AND VERTIC	US	Issued	12/969,384	Dec 15, 2010	8,139,448	Mar 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD POLE LAMINATE STRUCTURE	US	Issued	12/976,993	Dec 22, 2010	8,958,176	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING IMPROVED RESISTANCE TO THERMAL STRESS INDUCED IN	US	Issued	12/914,926	Oct 28, 2010	8,867,177	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT IN FLASH MEMORY USING PROBABILITY OF CHARGE DISTURBANC	US	Issued	12/930,017	Dec 22, 2010	8,649,215	Feb 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT IN FLASH MEMORY USING PROBABILITY OF CHARGE DISTURBANC	US	Issued	12/930,013	Dec 22, 2010	8,599,609	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INDUCTION OF MAGNETIC BIAS IN A MAGNETIC RECORDING DISK	US	Issued	12/917,837	Nov 2, 2010	8,339,724	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	APPROACHES FOR DETECTING LEAKS IN A HARD-DISK DRIVE (HDD) COVER	US	Issued	12/961,990	Dec 7, 2010	8,656,758	Feb 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PLANARIZED MAGNETIC RECORDING DISK WITH PRE-PATTERNED SURFACE FEATURES A	US	Issued	12/914,647	Oct 28, 2010	8,252,437	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	EARLY DEGRADATION DETECTION IN FLASH MEMORY USING TEST CELLS	US	Issued	12/930,020	Dec 22, 2010	8,422,303	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH ULTRATHIN OXID	US	Issued	13/049,124	Mar 16, 2011	8,268,461	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CHANNEL-SOURCE LASER-PULSING SYSTEM ARCHITECTURE FOR THERMAL-ASSISTED RE	US	Issued	13/117,300	May 27, 2011	8,503,125	Aug 6, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH SHINGLED WRITING AND WIDE-AREA THERM	US	Issued	13/102,959	May 6, 2011	8,270,256	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DOCK FOR A PORTABLE STORAGE DEVICE, OR THE LIKE	US	Issued	29/370,334	Jul 1, 2010	8,636,395	Apr 19, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DOCK ASSEMBLY FOR A PLURALITY OF PORTABLE EXTERNAL STORAGE DEVICES	US	Issued	29/370,342	Jul 1, 2010	8,639,301	Jun 7, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTERNAL STORAGE DEVICE	US	Issued	29/370,332	Jul 1, 2010	8,638,423	May 24, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	COMBINED EXTERNAL STORAGE DEVICE AND REMOVABLE PORTABLE MEMORY KEY	US	Issued	29/370,333	Jul 1, 2010	8,639,297	Jun 7, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH SHINGLED WRITING AND RECTANGULAR OPT	US	Issued	13/190,410	Jul 25, 2011	8,416,646	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH SELF COMPENSATING DUAL THERMAL FLY HEIGHT CONTROL	US	Issued	13/117,814	May 27, 2011	8,634,167	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC WRITE POLE HAVING STRAIGHT SIDE WA	US	Issued	13/187,370	Jul 20, 2011	8,371,019	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING WRAPAROUND SHIELD WRITE HEAD USING HARD MA	US	Issued	13/193,520	Jul 28, 2011	8,801,943	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUORINATED POLYTETRAMETHYLENE GLYCOL (PTMG) WITH DIEPOXIDE ENDGROUPS	US	Issued	13/100,871	May 4, 2011	8,628,868	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING BLOCK COPOLYMERS FOR MAKING A MASTER MOLD FOR NANOMIPRI	US	Issued	13/036,346	Feb 28, 2011	8,815,105	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A PATTERNED MAGNETIC MEDIA WITH OFFSET DATA	US	Issued	13/909,906	Jun 24, 2013	9,251,835	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH MULTIPLE MAGNETIC LAYERS AND	US	Issued	13/156,272	Jun 8, 2011	9,040,180	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH MULTIPLE MAGN	US	Issued	13/188,384	Jul 21, 2011	8,320,232	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR CREATING BURST MAGNITUDE SERVO PATTERNS WITH UNIPOLAR BITS C	US	Issued	13/249,041	Sep 29, 2011	8,665,549	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH DYNAMIC HUMIDITY CONTROL SYSTEM TO MITIGAT	US	Issued	13/212,038	Aug 17, 2011	8,861,127	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH HUMIDITY CONTROL DEVICE INCORPORATING A DIR	US	Issued	13/211,826	Aug 17, 2011	8,867,164	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH MULTI-FUNCTIONAL COMPONENT FOR CONTROLLIN	US	Issued	13/211,748	Aug 17, 2011	8,885,289	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CPP-GMR SENSOR WITH CORROSION RESISTANT SPACER LAYER AND HIGHER SIGNAL/N	US	Issued	13/222,827	Aug 31, 2011	8,743,511	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR WI	US	Issued	13/077,815	Mar 31, 2011	8,218,270	Jul 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF SYNCHRONIZED WRITING ON BIT PATTERNED MEDIA WITH H	US	Issued	13/204,360	Aug 5, 2011	8,773,796	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUBSTRATE PATTERNING IN PERPENDICULAR STORAGE MEDIA	US	Issued	13/341,997	Dec 31, 2011	8,920,948	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING SURFACE OF HEAD FOR MINIMIZING CONTACT WITH DISK	US	Issued	13/080,358	Apr 5, 2011	8,553,363	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAGNONIC SPIN-TORQUE OSCILLATOR (STO) AND SENSOR UTILIZING SAME TO D	US	Issued	13/228,429	Sep 8, 2011	8,379,352	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-TERMINAL SPIN-TORQUE OSCILLATOR (STO)	US	Issued	13/149,419	May 31, 2011	8,320,080	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR (STO) WITH MAGNETICALLY DAMPED FREE LAYER	US	Issued	13/176,378	Jul 5, 2011	8,462,461	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR (STO) WITH ANTIPARALLEL-COUPLED FREE FERROMAGNETI	US	Issued	13/858,004	Apr 6, 2013	8,675,309	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH INLINE ADDRESS INDIRECTION METADATA STORAGE	US	Issued	13/200,632	Sep 27, 2011	8,892,817	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH SHINGLED DATA AND UNSHINGLED CACHE REGIONS	US	Issued	13/135,953	Jul 18, 2011	8,913,335	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN-TORQUE OSCILLATOR SENSING WITH ENHANCED DEMODULATOR	US	Issued	13/316,342	Dec 9, 2011	8,654,465	Feb 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN-TORQUE OSCILLATOR SENSING WITH ENHANCED DELAY CONTR	US	Issued	13/316,407	Dec 9, 2011	8,553,346	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING SPIN-TORQUE OSCILLATOR SENSING WITH ENHANCED INTEGRATED DE	US	Issued	13/316,419	Dec 9, 2011	8,570,677	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SMR STORAGE DEVICE WITH USER CONTROLS AND ACCESS TO STATUS INFORMATION A	US	Issued	13/200,458	Sep 22, 2011	8,510,504	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INDIRECTION MEMORY ARCHITECTURE WITH REDUCED MEMORY REQUIREMENTS FOR	US	Issued	13/200,418	Sep 22, 2011	8,578,122	Nov 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HELIUM FILLED SEALED HDD USING GAS FLOW DIVERSION FILTRATION TO IMPROVE PA	US	Issued	13/270,413	Oct 11, 2011	8,638,524	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED DETERMINISTIC MEMORY ALLOCATION FOR INDIRECTIO	US	Issued	13/207,740	Aug 11, 2011	8,788,749	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED EPO PROTECTION FOR INDIRECTION DATA	US	Issued	13/207,852	Aug 11, 2011	8,719,632	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED UPDATES FOR INDIRECTION TABLES	US	Issued	13/207,935	Aug 11, 2011	8,631,197	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED-WRITING THERMAL ASSISTANCE RECORDING (TAR) DISK DRIVE WITH AVOID	US	Issued	13/192,437	Jul 27, 2011	8,385,162	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE-SENSE THERMO-RESISTIVE SENSOR FOR CONTACT DETECTION OF READ-WRI	US	Issued	13/250,204	Sep 30, 2011	8,854,764	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC BIAS STRUCTURE FOR MAGNETORESISTIVE SENSOR HAVING A SCISSOR STR	US	Issued	13/251,100	Sep 30, 2011	8,907,666	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE SENSOR IN A THERMALLY ASSISTED MAGNETIC RECORDING HEAD	US	Issued	13/285,769	Oct 31, 2011	8,451,696	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TAR TEMPERATURE SENSOR HAVING FASTER RESPONSE TIME	US	Issued	13/725,140	Dec 21, 2012	8,705,323	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SILVER ALLOY ELECTRICAL LAPPING GUIDES (ELGS) FOR FABRICATION OF DISK DRIVE SL	US	Issued	13/238,838	Sep 21, 2011	8,739,391	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	USE OF MAGNETIC MATERIAL FOR RIE STOP LAYER DURING DAMASCENE MAIN POLE F	US	Issued	13/247,883	Sep 28, 2011	8,508,886	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC READ SENSOR WITH NARROW TRACK W	US	Issued	13/275,728	Oct 18, 2011	8,617,408	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH LADDER NETWORK COMP	US	Issued	13/306,552	Nov 29, 2011	8,824,077	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED RECORDING SYSTEMS USING MULTIPLE PASS WRITE, SINGLE PASS READ AR	US	Issued	13/251,031	Sep 30, 2011	8,786,969	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC RECORDING DISK FOR MULTI-TRACK RECORDING WITH COMPE	US	Issued	13/308,189	Nov 30, 2011	8,593,751	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A PATTERNED PERPENDICULAR MAGNETIC RECORDING DISK HA	US	Issued	13/248,086	Sep 29, 2011	8,399,051	Mar 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIUM PATTERNING METHOD AND ASSOCIATED APPARATUS	US	Issued	13/250,885	Sep 30, 2011	8,871,528	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED FIELD SELF-TEST FOR SHINGLED MAGNETIC RECORDING DRIVES	US	Issued	13/312,979	Dec 6, 2011	8,599,507	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH MULTIPLEXED READ SIGNAL AND FLY-HEIGHT SIGNAL FOR FLY-HEIGH	US	Issued	13/331,688	Dec 20, 2011	8,724,249	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL CONNECTION FOR A LASER DIODE IN A TAR HEAD	US	Issued	13/308,348	Nov 30, 2011	8,411,535	Apr 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH WRITE CLOCK FREQUENCY COMPENSATION FOR EXTERNAL VIBRATIO	US	Issued	13/373,970	Dec 5, 2011	8,908,316	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING (SMR) DISK DRIVE WITH VERIFICATION OF WRITTEN	US	Issued	13/316,629	Dec 12, 2011	8,665,545	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA DISK ANTICORROSION OVERCOAT WITH TITANIUM AND SILICON BA	US	Issued	13/271,712	Oct 12, 2011	8,687,323	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR ELECTRICALLY CONNECTING AN ENERGY SOURCE TO A HEAD OF A DISK D	US	Issued	13/308,246	Nov 30, 2011	8,631,561	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM, METHOD AND APPARATUS FOR SELESS ELECTROPLATED STRUCTURE ON A SE	US	Issued	13/328,218	Dec 16, 2011	9,236,260	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFLUORINATED POLYETHERS (PFPE) AS MAGNETIC LUBRICANTS	US	Issued	13/328,869	Dec 16, 2011	9,045,711	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH CURRENT CAPABLE ACCESS DEVICE FOR THREE DIMENSIONAL SOLID-STATE MEM	US	Issued	13/358,944	Jan 26, 2012	8,767,431	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD DESIGNED FOR ADJUSTING RELATIVE WRITE PHASE BETWEEN SUBTRACKS	US	Issued	13/314,029	Dec 7, 2011	8,848,314	Sep 30, 2014

WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD DESIGNED FOR ADJUSTING RELATIVE WRITE PHASE BETWEEN SUBTRACKS	US	Issued	14/480,539	Sep 8, 2014	9,472,211	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	BALANCED EMBEDDED CONTACT SENSOR WITH LOW NOISE ARCHITECTURE	US	Issued	13/333,518	Dec 21, 2011	8,830,614	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING COFEBTA IN PINNED AND FREE LAYER STRUCTURES	US	Issued	13/275,208	Oct 17, 2011	8,817,426	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUBSTRATE NITROGEN PLASMA TREATMENT FOR SOFTER COFE MAIN POLE WRITER FO	US	Issued	13/411,424	Mar 2, 2012	8,760,804	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTANCE (TMR) READ SENSOR WITH A LONG DIFFUSION PA	US	Issued	13/335,642	Dec 22, 2011	8,947,835	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FABRICATING A MASK STRUCTURE FOR PATTERNING A WORKPIECE BY ION	US	Issued	13/415,659	Mar 8, 2012	8,906,706	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	UNCOUPLED PIEZOELECTRIC MILLI-ACTUATOR ASSEMBLY	US	Issued	13/370,947	Feb 10, 2012	8,456,780	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DATA RECORDING SYSTEM WITH IMPROVED SERVO CAPABILITY FOR BIT PA	US	Issued	13/333,972	Dec 21, 2011	8,937,783	Jan 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR COMPENSATING VIBRATION BY ADJUSTING TRACK PITCH	US	Issued	13/306,736	Nov 29, 2011	8,724,248	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED FRAGMENTED STREAM HANDLING IN A SHINGLED DISK DR	US	Issued	13/306,266	Nov 29, 2011	8,654,472	Feb 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SIGNAL-EXTRACTION LASER-PULSE SYSTEM ARCHITECTURE FOR THERMALLY-ASSISTED M	US	Issued	13/337,046	Dec 23, 2011	8,310,902	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE SENSOR WITH M	US	Issued	13/415,813	Mar 8, 2012	8,611,053	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED MAGNETIC STORAGE MEDIUM	US	Issued	13/332,206	Dec 20, 2011	9,142,239	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD AND SYSTEM HAVING OPTICAL WAVEGUIDE CORE AND/O	US	Issued	13/311,397	Dec 5, 2011	8,760,978	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PREHEAT FEATURE FOR THERMALLY ASSISTED RECORDING	US	Issued	13/340,147	Dec 29, 2011	8,553,506	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIFORMITY DURING PLANARIZATION OF A DISK	US	Issued	13/414,568	Mar 7, 2012	8,926,400	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH ANTI-PARALLEL-COUPLED L	US	Issued	13/408,213	Feb 29, 2012	8,320,078	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	EXCITATION OF AIRBEARING OSCILLATION WITH TAR NEARFIELD DEVICE FOR TOUCH	US	Issued	13/474,593	May 17, 2012	8,797,671	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ENABLED EXCHANGE COUPLED MEDIA FOR MAGNETIC DATA RECORDING	US	Issued	13/417,032	Mar 9, 2012	8,630,060	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR STORING DATA IN A STUCK AND UNSTABLE MEMORY CELL	US	Issued	13/649,007	Oct 10, 2012	8,996,955	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLE-WRITTEN MAGNETIC RECORDING (SMR) DEVICE WITH HYBRID E-REGION	US	Issued	13/411,505	Mar 2, 2012	8,687,303	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLE-WRITTEN MAGNETIC RECORDING (SMR) DEVICE WITH HYBRID E-REGION	US	Issued	13/411,503	Mar 2, 2012	8,681,443	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING DISK DRIVE WITH MINIMIZATION OF THE EFFECT OF	US	Issued	13/423,177	Mar 17, 2012	8,537,481	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED STORAGE MEDIUM	US	Issued	13/435,849	Mar 30, 2012	8,625,236	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED DATA WRITE FOR MULTI-LEVEL CELL (MLC) MEMORY USING	US	Issued	13/361,905	Jan 30, 2012	8,699,266	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED DATA READ FOR MULTI-LEVEL CELL (MLC) MEMORY USING	US	Issued	13/361,918	Jan 30, 2012	9,208,871	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED DATA PARTIAL ERASE FOR MULTI-LEVEL CELL (MLC) MEMO	US	Issued	13/361,925	Jan 30, 2012	8,792,272	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING LARGE BLOCK RANDOM WRITE HOT SPARE SSD FOR SMR RAID	US	Issued	13/410,089	Mar 1, 2012	8,909,859	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING DISK DRIVE WITH INTER-BAND DISK CACHE AND MIN	US	Issued	13/423,178	Mar 17, 2012	8,793,431	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-SITU CONTACT POTENTIAL MEASUREMENT IN HARD DISK DRIVES	US	Issued	13/495,513	Jun 13, 2012	8,630,057	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR IMPROVING A PATTERNED PERPENDICULAR MAGNETIC RECORDING DISK	US	Issued	13/449,279	Apr 17, 2012	9,147,423	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIATED LIFTOFF PROCESS FOR ULTRA-SHALLOW MASK DEFINED NARROW TR	US	Issued	13/458,374	Apr 27, 2012	8,984,741	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	WRAP-AROUND ANTENNA DESIGN FOR IMPROVED PERFORMANCE IN THERMALLY-ASS	US	Issued	13/490,283	Jun 6, 2012	8,498,182	Jul 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TAR WITH WRITE SYNCHRONIZED LASER MODULATION	US	Issued	13/490,318	Jun 6, 2012	8,570,842	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PLASMA POLISH FOR MAGNETIC RECORDING MEDIA	US	Issued	13/472,854	May 16, 2012	9,159,353	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED DATA MIGRATION ACROSS A PLURALITY OF DEVICES	US	Issued	13/448,192	Apr 16, 2012	8,868,677	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTION OF MASS IN VERTICAL AXIS FOR HGA FLEXURE MODE CONTROL	US	Issued	13/546,774	Jul 11, 2012	8,917,482	Dec 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ICC-NQ COMMAND SCHEDULING FOR SHINGLE-WRITTEN MAGNETIC RECORDING (SMR)	US	Issued	13/537,293	Jun 29, 2012	8,874,875	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING REMAPPING COMMAND WITH INDIRECT UPDATE FOR INDIRECTED	US	Issued	13/442,419	Apr 9, 2012	8,862,856	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FAILURE RESISTANT MULTI-LUN HARD DISK DRIVE	US	Issued	13/536,103	Jun 28, 2012	8,736,993	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC COMB BORE IN A ACTUATOR DESIGN	US	Issued	13/485,350	May 31, 2012	8,830,634	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING CHANNEL SIGNAL PROCESSING ASSIST WITH ECS CONTACT DETECTION	US	Issued	13/475,787	May 18, 2012	8,736,996	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR STORING DATA IN STUCK MEMORY CELLS	US	Issued	13/649,072	Oct 10, 2012	8,887,025	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PLANARIZING A PERPENDICULAR MAGNETIC RECORDING DISK FOR THER	US	Issued	13/439,929	Apr 5, 2012	8,721,903	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF COMPENSATING FOR REPEATABLE RUNOUT ERROR	US	Issued	13/529,309	Jun 21, 2012	9,001,450	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING COMBINED PHASE AND AMPLITUDE MAGNETIC DEFECT DETECTION ON	US	Issued	13/495,903	Jun 13, 2012	8,736,997	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING DISK DRIVE WITH COMPENSATION FOR THE EFFECT	US	Issued	13/487,310	Jun 4, 2012	8,593,748	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO REDUCE WRITTEN-IN ERRORS IN STORAGE MEDIA	US	Issued	13/554,281	Jul 20, 2012	8,922,922	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE SYNCHRONIZATION IN BIT PATTERNED MEDIA USING AUXILIARY READ HEAD	US	Issued	13/485,879	May 31, 2012	8,773,798	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO CONTROL IN A PATTERNED-MEDIA MAGNETIC RECORDING DISK DRIVE USING A	US	Issued	13/492,880	Jun 10, 2012	8,625,229	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING TRACK FOLLOWING USING DATA CHARACTERISTICS FOR POSITIONAL IN	US	Issued	13/566,772	Aug 3, 2012	8,902,534	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR SEPARATELY PROCESSING REGIONS ON A PATTERNED MEDIUM	US	Issued	13/615,131	Sep 13, 2012	9,034,197	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING AND DECODING DATA TO ACCOMMODATE MEMORY CELLS HAVING STUCK	US	Issued	13/649,098	Oct 10, 2012	9,274,884	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH METHOD FOR DATA PRESERVATION DURING	US	Issued	13/528,794	Jun 20, 2012	8,755,142	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SCALABLE REPAIR BLOCK ERROR CORRECTION FOR SEQUENTIAL MULTIPLE DATA BLOC	US	Issued	13/645,309	Oct 4, 2012	8,856,618	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR LOW POWER LOW LATENCY HIGH CAPACITY STORAGE	US	Issued	15/716,467	Sep 26, 2017	10,860,477	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND STRUCTURE ENABLING IMPROVED NATIVE COMMAND QUEUEING IN A	US	Issued	13/561,156	Jul 30, 2012	8,838,841	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EMERGENCY POWER OFF (EPO) ISLAND FOR SAVING CRITICAL DATA TO NON-VOLATILE	US	Issued	13/708,901	Dec 7, 2012	8,947,813	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) DISK WITH LOW THERMAL CONDUCTIVITY UN	US	Issued	13/535,499	Jun 28, 2012	8,509,039	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TITANIUM-SILICON PROTECTIVE FILM COMPOSITION AND APPARATUS	US	Issued	13/598,102	Aug 29, 2012	9,045,348	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST READ COMMAND RETURN REORDERING BASED ON TIME ESTIMATION OF FLASH	US	Issued	14/680,657	Apr 7, 2015	9,354,814	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST READ COMMAND RETURN REORDERING BASED ON TIME ESTIMATION OF FLASH	US	Issued	15/154,418	May 13, 2016	9,652,156	May 16, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING INTEGRATED SPIN-TORQUE OSCILLATOR AND INTERFACE BIAS CONTR	US	Issued	13/646,614	Oct 5, 2012	8,570,684	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) HEAD WITH WAVEGUIDE HAVING TAPERED R	US	Issued	13/571,425	Aug 10, 2012	8,619,514	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) HEAD WITH REFLECTION LAYER FOR NEAR-FI	US	Issued	13/571,432	Aug 10, 2012	8,619,515	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY-ASSISTED RECORDING (TAR) HEAD WITH CONDUCTIVE LAYER BETWEEN TH	US	Issued	13/571,438	Aug 10, 2012	8,619,516	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH METHOD FOR RECOVERY OF DATA FROM FAI	US	Issued	13/680,087	Nov 18, 2012	8,786,972	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT ROTATIONAL PARAMETER CONTROL FOR HARD DISK DRIVE	US	Issued	13/726,207	Dec 23, 2012	8,724,244	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH SERVO SYSTEM WITH TIMING ADJUSTMENTS TO MASTER TIME FOR	US	Issued	13/726,168	Dec 23, 2012	8,749,909	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND STRUCTURE FOR IMPROVING PERFORMANCE AND STORAGE DENSITY IN	US	Issued	13/593,991	Aug 24, 2012	8,953,266	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND STRUCTURE FOR IMPROVING PERFORMANCE AND STORAGE DENSITY IN	US	Issued	14/589,573	Jan 5, 2015	9,324,368	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMOELECTRIC VOLTAGE-BASED DIFFERENTIAL CONTACT SENSOR	US	Issued	13/691,492	Nov 30, 2012	8,730,607	May 20, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WAFER GROUNDING DESIGN FOR SINGLE PAD LAPPING	US	Issued	13/690,685	Nov 30, 2012	8,956,200	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CORRECTING CURRENT CROWDING IN A ROW BAR AND VIAS FOR SINGLE PAD BONDIN	US	Issued	13/690,694	Nov 30, 2012	8,956,201	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTANCE (TMR) READ SENSOR WITH AN INTEGRATED AUXILI	US	Issued	13/754,685	Nov 30, 2013	8,946,707	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION WITH BARRIER COOLING FOR MAGNETIC READ HEAD	US	Issued	13/689,573	Nov 29, 2012	8,619,394	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR ENCODING AND DECODING USING A COMBINATORIAL NUMBER SYST	US	Issued	13/712,929	Dec 12, 2012	8,943,388	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED ADJACENT TRACK ERRORS IN BIT-PATTERNED MEDIA	US	Issued	13/760,886	Feb 6, 2013	9,190,093	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLED MAGNETIC RECORDING DISK DRIVE WITH MULTIPLE DATA ZONES CONTAINI	US	Issued	13/680,089	Nov 18, 2012	8,699,162	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A FILM OF UNIFORMLY ARRANGED CORE-SHELL NANOPARTICL	US	Issued	13/680,091	Nov 18, 2012	8,926,851	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC FLY HEIGHT CONTROL THAT IS INSENSITIVE TO OFF-TRACK MOTION	US	Issued	13/681,218	Nov 19, 2012	8,908,312	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR MAGNETIC READ HEAD WITH WRAP-AROUND MAGNETIC SHIELD	US	Issued	13/691,525	Nov 30, 2012	8,749,926	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR WITH EXTENDED PINNED LAYER AND PARTIAL WRAP AROUND SHIE	US	Issued	13/720,942	Dec 19, 2012	8,941,954	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR W	US	Issued	13/649,245	Oct 11, 2012	8,576,519	Nov 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	FILL-IN CONTACT LAYER FOR SLIDER AIR BEARING SURFACE PROTECTIVE COATING	US	Issued	13/691,551	Nov 30, 2012	8,797,688	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR WI	US	Issued	13/664,277	Oct 30, 2012	8,576,518	Nov 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR STORING BITS IN MEMORY CELLS HAVING STUCK-AT FAULTS	US	Issued	13/712,956	Dec 12, 2012	8,812,934	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EXCHANGE ENHANCED CAP MANUFACTURED WITH ARGON AND OXYGEN IMPLANTATI	US	Issued	13/720,969	Dec 19, 2012	9,318,140	Apr 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING AN EXTENDED PINNED LAYER AND SHAPE ENHANCED BIAS	US	Issued	13/720,959	Dec 19, 2012	8,842,395	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SALVAGING EVENT TRACE INFORMATION IN POWER LOSS INTERRUPTION SCENARIOS	US	Issued	13/719,209	Dec 18, 2012	9,690,642	Jun 27, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA TOPOGRAPHY DRIVEN FLYING HEIGHT MODULATION SENSING USING EMBEDDED	US	Issued	13/722,935	Dec 20, 2012	8,824,091	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO SYSTEMS WITH AUGMENTED SERVO BURSTS	US	Issued	13/896,159	May 16, 2013	8,760,794	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH A SUBSET OF SECTORS WITH REDUCED WRITE-TO-READ GAP	US	Issued	13/718,278	Dec 18, 2012	8,711,504	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO SYSTEMS WITH AUGMENTED SERVO BURSTS	US	Issued	13/896,209	May 16, 2013	8,767,341	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHAPE ENHANCED PIN READ HEAD MAGNETIC TRANSDUCER WITH STRIPE HEIGHT DEFI	US	Issued	13/724,662	Dec 21, 2012	8,836,059	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A RESIDUAL SHIELD SEED LAYER FOR REDUCING OVE	US	Issued	13/720,971	Dec 19, 2012	8,780,499	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPERED LEADING AND SIDE SHIELDS FOR USE IN A PERPENDICULAR MAGNETIC REC	US	Issued	13/771,300	Feb 20, 2013	8,730,617	May 20, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETOR	US	Issued	13/765,290	Feb 12, 2013	8,852,963	Oct 7, 2014

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING DUAL PARALLEL CAPACITORS FOR INTEGRATED TRANSDUCER	US	Issued	13/689,569	Nov 29, 2012	8,531,800	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ SENSOR USING SPIN HALL EFFECT	US	Issued	13/764,600	Feb 11, 2013	9,099,119	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR UTILIZING RASHBA EFFECT IN A TWO-DIMENSIONAL CONDUCTOR	US	Issued	13/764,619	Feb 11, 2013	9,429,633	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING AN EXTENDED PINNED LAYER WITH STITCHED ANTIFERRO	US	Issued	14/011,687	Aug 27, 2013	9,202,482	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REAL-TIME ELECTROSTATIC DISCHARGE (ESD) DETECTION	US	Issued	13/915,581	Jun 11, 2013	9,476,926	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC WRITE POLE WITH A CONSISTENT BEVEL	US	Issued	14/139,779	Dec 23, 2013	8,988,824	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR (STO) READER WITH SOFT MAGNETIC SIDE SHIELDS	US	Issued	13/714,322	Dec 13, 2012	8,902,544	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR WITH	US	Issued	13/688,051	Nov 28, 2012	8,670,218	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MASS BALANCED FLEXURE GIMBAL FOR HEAD GIMBAL ASSEMBLY SWAY MODE CONTR	US	Issued	13/720,903	Dec 19, 2012	8,797,690	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR CONTROLLING WRITING IN A THERMALLY-ASSISTED RECORDING (TAR) DISK	US	Issued	13/777,778	Feb 26, 2013	8,743,667	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPOSITION AND METHOD FOR PLANARIZED BIT-PATTERNED MAGNETIC MEDIA	US	Issued	13/958,214	Aug 2, 2013	9,190,091	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A STACKED COIL ARCHITECTURE FOR HIGH DATA RATE	US	Issued	13/867,019	Apr 19, 2013	9,183,853	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PRODUCING A SMOOTH RU SIDE GAP OF A DAMASCENE WRITER POLE	US	Issued	13/830,144	Mar 14, 2013	9,548,069	Jan 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK WITH TEMPLATE LAYER FORMED OF NAN	US	Issued	13/772,110	Feb 20, 2013	9,236,076	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A PERPENDICULAR MAGNETIC RECORDING DISK WITH TEMPLA	US	Issued	13/772,145	Feb 20, 2013	8,821,736	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH DISTRIBUTED CODEWORD BLOCKS	US	Issued	13/875,165	May 1, 2013	9,059,737	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING HEAD HAVING WIDER HEAT SINK AND POLE	US	Issued	13/903,899	May 28, 2013	9,135,942	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETOR	US	Issued	13/853,411	Mar 29, 2013	9,236,069	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE SENSOR WITH RE	US	Issued	13/895,411	May 16, 2013	8,988,833	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A COIL ADJACENT TO THE MAIN POLE	US	Issued	13/866,852	Apr 19, 2013	8,896,966	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR HA	US	Issued	13/771,486	Feb 20, 2013	8,638,530	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ANNEALING TREATMENT FOR ION-IMPLANTED PATTERNED MEDIA	US	Issued	13/832,704	Mar 15, 2013	9,384,773	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPER SHALLOW LAMINATED HARD MASK STENCIL FOR MAGNETIC READ SENSOR FABR	US	Issued	13/907,617	May 31, 2013	8,889,019	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Method for forming a magnetic head for perpendicular magnetic recording	US	Issued	13/886,088	Jul 2, 2013	9,449,635	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF FORMING SPACER STRUCTURES USING ULTRA NARROW MA	US	Issued	13/954,791	May 30, 2013	9,099,126	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DEFECT REDUCTION IN MAGNETIC WRITE HEAD FABRICATION	US	Issued	13/756,888	Feb 1, 2013	8,828,248	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE SHEET DIFFERENTIAL-POLED PIEZOELECTRIC MICROACTUATOR FOR A HARD DIS	US	Issued	13/858,716	Apr 8, 2013	8,810,971	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR SENSOR WITH BACK EDGE BIAS STRUCTURE AND NOVEL DIELECTRIC LAYER	US	Issued	14/094,690	Dec 2, 2013	9,099,122	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPRINT TEMPLATE WITH OPTICALLY DETECTABLE ALIGNMENT MARKS AND METHOD	US	Issued	13/849,113	Mar 22, 2013	9,377,683	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STITCHED POLE HAVING A TAPERED TIP	US	Issued	13/950,180	Jul 24, 2013	8,947,827	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NOBLE METAL SURROUNDED MAGNETIC LIP AND HEAT SINK FOR HEAT ASSISTED MAG	US	Issued	13/906,777	May 31, 2013	8,976,489	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NOBLE METAL SURROUNDED MAGNETIC LIP AND HEAT SINK FOR HEAT ASSISTED MAG	US	Issued	14/635,817	Mar 2, 2015	9,230,572	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA ETCH PROCESS	US	Issued	13/891,792	May 10, 2013	9,361,926	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A CHEMICAL CONTRAST PATTERN USING BLOCK COPOLYMERS A	US	Issued	13/902,795	May 25, 2013	8,900,467	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERN TONE REVERSAL	US	Issued	13/835,395	Mar 25, 2013	9,105,295	Aug 11, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH DIFFUSION BARRIER BETW	US	Issued	13/868,897	Apr 23, 2013	9,047,908	Jun 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NARROW READ-GAP HEAD WITH RECESSED AFM	US	Issued	13/923,624	Jun 21, 2013	9,030,785	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAKING A TUNNELING MAGNETORESISTIVE (TMR) SENSOR	US	Issued	13/869,005	Apr 23, 2013	8,914,970	Dec 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT SINK FOR A SPIN TORQUE OSCILLATOR (STO) IN MICROWAVE ASSISTED MAGNETI	US	Issued	14/060,504	Oct 22, 2013	8,995,088	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CAPPING MATERIALS FOR MAGNETIC READ HEAD SENSOR	US	Issued	14/012,595	Aug 28, 2013	8,958,180	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR WITH RECESSED AFM SHAPE ENHANCED PINNING AND SOFT MAGN	US	Issued	14/011,694	Aug 27, 2013	9,042,062	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK WITH PATTERNED NONDATA ISLANDS WITH DIFFERENT SI	US	Issued	13/850,582	Mar 26, 2013	8,737,002	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LASER POWER SENSOR WITH DUAL TEMPERATURE SENSOR	US	Issued	13/907,157	May 31, 2013	8,842,383	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH MAIN POLE FORMED ON A	US	Issued	13/905,291	May 30, 2013	8,861,137	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	RECESSING A NEAR FIELD TRANSDUCER IN A HEAT-ASSISTED MAGNETIC RECORDING H	US	Issued	13/906,106	May 30, 2013	8,810,947	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR MAGNETIC READ SENSOR WITH SHAPE ENHANCED SOFT MAGNETIC SIDE SHIE	US	Issued	14/207,323	Mar 12, 2014	9,076,468	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING SPIN TORQUE OSCILLATOR THAT IS SELF ALIGNED WIT	US	Issued	14/045,662	Oct 3, 2013	9,047,894	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Current-Perpendicular-To-The-Plane (CPP) Magnetoresistive (MR) Sensor With Side Sh	US	Issued	13/922,972	Jun 20, 2013	8,780,506	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SHIELD WITH UNIFORM MAGNETIC PROPERTIES FOR A PERPENDICULAR MAGNETIC RE	US	Issued	13/972,709	Aug 21, 2013	9,412,398	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE SENSOR WITH M	US	Issued	13/933,321	Jul 2, 2013	9,076,467	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CARTRIDGE DOCK SYSTEM	US	Issued	14/244,891	Apr 3, 2014	9,721,618	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	GIANT MAGNETO RESISTIVE SENSOR AND METHOD FOR MAKING SAME	US	Issued	14/045,349	Oct 3, 2013	9,177,576	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DC-Offset Adjustment for Balanced Embedded Contact Sensor	US	Issued	14/015,716	Aug 30, 2013	8,804,263	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED DATA RECOVERY FROM DATA STORAGE DEVICES	US	Issued	14/028,002	Sep 16, 2013	9,323,630	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPLEMENTING ENHANCED BUFFER MANAGEMENT FOR DATA STORAGE DEVICES	US	Issued	13/957,411	Aug 1, 2013	9,274,865	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	System And Method For Controlling A Storage Device	US	Issued	13/958,949	Aug 5, 2013	9,542,104	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TRACK BAND SQUEEZED-SECTOR ERROR CORRECTION IN MAGNETIC DATA STORAGE D	US	Issued	14/072,923	Nov 6, 2013	9,286,159	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION WITH ON-DEMAND PARITY SECTORS IN MAGNETIC DATA STORAG	US	Issued	14/199,807	Mar 6, 2014	9,229,813	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	E ANTENNA NEAR FIELD TRANSDUCER WITH THERMAL SHUNT TO RETURN POLE	US	Issued	13/954,754	Jul 30, 2013	9,042,209	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SCISSOR MAGNETIC READ SENSOR WITH NOVEL MULTI-LAYER BIAS STRUCTURE FOR UN	US	Issued	14/095,932	Dec 3, 2013	9,153,258	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR MAGNETIC RECORDING HEAD HAVING A WAVEGUIDE	US	Issued	14/074,408	Nov 7, 2013	9,311,935	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER EMBEDDED PHOTODETECTOR FOR OPTICAL POWER MONITORING IN HEAT ASSI	US	Issued	13/958,372	Aug 2, 2013	8,854,930	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING EPITAXIAL TRANSFER TO INTEGRATE HAMR PHOTONIC INTEGRATED CI	US	Issued	13/954,620	Jul 30, 2013	9,105,286	Aug 11, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING EPITAXIAL TRANSFER TO INTEGRATE HAMR PHOTONIC INTEGRATED CI	US	Issued	14/804,004	Jul 20, 2015	9,613,647	Apr 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLING MAGNETIC LAYER ANISOTROPY FIELD BY OBLIQUE ANGLE STATIC DEPO	US	Issued	14/097,192	Dec 4, 2013	9,349,391	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL THERMAL SENSOR FOR HAMR WAVEGUIDE POWER MONITOR AND INTEGRATION	US	Issued	14/057,044	Oct 18, 2013	9,047,926	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING NARROW TRACKWIDTH AND SMALL READ GAP	US	Issued	14/170,487	Jan 31, 2014	9,047,893	Jun 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	RECESSED ANTIFERROMAGNETIC DESIGN WITH ANTIPARALLEL PINNED STITCH LAYERS	US	Issued	14/139,762	Dec 23, 2013	9,318,133	Apr 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH WRITE DRIVER TO WRITE HEAD TRANSMISSI	US	Issued	14/082,340	Nov 18, 2013	9,036,305	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD HAVING A RECESSED HIGH MOMENT PORTION OF THE WRAP	US	Issued	13/950,011	Jul 24, 2013	9,036,299	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSDUCER RESISTOR SHUNT STRUCTURE FOR LOW-COST PROBING	US	Issued	14/096,725	Dec 4, 2013	9,129,660	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) DISK DRIVE WITH FLY HEIGHT SENSING	US	Issued	14/011,430	Aug 27, 2013	8,842,506	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICALLY AND HORIZONTALLY WEAKLY COUPLED PERPENDICULAR SMALL GRAIN ME	US	Issued	14/070,408	Nov 1, 2013	9,552,837	Jan 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SEGREGATED HEAT ASSISTED MAGNETIC RECORDING (HAMR) MEDIA	US	Issued	14/084,535	Nov 19, 2013	9,324,353	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO CONVERT AND CALIBRATE THE EMBEDDED CONTACT SENSOR SIGNAL TO	US	Issued	14/058,686	Oct 21, 2013	8,976,480	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR WITH DOPED FERROMAGNETIC CAP AND/OR UNDERLAYER	US	Issued	14/078,410	Nov 12, 2013	9,099,115	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Write set boundary management for heterogeneous storage controllers in support of	US	Issued	11/596,153	May 11, 2009	8,296,532	Oct 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Data vaulting in emergency shutdown	US	Issued	12/192,228	Aug 15, 2008	8,055,846	Nov 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	Data vaulting in emergency shutdown	US	Issued	13/241,115	Sep 22, 2011	8,166,247	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Self-contained placement of data objects in a data storage system	US	Issued	13/158,421	Jun 12, 2011	8,706,782	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MRAM array and access method thereof	US	Issued	10/134,143	Apr 26, 2002	7,474,557	Jan 6, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	CAR DISK DRIVE UNIT	US	Issued	10/352,513	Jan 28, 2003	6,934,118	Aug 23, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE APPARATUS, ROTATION CONTROL APPARATUS, AND ROTATION CONTR	US	Issued	10/405,306	Apr 1, 2003	7,006,321	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic memory and method for optimizing write current in a magnetic memory	US	Issued	10/680,051	Oct 7, 2003	6,992,924	Jan 31, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE APPARATUS AND METHOD FOR MANAGING BUFFER MEMORY	US	Issued	10/713,289	Nov 16, 2003	7,085,087	Aug 1, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE	US	Issued	11/000,486	Nov 30, 2004	7,414,908	Aug 19, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW-VOLTAGE, LOW-POWER-CONSUMPTION, AND HIGH-SPEED DIFFERENTIAL CURREN	US	Issued	11/566,607	Dec 4, 2006	7,477,076	Jan 13, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	Integrated Network-Attachable Controller that Interconnects a Solid-State Drive with a	US	Issued	15/530,346	Dec 28, 2016	10,860,511	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Component-Efficient Cyclic-Redundancy-Check-Code-Computation Circuit	US	Issued	15/954,101	Apr 16, 2018	10,644,723	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO FABRICATE AN ESD RESISTANT TUNNELING MAGNETORESISTIVE READ TR	US	Issued	11/768,883	Jun 26, 2007	7,389,577	Jun 24, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	SETTING AN OPERATING BIAS CURRENT FOR A MAGNETORESISTIVE HEAD BY COMPUTI	US	Issued	11/761,266	Jun 11, 2007	7,872,824	Jan 18, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO DETECT HELIUM LEAKAGE FROM A DISK DRIVE	US	Issued	11/832,491	Aug 1, 2007	7,434,987	Oct 14, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC TRANSDUCER HAVING AN IMPRO	US	Issued	11/840,113	Aug 16, 2007	9,190,080	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PMR HEAD WITH AN ANGLED STITCH LAYER	US	Issued	11/935,508	Nov 6, 2007	8,537,494	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY WITH FLEXURE TAIL RETENTION FEATURES	US	Issued	11/948,840	Nov 30, 2007	8,064,168	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY WITH FLEXURE TAIL HAVING BENT ALIGNMENT TAB FEATURE	US	Issued	11/870,525	Oct 11, 2007	7,907,369	Mar 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE REFRESHING ZONES BASED ON SERPENTINE ACCESS OF DISK SURFACES	US	Issued	11/768,288	Jun 26, 2007	7,872,822	Jan 18, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A HIGH PERFORMANCE ACCESS MODE AND A LOWER PERFORMAN	US	Issued	11/767,315	Jun 22, 2007	7,599,139	Oct 6, 2009

WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CONTROLLING A VOICE COIL MOTOR DURING AN EMERGENCY UNLOAD	US	Issued	11/804,819	May 21, 2007	7,548,392	Jun 16, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING A RECESSED MAGNETIC BASE	US	Issued	11/942,113	Nov 19, 2007	8,077,434	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	OSCILLATOR COMPRISING FOLDOVER DETECTION	US	Issued	11/855,848	Sep 14, 2007	7,733,189	Jun 8, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-CELL DISK DRIVE TEST SYSTEM PROVIDING A POWER RECOVERY MODE	US	Issued	11/960,658	Dec 19, 2007	8,078,421	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING A DEFECT THRESHOLD WHEN SCANNING FOR DEFECTIVE SECTORS	US	Issued	11/933,662	Nov 1, 2007	9,042,045	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING HEAD	US	Issued	11/960,596	Dec 19, 2007	8,793,866	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH A CONDUCTIVE SHIELD HAVING FREE AND FORCED	US	Issued	12/201,460	Aug 29, 2008	8,164,849	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH SHEET METAL PROJECTIONS AND ELASTOMERIC	US	Issued	11/953,782	Dec 10, 2007	7,701,705	Apr 20, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD WITH AN AIR BEARING SURFACE HAVING LEFT AND RIGHT LEADING PRESSURIZING	US	Issued	11/948,789	Nov 30, 2007	7,916,426	Mar 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE HAVING A CONDUCTIVE SHIELD WITH A PERIPHERAL	US	Issued	12/036,106	Feb 22, 2008	8,390,952	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETORESISTIVE STRUCTURE	US	Issued	12/035,036	Feb 21, 2008	8,545,999	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING WR	US	Issued	12/042,691	Mar 5, 2008	8,179,636	May 15, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING PULSE WIDTH MODULATION OF HEAD CONTROL SIGNAL	US	Issued	12/032,783	Feb 18, 2008	8,482,873	Jul 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DECODING BINARY SEQUENCE FROM PHASES OF SERVO BURSTS	US	Issued	12/057,278	Mar 27, 2008	7,916,415	Mar 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC LAPPING GUIDE IN A MAGNETIC RECORDING TRANSDUCER	US	Issued	13/419,313	Mar 13, 2012	9,153,260	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGED PEER-TO-PEER APPLICATIONS, SYSTEMS AND METHODS FOR DISTRIBUTED	US	Issued	10/988,280	Nov 13, 2004	9,191,443	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SWITCHING VOLTAGE REGULATOR EMPLOYING DYNAMIC VOLTAGE SCALING WITH HYS	US	Issued	12/139,231	Jun 13, 2008	8,085,020	Dec 27, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY INCLUDING A FLEXURE TAIL WITH STAGGERED ROWS OF APER	US	Issued	13/471,777	May 15, 2012	8,474,760	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING BOOT DISK SPACE TO EXPEDITE THE BOOT OPERATION FOR A H	US	Issued	12/030,042	Feb 12, 2008	8,082,433	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	USING DEVICE CONTROL FIELD TO IMPLEMENT NON-DISRUPTIVE NOTIFICATION OF AN	US	Issued	12/058,601	Mar 28, 2008	8,856,390	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A HEAD LOADING/UNLOADING RAMP THAT INCLUDES A TORSIONA	US	Issued	12/135,454	Jun 9, 2008	8,203,806	Jun 19, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPRINT EMBOSING ALIGNMENT SYSTEM	US	Issued	12/555,780	Sep 8, 2009	8,100,685	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DIE SET HAVING SEALED COMPLIANT MAMBER	US	Issued	10/886,898	Jul 7, 2004	7,320,584	Jan 22, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR POLISHING A WORKPIECE	US	Issued	10/777,424	Feb 12, 2004	7,004,827	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD HAVING REDUCED SHIELD NOTCHING	US	Issued	13/417,930	Mar 12, 2012	8,797,680	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING (PMR) TRANSDUC	US	Issued	12/057,611	Mar 28, 2008	8,166,632	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AT LEAST ONE MAGNETORESISTIVE DEVICE	US	Issued	12/060,724	Apr 1, 2008	8,316,527	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLER AND METHOD FOR CONTROLLING A BUFFERED DATA TRANSFER DEVICE	US	Issued	12/122,708	May 18, 2008	9,106,592	Aug 11, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SERIAL ATA DEVICE IMPLEMENTING INTRA-COMMAND PROCESSING BY DETECTING XRI	US	Issued	12/058,572	Mar 28, 2008	7,827,320	Nov 2, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD	US	Issued	13/372,316	Feb 13, 2012	8,310,785	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD	US	Issued	13/372,775	Feb 14, 2012	8,284,517	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING A SERVO ADDRESS MARK (SAM) IN A SERVO FIELD SYNC-UP OPERATION	US	Issued	12/146,040	Jun 25, 2008	8,159,768	Apr 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A MAGNETORESISTIVE JUNCTION AND SIDE OXIDE LAYERS	US	Issued	13/848,353	Mar 21, 2013	9,030,784	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN IMPROVED HARD BIAS STRUCTURE	US	Issued	12/140,211	Jun 16, 2008	8,270,126	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK TO MOTOR HUB SWAGE ATTACHMENT	US	Issued	13/667,961	Nov 2, 2012	9,196,295	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE BASE HAVING A RAISED THERMAL PEDESTAL	US	Issued	12/181,469	Jul 29, 2008	8,363,351	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE TOGGING VCM INDUCTOR COMPENSATION TO REDUCE ACOUSTIC NOISE	US	Issued	12/126,377	May 23, 2008	8,988,811	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR EXPOSING PHOTORESIST IN A MICROELECTRIC DEVICE	US	Issued	12/146,370	Jun 25, 2008	8,274,438	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH AN AIR-BEARING SURFACE INCLUDING FOUR PRESSURE GENERATING PO	US	Issued	12/201,916	Aug 29, 2008	9,081,400	Dec 20, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN IMPROVED SENSOR STACK FOR A RECORDI	US	Issued	12/236,833	Sep 24, 2008	8,755,152	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO FABRICATE A DAMPED SUSPENSION ASSEMBLY	US	Issued	12/190,377	Aug 12, 2008	8,142,671	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER INCLU	US	Issued	13/662,255	Oct 26, 2012	8,844,120	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER INCLU	US	Issued	12/147,364	Jun 26, 2008	8,320,076	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY WITH A FLEXIBLE PRINTED CIRCUIT HAVING A MOUTH CENTER	US	Issued	14/954,486	Nov 30, 2015	9,514,773	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY WITH A FLEXIBLE PRINTED CIRCUIT HAVING A MOUTH CENTER	US	Issued	12/195,288	Aug 20, 2008	9,324,346	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATED VISION BASED ROBOTIC SYSTEM	US	Issued	12/242,239	Sep 30, 2008	8,180,487	May 15, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HDA VACUUM CLEANING MACHINE FOR MANUFACTURING OF HDD	US	Issued	12/332,029	Dec 10, 2008	8,387,631	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH LEADING EDGE BLEND AND CONFORMAL STEP FEATURES	US	Issued	13/310,931	Dec 5, 2011	8,339,742	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING FLY HEIGHT BASED ON AIR DENSITY MEASURED FROM RATE OF	US	Issued	12/478,606	Jun 4, 2009	8,947,822	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A DISK DRIVE SUSPENSION	US	Issued	13/418,595	Mar 13, 2012	8,869,382	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED ACOUSTIC NOISE DURING SPIN-UP BY DRIVING A SPINDLE MOTOR OPEN LOC	US	Issued	12/146,678	Jun 26, 2008	8,054,022	Nov 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH STEPPED MOTOR HUB	US	Issued	12/243,788	Oct 1, 2008	8,416,522	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURING A DATA STORAGE DEVICE WITH A PARAMETER FILE INTERLOCKED WITH	US	Issued	12/236,278	Sep 23, 2008	9,009,358	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING STARTUP FAULT OF SDRAM VOLTAGE REGULATOR	US	Issued	12/144,062	Jun 23, 2008	9,063,714	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER HAVING A HYBRID M	US	Issued	13/528,007	Jun 20, 2012	8,339,738	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER HAVIN	US	Issued	12/196,131	Aug 21, 2008	8,228,633	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A MAGNETIC RECORDING TRANSDUCER HAVING SIDE	US	Issued	13/778,464	Feb 27, 2013	8,720,044	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCER HAVING SIDE SHIELDS	US	Issued	13/433,587	Mar 29, 2012	8,488,272	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC RECORDING TRANSDUCER HAVING SIDE SHIE	US	Issued	12/199,624	Aug 27, 2008	8,166,631	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCER HAVING SIDE SHIELDS BETWEEN THE COILS AND	US	Issued	13/597,091	Aug 28, 2012	8,576,517	Nov 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC RECORDING TRANSDUCER	US	Issued	12/198,657	Aug 26, 2008	8,276,258	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH GRAIN ISOLATION MAGNETIC	US	Issued	12/242,210	Sep 30, 2008	8,488,276	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING HEA	US	Issued	12/262,572	Oct 31, 2008	8,334,093	Dec 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE AND METHOD USING NATIVE COMMAND QUEUING TAGS TO IDENTIFY LOG	US	Issued	12/330,375	Dec 8, 2008	8,285,923	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE UPDATING ESTIMATE OF VOICE COIL RESISTANCE TO ACCOUNT FOR RESIST	US	Issued	12/241,814	Sep 30, 2008	8,876,522	Jan 25, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING STACKED AND STEPPED TRACES FOR IMPROVED TRANSMISSI	US	Issued	12/273,725	Nov 19, 2008	8,289,656	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MICRO-ACTUATOR ENABLING SINGLE DIRECTION MOTION OF A MAGNETIC DISK DRIV	US	Issued	12/335,199	Dec 15, 2008	8,643,980	Feb 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A POLE FOR A PERPENDICULAR MAGNETIC REC	US	Issued	12/336,758	Dec 17, 2008	8,196,285	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	A METHOD OF MAKING AN ENERGY-ASSISTED MAGNETIC RECORDING APPARATUS	US	Issued	13/568,931	Aug 7, 2012	8,495,813	Jul 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATION OF A VERTICAL CAVITY SURFACE EMITTING LASER (VCSEL) ON AN ENER	US	Issued	12/337,403	Dec 17, 2008	8,259,539	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETERMINING OPERATING FLY HEIGHT BY DETECTING HEAD DISK CONTACT	US	Issued	12/277,142	Nov 24, 2008	8,934,192	Jan 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO REPLACE GAS IN A DISK DRIVE	US	Issued	12/475,298	May 29, 2009	8,199,425	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER HAVIN	US	Issued	12/331,238	Dec 9, 2008	8,231,796	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	VIBRATION TEST APPARATUS WITH AN ACTUATOR COUPLED TO A REACTION MASS MO	US	Issued	12/484,679	Jun 15, 2009	8,100,017	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A HIGH MOMENT FILM	US	Issued	12/334,753	Dec 15, 2008	8,320,077	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ESTIMATING FLY HEIGHT USING A PLL TUNED BY A FLY HEIGHT CAPACITAN	US	Issued	12/356,701	Jan 21, 2009	7,729,079	Jun 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING HEA	US	Issued	13/779,529	Feb 27, 2013	8,830,628	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PRECISE METROLOGY WITH ADAPTIVE MILLING	US	Issued	12/424,323	Apr 15, 2009	8,222,599	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONED SERVO SYSTEM	US	Issued	12/401,494	Mar 10, 2009	8,213,106	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC TRANSDUCER HAVING IMPROVED	US	Issued	14/012,979	Aug 28, 2013	9,214,168	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING HIGH QUALITY METRICS WHEN DECODING LOGIC	US	Issued	12/403,257	Mar 12, 2009	8,413,010	Apr 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATED VISION BASED ROBOTIC SYSTEM UTILIZING UPWARD AND DOWNWARD LOG	US	Issued	12/354,506	Jan 15, 2009	8,135,208	Mar 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN IMPROVED MAGNETORESISTIVE STRUCTUR	US	Issued	12/414,880	Mar 31, 2009	8,315,019	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR FABRICATING MAGNETIC TRANSDUCERS WITH IMPROVED	US	Issued	13/533,040	Jun 26, 2012	9,007,728	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR FABRICATING MAGNETIC TRANSDUCERS WITH IMPROVED	US	Issued	12/472,965	May 27, 2009	8,227,023	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DRIVE POWER SAFE WEAR-LEVELING	US	Issued	13/335,194	Dec 22, 2011	8,478,930	Jul 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DRIVE POWER SAFE WEAR-LEVELING	US	Issued	12/398,093	Mar 4, 2009	8,090,899	Jan 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE FLUSHING WRITE CACHE TO A NEAREST SET OF RESERVED TRACKS DURING	US	Issued	12/410,338	Mar 24, 2009	7,800,856	Sep 21, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY WITH SUSPENSION TAILS EXTENDING INTO INTERFERING SLITS	US	Issued	12/406,830	Mar 18, 2009	8,068,314	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING A NEAR FIELD TRANSDUCER V	US	Issued	13/287,230	Nov 2, 2011	8,208,350	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING THERMAL PROTRUSION OF A NEAR FIELD TRANSDUCER IN AN ENERGY ASSI	US	Issued	12/415,465	Mar 31, 2009	8,077,418	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH EFFICIENCY GRATING COUPLING FOR LIGHT DELIVERY IN EAMR	US	Issued	12/426,262	Apr 19, 2009	8,200,054	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING A MAGNETIC RECORDING HEAD	US	Issued	13/765,161	Feb 12, 2013	9,251,813	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD WITH VARIABLE SIDE SHIELD GAPS	US	Issued	12/426,264	Apr 19, 2009	8,400,731	Mar 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FORMING A STRAIGHT TOP MAIN POLE FOR PMR BEVEL WRITER	US	Issued	13/568,685	Aug 7, 2012	8,893,376	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STRAIGHT TOP MAIN POLE FOR PMR BEVEL WRITER	US	Issued	12/426,134	Apr 17, 2009	8,254,060	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING ACCESS OF NON-VOLATILE SEMICONDUCTOR MEMORY BASED ON ACCESS	US	Issued	12/410,304	Mar 24, 2009	10,079,048	Sep 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL DAMASCENE PROCESS FOR PRODUCING A PMR WRITE POLE	US	Issued	12/472,341	May 26, 2009	9,099,118	Aug 4, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC GRAVITY VACUUM SCREW FEEDING	US	Issued	13/535,683	Jun 28, 2012	8,689,433	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC GRAVITY VACUUM SCREW FEEDING	US	Issued	12/484,032	Jun 12, 2009	8,230,570	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING COMMAND EXECUTION IN RESPONSE TO CONTROL CIRCUITRY	US	Issued	12/471,104	May 22, 2009	8,090,902	Jan 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	OUTPUT CAPACITOR CURRENT AS FEEDBACK TO CONTROL A HYSTERETIC VOLTAGE REG	US	Issued	12/431,175	Apr 28, 2009	8,358,114	Jan 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRO-DEPOSITED PASSIVATION COATINGS FOR PATTERNED MEDIA	US	Issued	13/740,010	Jan 11, 2013	8,980,076	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE APERTURE VCSEL EAMR HEADS	US	Issued	12/468,813	May 19, 2009	8,007,557	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING MOUNTING INSERTS WITH CANTILEVERED BEAMS	US	Issued	12/487,502	Jun 18, 2009	8,300,352	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PHYSICALLY MODIFYING A DATA STORAGE DEVICE TO DISABLE ACCESS TO SECURE DAT	US	Issued	12/475,340	May 29, 2009	8,838,995	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DELAYING UNLOAD OPERATION WHEN RATE OF UNLOADS EXCEEDS A TIME VARYING U	US	Issued	12/471,265	May 22, 2009	9,117,481	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSORS HAVING AN IMPROVED FREE LAYER	US	Issued	12/506,978	Jul 21, 2009	8,498,084	Jul 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR CALIBRATING AN ELECTRONIC LAPPING GUIDE FOR A BEVELED POLE IN A	US	Issued	13/625,270	Sep 24, 2012	8,717,709	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DOUBLE RIE DAMASCENE PROCESS FOR NOSE LENGTH CONTROL	US	Issued	12/717,090	Mar 3, 2010	8,257,597	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS CONTROL FOR A SONICATION CLEANING TANK	US	Issued	12/473,223	May 27, 2009	8,404,056	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING A SECURE PROCESSOR FOR MAINTAINING PLAIN	US	Issued	12/491,441	Jun 25, 2009	8,356,184	Jan 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC PARTICLE TRAPPER FOR A DISK SPUTTERING SYSTEM	US	Issued	12/474,207	May 28, 2009	8,101,054	Jan 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPONENT TEST SYSTEM	US	Issued	12/828,086	Jun 30, 2010	8,432,630	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SONICATION CLEANING WITH A PARTICLE COUNTER	US	Issued	12/473,227	May 27, 2009	8,863,763	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANICALLY DECOUPLED STATUS LENS	US	Issued	12/485,866	Jun 16, 2009	8,064,194	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT START SEQUENCER FOR STARTING MULTIPLE VOLTAGE REGULATORS	US	Issued	12/534,052	Jul 31, 2009	8,145,934	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-HEATING INTEGRATED CIRCUIT	US	Issued	13/719,883	Dec 19, 2012	9,275,927	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-HEATING INTEGRATED CIRCUIT	US	Issued	12/488,484	Jun 19, 2009	8,358,145	Jan 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CONFIGURING POWER MODE OF DISK DRIVE RELATIVE TO SERVO GATE	US	Issued	12/480,576	Jun 8, 2009	9,082,419	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR FABRICATING DAMASCENE WRITE POLES USING RUTHENIUM HARD MA	US	Issued	12/535,645	Aug 4, 2009	9,346,672	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC ETCH-STOP LAYER FOR MAGNETORESISTIVE READ HEADS	US	Issued	14/088,320	Nov 22, 2013	9,064,507	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC ETCH-STOP LAYER FOR MAGNETORESISTIVE READ HEADS	US	Issued	12/534,091	Jul 31, 2009	8,611,055	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESS SYSTEM FOR NANO-IMPRINTING OF RECORDING MEDIA WITH A TWO STEP PRES	US	Issued	12/614,355	Nov 6, 2009	9,330,685	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPRINTING METHOD WITH EMBOSING FOIL FREE TO EXPAND FOR NANO-IMPRINTIN	US	Issued	13/791,282	Mar 8, 2013	9,149,978	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESS SYSTEM WITH EMBOSING FOIL FREE TO EXPAND FOR NANO-IMPRINTING OF RE	US	Issued	12/614,334	Nov 6, 2009	8,402,638	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GENERATING ACTUAL DATA TPI PROFILE BY COMBINING SEGMENTS OF PR	US	Issued	12/492,443	Jun 26, 2009	8,031,423	Oct 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED DISCRETE TRACK MEDIA WITH HEAT SINK	US	Issued	12/545,692	Aug 21, 2009	8,247,095	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD INTEGRATED TOUCHDOWN SENSOR FOR HARD DISK DRIVES	US	Issued	12/435,280	May 4, 2009	7,796,356	Sep 14, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIAL HEAD INTEGRATED TOUCHDOWN SENSORS FOR HARD DISK DRIVES	US	Issued	12/435,298	May 4, 2009	7,800,858	Sep 21, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO REDUCE WRITE SPICE FAILURES	US	Issued	12/533,993	Jul 31, 2009	8,370,683	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY SEGREGATING SEQUENTIAL, RANDOM, AN	US	Issued	12/607,011	Oct 27, 2009	9,753,847	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH AN ORDERING TEMPERATURE	US	Issued	12/636,604	Dec 11, 2009	8,173,282	May 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH EPITAXIAL EXCHANGE COUPL	US	Issued	12/625,504	Nov 24, 2009	9,401,170	Jul 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCER	US	Issued	13/535,828	Jun 28, 2012	9,431,040	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE BIASING SYNC PATTERN OF AN EXTENDED SYNC MARK	US	Issued	13/015,844	Jan 28, 2011	8,619,385	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ SENSOR HAVING A LOW MAGNETOSTR	US	Issued	12/553,897	Sep 3, 2009	8,194,365	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SWITCHING VOLTAGE REGULATOR EMPLOYING CURRENT PRE-ADJUST BASED ON POW	US	Issued	12/534,072	Jul 31, 2009	8,912,778	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROCHEMICAL ETCHING OF MAGNETIC RECORDING LAYER	US	Issued	13/928,145	Jun 26, 2013	9,123,373	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR COUPLING A LASER WITH A SLIDER IN AN ENERGY ASSISTE	US	Issued	12/572,060	Oct 1, 2009	8,279,719	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING IMPEDANCE DISCONTINUITY COMPENSATION FOR INTERCON	US	Issued	12/551,425	Aug 31, 2009	8,462,466	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR ASSEMBLING A STORAGE DEVICE	US	Issued	14/225,000	Mar 25, 2014	9,390,762	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PERFORMING EAMR RECORDING AT HIGH DENSITY USING	US	Issued	12/570,975	Sep 30, 2009	8,385,157	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A DUAL READ ELEMENT AND DELAY CIRCUITRY TO IMPROVE	US	Issued	13/371,252	Feb 10, 2012	8,514,506	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A DUAL READ ELEMENT AND DELAY CIRCUITRY TO IMPROVE	US	Issued	12/507,294	Jul 22, 2009	8,139,301	Mar 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER HAVIN	US	Issued	12/574,621	Oct 6, 2009	8,385,158	Feb 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PIVOT ASSISTED STORAGE DEVICE UNLOADING MECHANISM	US	Issued	12/564,824	Sep 22, 2009	8,113,873	Feb 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE OVERLAPPING HOST DATA TRANSFER FOR A WRITE COMMAND	US	Issued	12/553,012	Sep 2, 2009	8,631,188	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR REDUCING UNAUTHORIZED DATA RECOVERY FROM SOLI	US	Issued	12/399,654	Mar 6, 2009	7,898,855	Mar 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR SEGMENTING AND PROTECTING A STORAGE SUBSYSTEM	US	Issued	12/409,174	Mar 23, 2009	7,912,991	Mar 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR SEGMENTING AND PROTECTING A STORAGE SUBSYSTEM	US	Issued	13/052,017	Mar 18, 2011	8,127,048	Feb 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR SEGMENTING AND PROTECTING A STORAGE SUBSYSTEM	US	Issued	11/480,303	Jun 30, 2006	7,509,441	Mar 24, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR STORING DATA IN SEGMENTS OF A STORAGE SUBSYSTEM	US	Issued	11/480,276	Jun 30, 2006	7,447,807	Nov 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A MAGNETIC RECORDING HEAD SLIDER COMPRISING B	US	Issued	14/055,851	Oct 16, 2013	9,390,737	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD SLIDER COMPRISING BOND PAD HAVING A PROBE CONT	US	Issued	12/650,459	Dec 30, 2009	8,587,901	Nov 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	GLASS SUBSTRATES AND METHODS OF ANNEALING THE SAME	US	Issued	13/531,339	Jun 22, 2012	8,790,799	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GLASS SUBSTRATES AND METHODS OF ANNEALING THE SAME	US	Issued	12/611,827	Nov 3, 2009	8,206,789	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DIE INCLUDING A CURRENT ROUTING LINE HAVING NON-METALLIC	US	Issued	13/854,898	Apr 1, 2013	8,779,574	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DIE INCLUDING A CURRENT ROUTING LINE HAVING NON-METALLIC	US	Issued	12/645,026	Dec 22, 2009	8,432,031	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM COMPRISING A MAPPING BRIDGE FOR ALIGNING HOST BLOCK	US	Issued	12/618,667	Nov 13, 2009	8,255,661	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLY HEIGHT SENSOR CONTROL CIRCUIT	US	Issued	13/397,376	Feb 15, 2012	8,279,550	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLY HEIGHT SENSOR CONTROL CIRCUIT	US	Issued	12/683,364	Jan 6, 2010	8,139,310	Mar 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATICALLY CONFIGURING A WEB BROWSER FILE WHEN BOOTING AN OPERATING	US	Issued	12/534,083	Jul 31, 2009	8,914,625	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATICALLY TRANSMITTING A WEB BROWSER FILE OVER THE INTERNET WHEN BO	US	Issued	12/534,076	Jul 31, 2009	9,588,936	Mar 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR OPTICALLY COUPLING A LASER WITH A TRANSDUCER IN AN	US	Issued	12/613,452	Nov 5, 2009	8,125,566	Feb 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MEASURING THE USEFUL LIFE OF SOLID-STATE STORAGE	US	Issued	12/688,815	Jan 15, 2010	8,122,185	Feb 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MEASURING THE USEFUL LIFE OF SOLID-STATE STORAGE	US	Issued	13/399,907	Feb 17, 2012	8,312,207	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MEASURING THE USEFUL LIFE OF SOLID-STATE STORAGE	US	Issued	11/429,936	May 8, 2006	7,653,778	Jan 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE STORAGE SUBSYSTEM THAT MAINTAINS AND PROVIDES ACCESS TO DATA	US	Issued	12/027,965	Feb 7, 2008	8,078,918	Dec 13, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE STORAGE SUBSYSTEM SECURITY SOLUTION	US	Issued	13/339,812	Dec 29, 2011	9,251,381	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE STORAGE SUBSYSTEM SECURITY SOLUTION	US	Issued	11/475,841	Jul 27, 2006	8,108,692	Jan 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SUBSYSTEM WITH CONFIGURABLE BUFFER	US	Issued	12/566,453	Sep 24, 2009	8,151,020	Apr 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SUBSYSTEM WITH CONFIGURABLE BUFFER	US	Issued	11/672,435	Feb 7, 2007	7,596,643	Sep 29, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMAND PORTAL FOR SECURELY COMMUNICATING AND EXECUTING NON-STANDAR	US	Issued	12/425,992	Apr 17, 2009	8,375,151	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-INTERFACE AND MULTI-BUS STRUCTURED SOLID-STATE STORAGE SUBSYSTEM	US	Issued	12/725,139	Mar 16, 2010	8,166,245	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-INTERFACE AND MULTI-BUS STRUCTURED SOLID-STATE STORAGE SUBSYSTEM	US	Issued	13/425,303	Mar 20, 2012	8,433,858	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-INTERFACE AND MULTI-BUS STRUCTURED SOLID-STATE STORAGE SUBSYSTEM	US	Issued	11/829,023	Jul 26, 2007	7,685,374	Mar 23, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE STORAGE SUBSYSTEM FOR EMBEDDED APPLICATIONS	US	Issued	11/753,477	May 24, 2007	7,685,337	Mar 23, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE STORAGE SUBSYSTEM FOR EMBEDDED APPLICATIONS	US	Issued	11/753,502	May 24, 2007	7,685,338	Mar 23, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SUBSYSTEM CAPABLE OF ADJUSTING ECC SETTINGS BASED ON MONITORED	US	Issued	13/344,502	Jan 5, 2012	8,296,625	Oct 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SUBSYSTEM CAPABLE OF ADJUSTING ECC SETTINGS BASED ON MONITORED	US	Issued	11/851,288	Sep 6, 2007	8,095,851	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERFACE FOR ENABLING A HOST COMPUTER TO RETRIEVE DEVICE MONITOR DATA F	US	Issued	12/029,370	Feb 11, 2008	7,962,792	Jun 14, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING THE PERFORMANCE OF NON-VOLATILE MEM	US	Issued	12/350,180	Jan 7, 2009	9,176,859	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ARCHITECTURE FOR OPTIMIZING EXECUTION OF STORAGE ACCESS COMMANDS	US	Issued	13/326,780	Dec 2, 2008	8,825,940	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING DATA PATH PROTECTION USING BOTH LBA AND PR	US	Issued	12/636,614	Dec 11, 2009	8,397,107	Mar 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANIPULATION ENGINE	US	Issued	12/611,078	Nov 2, 2009	8,281,218	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS COMPRISING A BROWN-OUT PROTECTION CIRCUIT FOR MEMORY DEVICES	US	Issued	12/608,918	Oct 29, 2009	8,351,174	Jan 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A WRITE POLE IN AN ENERGY ASSISTED MAGN	US	Issued	12/614,341	Nov 6, 2009	8,164,855	Apr 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING A RUN-LENGTH MAPPING TABLE AND A SINGLE AD	US	Issued	12/639,794	Dec 16, 2009	8,443,167	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING ENERGY ASSISTED MAGNETIC RECORDING DISK	US	Issued	12/616,729	Nov 11, 2009	8,116,171	Feb 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TESTER	US	Issued	12/749,243	Mar 29, 2010	8,626,463	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE APPARATUS PROVIDING HOST FULL DUPLEX OPERATIONS USING HALF	US	Issued	12/830,263	Jul 2, 2010	8,762,682	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING ASYNCHRONOUS EVENT NOTIFICATION IN SYSTEMS	US	Issued	12/772,101	Apr 30, 2010	8,631,284	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A WRAP-AROUND SHIELD FOR A MAGNETIC RECORDING TRA	US	Issued	12/615,544	Nov 10, 2009	8,322,023	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL GRATING AND METHOD OF MANUFACTURE	US	Issued	12/645,491	Dec 23, 2009	8,532,450	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY HAVING A RADIAL ROTARY PIEZOELECTRIC MICROACTUATOR	US	Issued	12/643,935	Dec 21, 2009	8,264,797	Sep 11, 2012

WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING PO	US	Issued	12/643,954	Dec 21, 2009	8,277,669	Oct 2, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC TRANSDUCER HAVING AN IMPRO	US	Issued	12/634,589	Dec 9, 2009	8,116,043	Feb 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A POLE OF A MAGNETIC TRANSDUCER	US	Issued	12/633,562	Dec 8, 2009	8,375,564	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CHARACTERIZING MICROACTUATOR BY INJECTING SINUSOIDAL DISTURBAN	US	Issued	12/606,819	Oct 27, 2009	9,142,235	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR CONTROLLING USE OF A SOLID-STATE STORAGE SUBSYSTEM	US	Issued	11/475,386	Jun 27, 2006	7,765,373	Jul 27, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SUBSYSTEM WITH EMBEDDED CIRCUIT FOR PROTECTING AGAINST ANOMALI	US	Issued	12/123,932	May 20, 2008	7,733,712	Jun 8, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PORTABLE CONTENT CONTAINER DISPLAYING A/V FILES IN RESPONSE TO A COMMAND	US	Issued	14/014,025	Aug 29, 2013	8,861,941	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PORTABLE CONTENT CONTAINER DISPLAYING A/V FILES IN RESPONSE TO A COMMAND	US	Issued	14/511,951	Oct 10, 2014	9,247,284	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSFERING MEDIA FILES BETWEEN USERS AFTER ENCRYPTING WITH ENCRYPTION KE	US	Issued	12/781,365	May 17, 2010	10,289,809	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	12/645,498	Dec 23, 2009	8,134,794	Mar 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A HEAD LOADING RAMP AND A DISK LIMITER TAB THAT PROJECTS	US	Issued	12/777,152	May 10, 2010	8,743,509	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REFRESHING NON-VOLATILE SEMICONDUCTOR MEMORY BY READING WITHOUT REWR	US	Issued	12/571,330	Sep 30, 2009	8,243,525	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING NON-VOLATILE SEMICONDUCTOR MEMORY BASED ON ERASE TIMES A	US	Issued	12/571,264	Sep 30, 2009	8,254,172	Aug 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY COMPRISING POWER FAIL CIRCUITRY FOR	US	Issued	12/610,073	Oct 30, 2009	8,261,012	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SCREWDRIVER SLEEVE FINDER	US	Issued	12/752,006	Mar 31, 2010	8,245,601	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY COMPRESSING DATA TO IMPROVE PERFOR	US	Issued	12/610,129	Oct 30, 2009	8,135,903	Mar 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE FRAMING WRITE DATA WITH IN-LINE MAPPING DATA DURING WRITE OPER	US	Issued	12/727,127	Mar 18, 2010	8,194,340	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TOUCHDOWN DETECTION	US	Issued	12/765,800	Apr 22, 2010	8,593,753	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA DEFECT SCAN	US	Issued	12/704,105	Feb 11, 2010	8,094,396	Jan 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING	US	Issued	13/858,280	Apr 8, 2013	8,665,690	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A PLURALITY OF ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	12/645,500	Dec 23, 2009	8,418,353	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A PIEZOELECTRIC MULTILAYER	US	Issued	13/460,190	Apr 30, 2012	8,813,324	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DISPLAY ASSEMBLY COMPRISING A DISPLAY MOUNT AND A FLEX CIRCUIT	US	Issued	12/720,602	Mar 9, 2010	8,358,395	Jan 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE DATA WRITING MODE BASED ON DRIVE ENVIRONMENT	US	Issued	12/720,568	Mar 9, 2010	8,315,006	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A CURVED SURFACE IN A MAGNETIC RECORDIN	US	Issued	12/751,815	Mar 31, 2010	8,404,129	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE THRESHOLD FOR DETECTING TOUCHDOWN OR CONTAMINATION	US	Issued	12/684,045	Jan 7, 2010	8,665,546	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING SEQUENTIAL DATA RATE PERFORMANCE US	US	Issued	13/766,470	Feb 13, 2013	8,693,133	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING SEQUENTIAL DATA RATE PERFORMANCE US	US	Issued	14/194,243	Feb 28, 2014	8,902,527	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING SEQUENTIAL DATA RATE PERFORMANCE US	US	Issued	12/729,159	Mar 22, 2010	8,687,306	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING TRANSDUCER USIN	US	Issued	13/690,255	Nov 30, 2012	8,780,498	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC RECORDING TRANSDUCER USING A SPLIT SEE	US	Issued	12/758,469	Apr 12, 2010	8,341,826	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A SIDE SHIELD FOR A MAGNETIC RECORDING TRANSDUCER I	US	Issued	13/887,252	May 3, 2013	8,879,207	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A SIDE SHIELD FOR A MAGNETIC RECORDING TRANSDUCER I	US	Issued	13/331,208	Dec 20, 2011	8,451,563	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING COMMAND RATE PROFILE BASED ON OPERATING N	US	Issued	12/730,078	Mar 23, 2010	9,959,209	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING SEPARATE WRITE AND OPTICAL MODULES IN A	US	Issued	12/796,806	Jun 9, 2010	8,310,901	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BOOTING FROM SYSTEM DATA LOADED BY HOST	US	Issued	12/751,696	Mar 31, 2010	8,341,337	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING ROTATION SPEED OF DISK TO REDUCE FLY HEIGHT MODULATION WHEN SE	US	Issued	12/723,451	Mar 12, 2010	9,214,188	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MOLDED CAPPING LAYER FOR AN ENERGY AS	US	Issued	12/646,896	Dec 23, 2009	8,451,556	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING	US	Issued	13/861,663	Apr 12, 2013	9,245,543	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING LASER INTEGRATED MOUNTIN	US	Issued	12/824,080	Jun 25, 2010	8,441,896	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/888,768	May 7, 2013	8,792,312	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING (EAMR) HEAD	US	Issued	12/751,883	Mar 31, 2010	8,607,439	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING POSITIVE CORRELATION IN FLY HEIGHT MEASUREMENTS	US	Issued	12/727,154	Mar 18, 2010	8,320,069	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DOUBLE HARD-MASK MILL BACK METHOD OF FABRICATING A NEAR FIELD TRANSDUCE	US	Issued	12/796,585	Jun 8, 2010	8,343,364	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE CHARACTERIZATION OF ADJACENT TRACK ERASURE IN RECORDING MEDIA	US	Issued	12/718,927	Mar 5, 2010	8,125,723	Feb 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE CHARACTERIZATION OF ADJACENT TRACK ERASURE IN RECORDING MEDIA	US	Issued	12/722,489	Mar 11, 2010	8,125,724	Feb 28, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD WITH AN AIR BEARING SURFACE HAVING A PARTICLE FENCE SEPARATED FROM A	US	Issued	12/720,556	Mar 9, 2010	8,199,437	Jun 12, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY PROTECTION	US	Issued	12/636,257	Dec 11, 2009	8,375,225	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR AN ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVIN	US	Issued	12/758,319	Apr 12, 2010	8,456,963	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-LINEAR OPTICAL GRATING	US	Issued	12/759,491	Apr 13, 2010	8,320,722	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN STAND COMPRISING A DUAL DISK CLAMP	US	Issued	12/718,910	Mar 5, 2010	8,331,056	Dec 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED LAMINATED ELECTRICAL CONNECTOR FOR HELIUM FILLED DISK DRIVE	US	Issued	12/714,328	Feb 26, 2010	8,194,348	Jun 5, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR ELECTRICALLY CONNECTED TO A	US	Issued	14/802,329	Jul 17, 2015	9,472,218	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR ELECTRICALLY CONNECTED TO A	US	Issued	14/012,449	Aug 28, 2013	9,099,131	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR ELECTRICALLY CONNECTED TO A	US	Issued	12/725,730	Mar 17, 2010	8,542,465	Sep 24, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING FLY HEIGHT WHEN CALIBRATING HEAD/DISK CONTACT	US	Issued	12/727,166	Mar 18, 2010	8,059,357	Nov 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A SHROUD WALL THAT COMPLETELY ENCIRCLES A DISK OUTER PER	US	Issued	12/792,873	Jun 3, 2010	9,449,649	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY STORING AN INVERSE MAP FOR REBUILDIN	US	Issued	13/670,228	Nov 6, 2012	8,489,854	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY STORING AN INVERSE MAP FOR REBUILDIN	US	Issued	12/714,350	Feb 26, 2010	8,407,449	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PACKAGING SLEEVE	US	Issued	29/350,409	Nov 16, 2009	0,621,282	Aug 10, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A CLAMP FASTENER WITH A CONVEX HEAD	US	Issued	12/824,538	Jun 28, 2010	8,284,514	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY SEGREGATING SEQUENTIAL DATA DURING	US	Issued	12/707,552	Feb 17, 2010	8,316,176	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING WEAR LEVELING AND GARBAGE COLLECTION OPERATIONS IN A SOLID-STAT	US	Issued	12/749,329	Mar 29, 2010	8,713,066	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING TRANSDUCER HAVING AN ELECTRONIC LAPP	US	Issued	13/746,991	Jan 22, 2013	8,964,333	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN ELECTRONIC LAPPING GUIDE CORRESPONDING TO A NEA	US	Issued	12/789,813	May 28, 2010	8,375,565	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC AUTO-REGISTRATION AND TRANSCODING OF MEDIA CONTENT DEVICES VIA	US	Issued	12/847,096	Jul 30, 2010	9,525,712	Dec 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING THE EXECUTION OF MEMORY COMMANDS IN	US	Issued	12/732,951	Mar 26, 2010	8,725,931	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ALIGNING DATA STORAGE DEVICE PARTITION TO BOUNDARY OF PHYSICAL DATA SECTO	US	Issued	12/623,370	Nov 20, 2009	8,285,965	Oct 9, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE USING NON-VOLATILE CACHE WHEN GARBAGE COLLECTING LOG STRUCTUR	US	Issued	12/774,643	May 5, 2010	9,563,397	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE FLUID DYNAMIC BEARING SPINDLE	US	Issued	12/826,640	Jun 29, 2010	8,411,389	Apr 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	VORTEX REDUCER	US	Issued	12/761,340	Apr 15, 2010	8,397,751	Mar 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DOUBLE OPTICAL GRATING	US	Issued	12/779,160	May 13, 2010	8,422,841	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CRASH STOP INCLUDING A HELICAL PORTION	US	Issued	12/825,232	Jun 28, 2010	8,320,086	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR BONDED TO A FLEXURE	US	Issued	12/826,550	Jun 29, 2010	8,339,748	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR GROUNDED TO A FLEXURE	US	Issued	14/146,710	Jan 2, 2014	8,908,332	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR GROUNDED TO A FLEXURE	US	Issued	14/563,936	Dec 8, 2014	9,230,580	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY HAVING A MICROACTUATOR GROUNDED TO A FLEXURE	US	Issued	12/827,813	Jun 30, 2010	8,665,567	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTING WORKPIECE OVERCOAT	US	Issued	12/973,032	Dec 20, 2010	8,623,197	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REFRESH OPERATIONS USING WRITE/READ COMMANDS	US	Issued	12/782,681	May 18, 2010	8,320,067	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DRIVE WITH CIRCUMFERENTIAL DISK LIMITER	US	Issued	12/826,561	Jun 29, 2010	8,446,688	May 21, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING A PREAMP COMPRISING READ/WRITE PASS THROUGHS FOR C	US	Issued	12/788,152	May 26, 2010	8,390,948	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING EXECUTION OF INTERNAL COMMANDS AND H	US	Issued	14/303,508	Jun 12, 2014	9,405,675	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING EXECUTION OF INTERNAL COMMANDS AND H	US	Issued	12/777,771	May 11, 2010	8,782,327	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MULTISTAGE PROCESSING IN A MEMORY STORAGE SUBSYS	US	Issued	13/166,985	Jun 23, 2011	9,164,886	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING ACCESS REQUESTS TO A MEMORY STORAGE SU	US	Issued	14/885,018	Oct 16, 2015	9,477,413	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING ACCESS REQUESTS TO A MEMORY STORAGE SU	US	Issued	15/294,063	Oct 14, 2016	10,048,875	Aug 14, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH MULTI-ZONE ARM DAMPER	US	Issued	12/825,392	Jun 29, 2010	8,432,641	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH TRANSVERSE PLANE DAMPER	US	Issued	12/826,371	Jun 29, 2010	8,345,387	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DEBUGGER INTERFACE	US	Issued	12/789,394	May 27, 2010	8,161,328	Apr 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED TRANSITIONS POWER MODES WHILE CONTINUOUSLY POWERING A POW	US	Issued	12/828,131	Jun 30, 2010	8,433,937	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING MAGNETIC RECORDING HEADS ADAPTED FO	US	Issued	12/822,120	Jun 23, 2010	8,264,798	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING TRA	US	Issued	13/894,240	May 14, 2013	8,861,133	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH ASYMMETRIC TOLERANCE RING	US	Issued	12/828,103	Jun 30, 2010	8,416,534	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TESTER	US	Issued	12/749,279	Mar 29, 2010	8,332,691	Dec 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TESTER	US	Issued	12/749,309	Mar 29, 2010	8,458,526	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING AN INTERCONNECT WITH TRANSMISSION LINES FORMING AN	US	Issued	12/785,150	May 21, 2010	8,467,151	Jun 18, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMING DATA RETENTION IN SOLID-STATE MEMORY	US	Issued	14/853,920	Sep 14, 2015	9,875,025	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMING DATA RETENTION IN SOLID-STATE MEMORY	US	Issued	12/824,434	Jun 28, 2010	8,612,669	Dec 17, 2013

WESTERN DIGITAL TECHNOLOGIES, INC.	SONICATION CLEANING SYSTEM	US	Issued	14/058,171	Oct 18, 2013	9,296,022	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A DISK LIMITER THAT IS DISPOSED WITHIN AN ANGULAR RANGE RE	US	Issued	12/822,452	Jun 24, 2010	8,289,646	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR OPTIMIZING GARBAGE COLLECTION IN DATA STORAGE	US	Issued	13/948,495	Jul 23, 2013	8,706,985	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR OPTIMIZING GARBAGE COLLECTION IN DATA STORAGE	US	Issued	12/827,931	Jun 30, 2010	8,521,972	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING HOST INTERFACE STATE MACHINE BLOCKING ON	US	Issued	12/823,437	Jun 25, 2010	8,380,922	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PULSING EAMR DISK DRIVES	US	Issued	12/973,957	Dec 21, 2010	8,289,821	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS OPTIMIZED BUFFER TRANSFER REQUESTS	US	Issued	12/786,391	May 24, 2010	8,392,689	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING DATA ACCESS IN NON-VOLATILE MEMORY	US	Issued	12/825,779	Jun 29, 2010	8,447,920	May 21, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING DISK BOUNDARIES USING MICROACTUATOR	US	Issued	12/823,359	Jun 25, 2010	8,300,348	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	TIMELINE APPLICATION FOR LOG STRUCTURED STORAGE DEVICES	US	Issued	12/816,920	Jun 16, 2010	8,554,741	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ROBUST GIMBAL DESIGN FOR HEAD GIMBAL ASSEMBLY	US	Issued	12/881,834	Sep 14, 2010	8,792,212	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	RECORDING HEAD WITH NEAR FIELD TRANSDUCER HAVING NON-RECTANGULAR PIN CO	US	Issued	13/708,464	Dec 7, 2012	8,472,288	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TRAILING EDGE OPTIMIZED NEAR FIELD TRANSDUCER HAVING NON-RECTANGULAR PIN	US	Issued	12/794,692	Jun 4, 2010	8,351,307	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR INTERROGATING THE THICKNESS OF A CARBON LAYER	US	Issued	12/815,273	Jun 14, 2010	8,298,609	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMABLE ERROR HANDLING	US	Issued	13/207,264	Aug 10, 2011	8,850,260	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	BROADBAND REFLECTIVE WAVEGUIDE METAL GRATINGS AND THEIR FORMATION	US	Issued	12/784,429	May 20, 2010	8,625,941	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING ENERGY ASSISTED MAGNETIC RECORDING DISK	US	Issued	13/846,802	Mar 18, 2013	8,599,657	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING DISK DRIVE USING A DISTRIBUTED FEEDBACK	US	Issued	12/824,098	Jun 25, 2010	8,422,342	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING PO	US	Issued	12/824,036	Jun 25, 2010	8,262,919	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH BALANCE PLUG HAVING LONGITUDINAL RETAINERS	US	Issued	13/733,750	Jan 3, 2013	8,755,148	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH BALANCE PLUG HAVING LONGITUDINAL RETAINERS	US	Issued	12/826,667	Jun 30, 2010	8,369,044	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING PO	US	Issued	12/886,999	Sep 21, 2010	8,444,866	May 21, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INJECTION MOLDING WITH CONTROLLED PART FLEXING	US	Issued	12/790,721	May 28, 2010	8,133,426	Mar 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH ADDED EXTERNAL LABYRINTH PATH DURING SERVO TRACK WRITING	US	Issued	12/826,474	Jun 29, 2010	8,665,555	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING METADATA AND MAPPING TABLE TO IDENTIFY VALID US	US	Issued	13/162,035	Jun 16, 2011	8,667,248	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING HEAD IN A WA	US	Issued	12/825,098	Jun 28, 2010	8,322,022	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL-MAGNETIC LAYER HIGH ANISOTROPY MEDIA WITH ORIENTATION INITIALIZATION	US	Issued	12/850,951	Aug 5, 2010	8,945,732	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING FLY HEIGHT CALIBRATION TRACKS TO ACCOUNT FOR MAGNETI	US	Issued	13/158,087	Jun 10, 2011	8,879,188	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING G	US	Issued	12/822,330	Jun 24, 2010	8,248,896	Aug 21, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE BOND PAD SHELF OFFSET FR	US	Issued	13/207,308	Aug 10, 2011	8,456,776	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE LAYER SMALL GRAIN SIZE FePt:C FILM FOR HEAT ASSISTED MAGNETIC RECORDI	US	Issued	14/069,075	Oct 31, 2013	9,542,968	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE LAYER SMALL GRAIN SIZE FePt:C FILM FOR HEAT ASSISTED MAGNETIC RECORDI	US	Issued	12/860,616	Aug 20, 2010	8,889,275	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPOSITE MAGNETIC RECORDING MEDIUM	US	Issued	12/854,115	Aug 10, 2010	8,530,065	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THROTTLED COMMAND COMPLETION TIME	US	Issued	12/895,851	Oct 1, 2010	8,271,692	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE TOP COVER REMOVAL	US	Issued	14/512,701	Oct 13, 2014	9,275,677	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE TOP COVER REMOVAL	US	Issued	13/207,295	Aug 10, 2011	8,863,372	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TRAILING EDGE OPTIMIZED NEAR FIELD TRANSDUCER	US	Issued	12/815,934	Jun 15, 2010	8,320,219	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE RESETTING FLY HEIGHT REFERENCE GENERATED FROM A DEGRADING CALI	US	Issued	13/157,809	Jun 10, 2011	8,773,802	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INTER-PROCESSOR COMMUNICATION	US	Issued	13/167,010	Jun 23, 2011	8,635,412	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR PROVIDING DATA SECURITY IN DATA STORAGE DEVICES	US	Issued	13/162,863	Jun 17, 2011	9,530,436	Dec 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SEQUENTIAL WRITE THREAD DETECTION	US	Issued	12/973,085	Dec 20, 2010	8,458,435	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROLESS COATED DISKS FOR HIGH TEMPERATURE APPLICATIONS AND METHODS C	US	Issued	13/783,660	Mar 4, 2013	8,828,482	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROLESS COATED DISKS FOR HIGH TEMPERATURE APPLICATIONS AND METHODS C	US	Issued	12/849,783	Aug 3, 2010	8,404,369	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CORRELATING DIFFERENT FLY HEIGHT MEASUREMENTS TO VERIFY DISK WA	US	Issued	12/895,115	Sep 30, 2010	8,300,338	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR IMPROVING WEAR-LEVELING PERFORMANCE IN SOLID-STA	US	Issued	12/895,691	Sep 30, 2010	8,612,804	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR ADJUSTING LAPPING OF A TRANSDUCER USING A DISK WIN	US	Issued	12/880,913	Sep 13, 2010	8,758,083	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MODIFYING METADATA CACHED IN A CIRCULAR BUFFER WHEN A WRITE O	US	Issued	13/166,695	Jun 22, 2011	8,756,361	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITING METADATA FILES ON A DISK	US	Issued	12/895,855	Oct 1, 2010	8,954,664	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCALIZED HEATING FOR FLIP CHIP BONDING	US	Issued	13/888,840	May 7, 2013	8,611,050	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCALIZED HEATING FOR FLIP CHIP BONDING	US	Issued	13/277,993	Oct 20, 2011	8,462,462	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ALTERNATING WEDGE REPEATABLE RUNOUT (WRRO) PATTERN	US	Issued	13/167,062	Jun 23, 2011	8,693,134	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECTIONAL WRITE RETRY FOR SHINGLED DISK DRIVE APPLICATION	US	Issued	12/977,658	Dec 23, 2010	8,611,032	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING A REFLECTOR FOR IMPROVIN	US	Issued	12/947,085	Nov 16, 2010	8,456,964	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR REDUCING CONTENTIONS IN SOLID-STATE MEMORY ACCES	US	Issued	14/266,520	Apr 30, 2014	9,652,379	May 16, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR REDUCING CONTENTIONS IN SOLID-STATE MEMORY ACCES	US	Issued	13/214,132	Aug 19, 2011	8,769,190	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INITIALIZATION INFORMATION ACCESSED BY SEARCHING FOR P	US	Issued	13/027,432	Feb 15, 2011	9,405,668	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR TRACE THROUGH A DIE	US	Issued	12/895,854	Oct 1, 2010	8,422,172	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED ELECTRICAL CONNECTOR WITH IMPROVED EMI SUPPRESSION AND MECHA	US	Issued	12/852,417	Aug 6, 2010	9,831,612	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE GARBAGE COLLECTING A NON-VOLATILE SEMICONDUCTOR MEMORY BY	US	Issued	12/814,662	Jun 14, 2010	8,341,339	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE STEERING WRITE DATA TO WRITE CACHE BASED ON WORKLOAD	US	Issued	12/824,959	Jun 28, 2010	8,959,284	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE CONVERTING NON-VOLATILE SEMICONDUCTOR MEMORY TO READ ONL	US	Issued	13/105,785	May 11, 2011	9,146,875	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE COMPRISING WRITE CACHE SPANNING NON-VOLATILE SEMICONDUCTO	US	Issued	13/149,703	May 31, 2011	8,639,872	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE MIGRATING DATA FROM DISK TO NON-VOLATILE SEMICONDUCTOR ME	US	Issued	13/105,800	May 11, 2011	9,058,280	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE BALANCING EXECUTION TIMES FOR NON-VOLATILE SEMICONDUCTOR M	US	Issued	13/156,813	Jun 9, 2011	8,775,720	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SPINNING DOWN DISK TO A SPIN RATE BASED ON SPIN-UP PARAMETER	US	Issued	12/972,091	Dec 17, 2010	8,743,502	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING DUAL MODE INDEPENDENT/PARALLEL VOLTAGE R	US	Issued	13/157,228	Jun 9, 2011	8,937,404	Jan 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR BONDING SUBSTRATES IN AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/525,731	Jun 18, 2012	8,763,235	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PERFORMING BONDING A FIRST SUBSTRATE TO A SECOND SUBSTRATE	US	Issued	12/880,785	Sep 13, 2010	8,220,140	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE TRACK FOLLOW CONTROL	US	Issued	13/162,095	Jun 16, 2011	8,896,955	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROMETER SCALE COMPONENTS	US	Issued	14/539,728	Nov 12, 2014	9,159,345	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROMETER SCALE COMPONENTS	US	Issued	14/853,531	Sep 14, 2015	9,672,847	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH A SPHERICAL BALANCE PLUG	US	Issued	13/858,175	Apr 8, 2013	8,717,706	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH A SPHERICAL BALANCE PLUG	US	Issued	12/826,671	Jun 30, 2010	8,437,101	May 7, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING HEAD HAVING WAVEGUIDE CAPABLE OF PR	US	Issued	12/948,425	Nov 17, 2010	8,462,592	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A LASER CAVITY FOR AN ENERGY ASSISTED MA	US	Issued	13/941,474	Jul 13, 2013	8,877,358	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A LASER CAVITY FOR AN ENERGY ASSISTED MA	US	Issued	12/946,655	Nov 15, 2010	8,518,279	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	VISUAL INDICATOR OF ONLINE BACKUP	US	Issued	12/887,341	Sep 21, 2010	8,713,265	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPOSITE MAGNETIC RECORDING MEDIUM	US	Issued	12/889,130	Sep 23, 2010	8,316,668	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE COPYING DISK CACHE TO NON-VOLATILE SEMICONDUCTOR MEMORY	US	Issued	13/207,184	Aug 10, 2011	8,782,334	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SELECTING HEAD FOR WRITE OPERATION BASED ON ENVIRONMENTAL CON	US	Issued	12/895,056	Sep 30, 2010	8,699,171	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE MIGRATING HIGH WORKLOAD DATA FROM DISK TO NON-VOLATILE SEM	US	Issued	13/157,111	Jun 9, 2011	9,268,499	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE WRITING COPY OF DATA TO DISK WHEN NON-VOLATILE SEMICONDUCT	US	Issued	12/892,837	Sep 28, 2010	8,825,977	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE WRITING EXTENDED ERROR CORRECTION CODE SYMBOLS TO DISK FOR	US	Issued	13/166,728	Jun 22, 2011	8,683,295	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR A PORTABLE DATA LOCKER	US	Issued	14/843,122	Sep 2, 2015	10,033,743	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR A PORTABLE DATA LOCKER	US	Issued	16/041,644	Jul 20, 2018	10,645,091	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEFECT SCANNING BY WRITING CONSECUTIVE DATA TRACKS AND SKIPPIN	US	Issued	12/964,480	Dec 9, 2010	8,964,320	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ANALOG-TO-DIGITAL CONVERTER COMPRISING DUAL OSCILLATORS FOR LINEARITY CON	US	Issued	13/027,557	Feb 15, 2011	8,421,663	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	REGULATING POWER CONSUMPTION OF DIGITAL CIRCUITRY USING A MULTI-LAYER RIN	US	Issued	12/972,121	Dec 17, 2010	8,324,974	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SUBSYSTEM WITH ENERGY-BASED PERFORMANCE THROTTLIN	US	Issued	14/306,070	Jun 16, 2014	9,182,916	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SUBSYSTEM WITH ENERGY-BASED PERFORMANCE THROTTLIN	US	Issued	13/216,177	Aug 23, 2011	8,788,779	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WAVEGUIDE WITH REFLECTIVE GRATING FOR LOCALIZED ENERGY INTENSITY	US	Issued	14/886,870	Oct 19, 2015	9,495,984	Nov 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WAVEGUIDE WITH REFLECTIVE GRATING FOR LOCALIZED ENERGY INTENSITY	US	Issued	14/321,786	Jul 1, 2014	9,190,085	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKGROUND SELECTION OF VOLTAGE REFERENCE VALUES FOR PERFORMING MEMO	US	Issued	13/167,032	Jun 23, 2011	8,638,602	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR A DATA RELIABILITY SCHEME IN A SOLID STATE MEMORY	US	Issued	12/966,892	Dec 13, 2010	8,601,313	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE STORING WRITE DATA IN NON-VOLATILE SEMICONDUCTOR MEMORY IF	US	Issued	12/909,624	Oct 21, 2010	8,612,798	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MAINTAINING A DATA REDUNDANCY SCHEME IN A SOLID S	US	Issued	12/967,206	Dec 14, 2010	8,615,681	Dec 24, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR USING OVER-PROVISIONED DATA CAPACITY TO MAINTAIN	US	Issued	12/967,228	Dec 14, 2010	8,601,311	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ANTIFERROMAGNETICALLY COUPLED WRIT	US	Issued	13/769,951	Feb 19, 2013	9,368,134	Jun 14, 2016

WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ANTIFERROMAGNETICALLY COUPLED WRIT	US	Issued	12/970,423	Dec 16, 2010	8,441,756	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR ENHANCING OPTICAL EFFICIENCY FOR AN EAMR HEAD	US	Issued	12/971,754	Dec 17, 2010	8,456,966	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE TO COALESCE UNENHANCED OPTICAL EFFICIENCY IN WRITE OPERATIONS	US	Issued	12/968,587	Dec 15, 2010	8,832,366	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GENERATING OFF-TRACK READ CAPABILITY FOR A PLURALITY OF TRACK SEG	US	Issued	13/028,603	Feb 16, 2011	8,699,172	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FORMING A DIELECTRIC SLOPE FOR EAMR AND MAGNETIC WRITER	US	Issued	13/042,819	Mar 8, 2011	8,491,802	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR OPTICALLY COUPLING A LASER WITH A TRANSDUCER IN AN	US	Issued	12/973,328	Dec 20, 2010	8,790,295	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	12/975,184	Dec 21, 2010	8,486,286	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD STACK ASSEMBLY HAVING A FLEXIBLE PRINTED CIRCUIT WITH HEAT T	US	Issued	13/398,578	Feb 16, 2012	8,295,013	Oct 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH FEATURES TO FAC	US	Issued	13/164,936	Jun 21, 2011	8,325,446	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH TRANSVERSE FLYIN	US	Issued	13/164,959	Jun 21, 2011	8,295,014	Oct 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH FEATURES TO FAC	US	Issued	13/078,829	Apr 1, 2011	8,320,084	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEX	US	Issued	13/897,609	May 20, 2013	9,214,174	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH FOLDED BOND PA	US	Issued	12/916,237	Oct 29, 2010	8,467,153	Jun 18, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING (EAMR) TRAN	US	Issued	13/045,433	Mar 10, 2011	8,307,540	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/046,380	Mar 11, 2011	8,721,902	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVELY ENABLING A HOST TRANSFER INTERRUPT	US	Issued	12/976,608	Dec 22, 2010	8,392,635	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCER WITH SPUTTERED ANTIFERROMAGNETIC COUPL	US	Issued	12/976,616	Dec 22, 2010	9,123,359	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING SENSOR WITH SPUTTERED ANTIFERROMAGNETIC COUPLING T	US	Issued	12/978,145	Dec 23, 2010	8,760,819	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED MANAGEMENT OF OPERATION DATA IN A SOLID-STATE MEMORY	US	Issued	15/048,565	Feb 19, 2016	9,442,666	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR OPTIMIZED MANAGEMENT OF OPERATION DATA IN A SOLI	US	Issued	12/974,234	Dec 21, 2010	9,268,646	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER-SAFE DATA MANAGEMENT SYSTEM	US	Issued	15/174,955	Jun 6, 2016	10,025,712	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER-SAFE DATA MANAGEMENT SYSTEM	US	Issued	16/011,569	Jun 18, 2018	10,496,535	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER-SAFE DATA MANAGEMENT SYSTEM	US	Issued	13/073,588	Mar 28, 2011	9,361,044	Jun 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC SPRING MEDIA WITH MULTIPLE EXCHANGE COUPLED HARD-SOFT MAGNETIC	US	Issued	12/978,225	Dec 23, 2010	8,940,418	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING GAS LEAKING FROM HEAD DISK ASSEMBLY	US	Issued	12/949,680	Nov 18, 2010	8,687,307	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING AN INNER FRAME WITH A SIDE OPENING AND AN EXTRUDED HERN	US	Issued	12/969,339	Dec 15, 2010	8,514,514	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A TOP COVER WITH AN ELECTRICAL CONNECTOR LATCH	US	Issued	13/010,491	Jan 20, 2011	8,616,900	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/045,394	Mar 10, 2011	8,834,728	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE SELECTIVELY SPINNING UP DISK WHEN POWERED ON	US	Issued	12/912,662	Oct 26, 2010	9,069,475	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE EXECUTING BIASED MIGRATION POLICY DURING HOST BOOT TO MIGRA	US	Issued	12/892,775	Sep 28, 2010	8,825,976	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE CHANGING POWER MODE OF DISK CHANNEL WHEN FREQUENCY OF WR	US	Issued	14/164,121	Jan 24, 2014	9,117,482	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE CHANGING POWER MODE OF DISK CHANNEL WHEN FREQUENCY OF WR	US	Issued	12/894,058	Sep 29, 2010	8,670,205	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE STORING REDUNDANT COPIES OF DATA ON DISK AND IN NON-VOLATILE	US	Issued	12/911,564	Oct 25, 2010	8,560,759	Oct 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR OPTICALLY COUPLING A LASER WITH A TRANSDUCER IN AN	US	Issued	12/976,770	Dec 22, 2010	8,593,914	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE SEMICONDUCTOR MEMORY MODULE ENABLING OUT OF ORDER HOST	US	Issued	13/080,800	Apr 6, 2011	8,769,232	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CONCURRENTLY SEARCHING MULTIPLE DEVICES OF A NON-VOLATILE SEMICONDUCTOR	US	Issued	13/021,456	Feb 4, 2011	8,683,113	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERMEDIATE LAYER FOR PERPENDICULAR MAGNETIC RECORDING MEDIUM WITH HI	US	Issued	12/977,533	Dec 23, 2010	8,993,133	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A SUSPENSION HEAD BOND PAD DESIGN	US	Issued	12/976,826	Dec 22, 2010	8,345,519	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DATA RECOVERY IN A SOLID STATE STORAGE DEVICE USING	US	Issued	13/935,221	Jul 3, 2013	8,861,272	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DATA RECOVERY IN A SOLID STATE STORAGE DEVICE	US	Issued	13/110,662	May 18, 2011	8,503,237	Aug 6, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCER WITH SHORT EFFECTIVE THROAT HEIGHT AND M	US	Issued	12/978,242	Dec 23, 2010	8,797,686	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ABSORPTION ENHANCED MEDIA FOR ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	14/037,235	Sep 25, 2013	8,811,129	Aug 19, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ABSORPTION ENHANCED MEDIA FOR ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/019,095	Feb 1, 2011	8,570,844	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD STACK ASSEMBLY HAVING FIRST AND SECOND SWAGE BOSSSES WITH	US	Issued	12/969,257	Dec 15, 2010	8,233,239	Jul 31, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	GATE SPEED REGULATOR DITHERING RING OSCILLATOR TO MATCH CRITICAL PATH CIR	US	Issued	13/027,616	Feb 15, 2011	8,350,628	Jan 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A DISK DRIVE BASE FOR A DISK DRIVE	US	Issued	13/005,727	Jan 13, 2011	8,667,667	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURABLE POWERLINE ETHERNET ADAPTER AND POWER SUPPLY	US	Issued	13/012,866	Jan 25, 2011	8,941,976	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROGRESSIVE POWER REDUCTION OF INACTIVE DEVICE WH	US	Issued	12/978,736	Dec 23, 2010	8,417,979	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING HEAD HAVING MULTIPLE CORES OF DIFFERE	US	Issued	13/039,216	Mar 2, 2011	8,588,039	Nov 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR A PERSONAL MULTIMEDIA CONTENT ARCHIVE	US	Issued	12/853,239	Aug 9, 2010	10,019,741	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DATA ERROR RECOVERY IN A SOLID STATE SUBSYSTEM	US	Issued	14/216,295	Mar 17, 2014	9,405,617	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DATA ERROR RECOVERY IN A SOLID STATE SUBSYSTEM	US	Issued	13/025,980	Feb 11, 2011	8,700,950	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR IMPROVING A DATA REDUNDANCY SCHEME IN A SOLID STA	US	Issued	13/044,400	Mar 9, 2011	8,700,951	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR NON-LINEARITY OF A HEAD BASED ON A FLY HEIGHT	US	Issued	14/100,646	Dec 9, 2013	8,970,982	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ENSURING MINIMUM GATE SPEED DURING STARTUP OF GATE SPEED REGULATOR	US	Issued	13/027,504	Feb 15, 2011	8,390,367	Mar 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR INCREASING MEDIA ABSORPTION EFFICIENCY USING INT	US	Issued	13/399,250	Feb 17, 2012	8,670,294	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING MEDIUM CAPABLE OF SUPPRESSING HIGH D	US	Issued	14/260,512	Apr 24, 2014	9,001,630	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING MEDIUM CAPABLE OF SUPPRESSING HIGH D	US	Issued	13/042,840	Mar 8, 2011	8,743,666	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH RECENT WRITE STREAMS LIST FOR DATA REFRESH DETERMINATION	US	Issued	13/167,246	Jun 23, 2011	9,268,649	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETERMINING TOUCHDOWN THRESHOLD	US	Issued	13/100,897	May 4, 2011	9,053,740	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING DATA TRACK DENSITY BASED ON WRITE CONDITION WHEN WR	US	Issued	13/101,005	May 4, 2011	8,599,510	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and system for providing a transducer having dual, ABS recessed auxiliary pole	US	Issued	13/070,279	Mar 23, 2011	8,405,930	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM BUS TRANSFER OPTIMIZATION	US	Issued	13/098,357	Apr 29, 2011	8,751,728	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CLEAN ROOM ROLLER CONVEYOR WITH MOTORS BETWEEN AND TORQUING DRIVE RO	US	Issued	13/115,828	May 25, 2011	8,763,790	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PROVIDING A TRANSDUCER HAVING A SPLIT MAIN POLE	US	Issued	13/075,070	Mar 29, 2011	8,053,715	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A SIDE SHIELDED READ TRANSDUCER	US	Issued	13/296,970	Nov 15, 2011	8,630,068	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR ASSEMBLING AN ELECTRICALLY ASSISTED MAGNETIC RECORDING (EAM	US	Issued	13/872,807	Apr 29, 2013	9,123,362	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MOUNTING AND ALIGNING A LASER IN AN ELECTRICALLY	US	Issued	13/053,466	Mar 22, 2011	8,456,961	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MEASURING MEDIA PERFORMANCE ASSOCIATED WITH ADJACENT TRAC	US	Issued	13/045,416	Mar 10, 2011	8,711,499	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	OPPORTUNISTIC DEFRAGMENTATION DURING GARBAGE COLLECTION	US	Issued	13/174,708	Jun 10, 2011	9,189,392	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PROVIDING A TRANSDUCER HAVING A MAIN COIL AND AN ADDITIONAL C	US	Issued	13/103,872	May 9, 2011	8,547,659	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD TO GRIP A DISK CLAMP OF A DISK DRIVE	US	Issued	13/097,455	Apr 29, 2011	8,683,676	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	BOOTING FROM A SECONDARY STORAGE DEVICE IN ORDER TO ACCUMULATE DISK DRI	US	Issued	13/099,865	May 3, 2011	9,009,455	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW ASPECT RATIO SCREW FINDER FOR RECEIPT OF A SCREW FOR DISK DRIVE ASSEMB	US	Issued	13/098,278	Apr 29, 2011	8,800,409	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CORRECTING HIGH ORDER GRAY CODE USING TRACK ESTIMATOR AND DEC	US	Issued	13/170,000	Jun 27, 2011	8,693,123	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	RECORDING MEDIA WITH MULTIPLE EXCHANGE COUPLED MAGNETIC LAYERS	US	Issued	13/077,419	Mar 31, 2011	9,028,985	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE AVOIDING FALSE DETECTION OF FREE FAL EVENT BASED ON DETE	US	Issued	13/167,532	Jun 23, 2011	9,047,907	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EVALUATING A SATA CONNECTOR TO DETECT A NON-SATA HOS	US	Issued	13/168,903	Jun 24, 2011	8,700,850	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE TO ENABLE DEFECT MARGINING	US	Issued	13/168,551	Jun 24, 2011	8,711,500	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MANUFACTURING TAPERED WAVEGUIDE STRUCTURES IN A	US	Issued	13/069,023	Mar 22, 2011	8,790,527	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A BASE WITH A PROTRUDING PERIPHERAL METAL FLANGE THAT IS	US	Issued	13/358,427	Jan 25, 2012	8,451,559	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TOUCHDOWN SENSOR HAVING A MORE STABLE CRYSTAL STRUCTURE FOR USE IN HARD	US	Issued	13/160,752	Jun 15, 2011	9,047,902	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR IMPROVED PARITY DETERMINATION WITHIN A DATA REDU	US	Issued	13/098,356	Apr 29, 2011	8,862,804	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic recording disk and process for manufacture thereof	US	Issued	10/765,222	Jan 28, 2004	7,045,215	May 16, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic disk and method of producing the same	US	Issued	10/854,256	May 27, 2004	7,166,319	Jan 23, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND METHOD OF MANUFACTURING	US	Issued	12/738,201	Jun 16, 2010	9,159,351	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK AND MANUFACTURING METHOD THERE	US	Issued	10/576,755	Aug 9, 2006	8,603,650	Dec 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Disk	US	Issued	12/161,626	Jul 21, 2008	7,833,641	Nov 16, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic recording medium	US	Issued	12/594,043	Oct 27, 2009	8,142,916	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND PROCESS FOR MANUFACTURE	US	Issued	12/934,953	Dec 23, 2010	9,047,903	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND METHOD OF MANUFACTURING	US	Issued	14/051,414	Oct 10, 2013	9,183,869	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND PROCESS FOR MANUFACTURE	US	Issued	12/934,935	Dec 27, 2010	8,580,410	Nov 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/666,561	Mar 17, 2010	8,057,926	Nov 15, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular magnetic recording medium	US	Issued	12/666,255	Dec 22, 2009	8,603,649	Dec 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular magnetic recording medium and manufacturing method of the same	US	Issued	12/665,271	Feb 4, 2010	8,795,857	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING MAGNETIC RECORDING MEDIUM	US	Issued	11/862,410	Sep 27, 2007	9,005,699	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM HAVING PATTERNED AUXILIARY RECORDING LAYER A	US	Issued	12/906,414	Oct 18, 2010	8,367,228	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM, MAGNETIC RECORDING MEDIUM MANUFACTURING	US	Issued	12/526,866	Feb 13, 2008	8,076,013	Dec 13, 2011

WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISC	US	Issued	13/112,433	May 20, 2011	8,828,566	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic disk and process for manufacture thereof	US	Issued	12/295,011	Sep 29, 2008	8,257,783	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic disk and method of manufacturing Method Thereof	US	Issued	11/238,011	Sep 29, 2005	7,736,768	Jun 15, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH CONTROLLED GRAIN DIAMETERS	US	Issued	12/443,372	May 4, 2009	8,592,061	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND METHOD OF MANUFACTURING	US	Issued	12/594,092	Oct 23, 2009	8,309,239	Nov 13, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND METHOD OF MANUFACTURING THE SAME	US	Issued	12/744,829	May 26, 2010	9,005,782	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND METHOD OF MANUFACTURING THE SAME	US	Issued	12/744,611	May 25, 2010	9,245,568	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH GUARD LAYER BETWEEN AUXILIARY AND MAG	US	Issued	12/745,206	May 27, 2010	8,605,388	Dec 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Method of manufacturing perpendicular magnetic recording medium and perpendicular	US	Issued	12/934,975	Jan 26, 2011	8,623,528	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/934,979	Dec 20, 2010	8,697,261	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND PROCESS FOR MANUFACTURE	US	Issued	13/119,057	May 5, 2011	8,871,368	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND MANUFACTURING METHOD THEREOF	US	Issued	14/930,229	Nov 2, 2015	9,984,715	Nov 29, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND MANUFACTURING METHOD THEREOF	US	Issued	13/121,901	Jun 20, 2011	9,177,586	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular Magnetic Recording Disc	US	Issued	13/112,323	May 20, 2011	9,240,204	Jan 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular Magnetic Recording Disc	US	Issued	13/149,613	May 31, 2011	9,349,404	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING DISK	US	Issued	13/149,659	May 31, 2011	8,951,651	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND METHOD OF MANUFACTURING THE SAME	US	Issued	12/666,552	Oct 1, 2010	8,551,627	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND PERPENDICULAR MAGNETIC RE	US	Issued	12/602,446	Nov 30, 2009	8,758,911	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/602,430	May 30, 2008	8,298,689	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Method for producing a perpendicular magnetic recording medium	US	Issued	13/322,520	Feb 13, 2012	8,795,765	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/749,147	Mar 29, 2010	8,431,257	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/751,329	Mar 31, 2010	8,895,163	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM AND METHOD OF MANUFACTURING	US	Issued	12/749,854	Mar 30, 2010	8,431,258	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Lubricant Compound for magnetic disk and magnetic disk	US	Issued	13/260,841	Dec 13, 2011	9,558,778	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING MAGNETIC RECORDING MEDIUM, AND MAGNETIC REC	US	Issued	13/202,255	Aug 18, 2011	9,424,873	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK AND METHOD FOR MANUFACTURING SAME	US	Issued	13/133,124	Aug 24, 2011	8,877,359	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC DISC	US	Issued	13/048,139	Mar 15, 2011	8,865,327	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC DISC	US	Issued	13/096,307	Apr 28, 2011	8,546,000	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY ASSISTED MAGNETIC RECORDING DISK WITH ION-IMPLANT FACILITATED N	US	Issued	13/074,529	Mar 29, 2011	8,634,155	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus of single write magnetic disc	US	Issued	13/071,132	Mar 24, 2011	8,922,936	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	12/987,704	Jan 10, 2011	8,859,118	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA	US	Issued	13/149,540	May 31, 2011	8,999,535	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular magnetic recording media and methods for producing the same	US	Issued	13/166,002	Jun 22, 2011	9,472,227	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING MEDIA AND MAGNETIC DISC APPARATUS	US	Issued	13/161,394	Jun 15, 2011	8,559,137	Oct 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Lubricant for magnetic disc, magnetic disc and method of producing the same	US	Issued	13/166,065	Jun 22, 2011	8,697,262	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EVALUATING DUAL STAGE ACTUATOR RESPONSE IN A DISK DRIVE BY ADDING SINUSOID	US	Issued	13/104,835	May 10, 2011	8,724,254	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR IMPROVING THE STRENGTH OF GLASS SUBSTRATES	US	Issued	13/153,320	Jun 3, 2011	8,846,962	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FILE BASED SHINGLED DATA STORAGE UTILIZING MULTIPLE MEDIA TYPES	US	Issued	13/173,587	Jun 30, 2011	8,756,382	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A DISK CLAMP WITH OPENINGS DIRECTLY RADially OUTBOARD OF	US	Issued	13/053,771	Mar 22, 2011	8,305,708	Nov 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING OF HARD MASKS FOR PATTERNING MAGNETIC MEDIA	US	Issued	13/938,131	Jul 9, 2013	9,064,521	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/165,017	Jun 21, 2011	8,634,280	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHE OPTIMIZATION OF A DATA STORAGE DEVICE BASED ON PROGRESS OF BOOT CO	US	Issued	13/174,760	Jun 30, 2011	9,286,079	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	VACUUM PICKUP ASSEMBLIES FOR PICKING UP ARTICLES AND MINIMIZING CONTAMIN	US	Issued	13/050,675	Mar 17, 2011	8,485,579	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH MEMORY DEVICE COMPRISING HOST INTERFACE FOR PROCESSING A MULTI-CON	US	Issued	13/073,638	Mar 28, 2011	8,924,627	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS FOR FABRICATING A MAGNETIC POLE AND SHIELDS	US	Issued	13/154,191	Jun 6, 2011	8,578,594	Nov 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DRIVE BIAS AND DAMPING FOR TRAYLESS DISK DRIVE ENCLOSURES	US	Issued	13/409,008	Feb 29, 2012	8,902,579	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING ACOUSTIC NOISE IN A DISK DRIVE WHEN EXITING IDLE MODE	US	Issued	14/263,511	Apr 28, 2014	8,995,082	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING ACOUSTIC NOISE IN A DISK DRIVE WHEN EXITING IDLE MODE	US	Issued	13/153,282	Jun 3, 2011	8,760,796	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MAPPING OUT DATA TRACKS TO AVOID THERMAL ASPERITIES	US	Issued	13/167,559	Jun 23, 2011	8,687,313	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMING DATA RETENTION THAT INCORPORATES ENV	US	Issued	13/159,720	Jun 14, 2011	8,719,531	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR NAS DEVICE PAIRING AND MIRRORING	US	Issued	14/672,484	Mar 30, 2015	9,503,436	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR NAS DEVICE PAIRING AND MIRRORING	US	Issued	13/491,491	Jun 7, 2012	9,009,525	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH SMALL GRAIN SIZE AND NARROW C-AXIS DISPERS	US	Issued	13/174,604	Jun 30, 2011	8,956,741	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CONTROLLING DAMPING OF MAGNETIC MEDIA FOR ASS	US	Issued	13/157,676	Jun 10, 2011	8,658,292	Feb 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR SERVICING HOST COMMANDS BY A DISK DRIVE	US	Issued	13/270,130	Oct 10, 2011	8,909,889	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NANO SCALE POLE TIP BULGE	US	Issued	13/315,098	Dec 8, 2011	8,520,336	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	A MAGNETIC RECORDING POLE HAVING A DUAL SIDEWALL ANGLE	US	Issued	13/169,685	Jun 27, 2011	8,705,205	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING TABLE FOR IMPROVING WRITE OPERATION EFFICIENCY	US	Issued	13/155,189	Jun 7, 2011	8,924,629	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE DRIVE WITH REDUCED POWER UP TIME	US	Issued	13/152,645	Jun 3, 2011	8,793,429	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITIZED ACCESS FOR MEDIA WITH HETEROGENEOUS ACCESS RATES	US	Issued	13/172,737	Jun 29, 2011	9,003,101	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EAMR HEAD HAVING IMPROVED OPTICAL COUPLING EFFICIENCY	US	Issued	13/169,720	Jun 27, 2011	8,325,569	Dec 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A LASER SUBMOUNT FOR AN ENERGY ASSISTED	US	Issued	13/952,932	Jul 29, 2013	8,860,216	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A LASER SUBMOUNT FOR AN ENERGY ASSISTED	US	Issued	13/172,583	Jun 29, 2011	8,518,748	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC READ TRANSDUCER HAVING AN I	US	Issued	13/170,506	Jun 28, 2011	8,493,695	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR IMPROVING WEAR-LEVELING PERFORMANCE IN SOLID-STA	US	Issued	13/172,772	Jun 29, 2011	8,898,373	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCELERATED TRANSLATION POWER RECOVERY	US	Issued	13/330,426	Dec 19, 2011	8,819,367	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EVALUATING BURST METRIC	US	Issued	13/169,938	Jun 27, 2011	8,970,980	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PERFORMING FORCE UNIT ACCESS WRITES ON A DISK	US	Issued	13/174,547	Jun 30, 2011	8,990,493	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR DETERMINING STORAGE CAPACITY ERROR FOR A DATA	US	Issued	13/282,274	Oct 26, 2011	8,711,665	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR FORMING MAGNETIC MEDIA WITH AN UNDERLAYER	US	Issued	13/112,959	May 20, 2011	8,609,263	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD STACK ASSEMBLY HAVING A FLEXIBLE PRINTED CIRCUIT WITH STIFFEN	US	Issued	13/163,387	Jun 17, 2011	8,259,417	Sep 4, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SCREW FEEDING APPARATUS TO DELIVER A SCREW FROM A VIBRATING RAIL TO A SCREW	US	Issued	13/171,150	Jun 28, 2011	8,789,446	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MANUFACTURING HYBRID COILS FOR MAGNETIC WRITE HEADS USED IN	US	Issued	13/932,332	Jul 1, 2013	9,117,464	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING HYBRID COILS FOR MAGNETIC WRITE HEADS	US	Issued	13/174,619	Jun 30, 2011	8,514,517	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING D	US	Issued	13/273,203	Oct 13, 2011	8,320,220	Nov 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION ASSEMBLY WITH EMBEDDED IN-PLANE ACTUATOR AT F	US	Issued	13/626,846	Sep 25, 2012	8,446,694	May 21, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FINE ACTUATION OF A HEAD DURING OPERATION OF A DISK DRIVE	US	Issued	13/672,636	Nov 8, 2012	8,593,764	Nov 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY WITH ROTARY FINE ACTUATOR AT FLEXURE TONGU	US	Issued	13/159,598	Jun 14, 2011	8,295,012	Oct 23, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVED ENCODING OF DATA IN DATA STORAGE DEVI	US	Issued	13/417,057	Mar 9, 2012	9,203,434	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR HIGH PERFORMANCE COMMAND PROCESSING IN SOLID ST	US	Issued	13/219,555	Aug 26, 2011	8,423,722	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DECREASING AN ADAPTING DELAY BASED ON SPEED THAT A SETTLE PARAM	US	Issued	14/032,023	Sep 19, 2013	8,842,385	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR FORMING MEMS ASSEMBLIES INCORPORATING GETTERS	US	Issued	13/198,448	Aug 4, 2011	9,212,051	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH REPLACEABLE PROTECTION DEVICE	US	Issued	13/333,985	Dec 21, 2011	8,498,088	Jul 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID CAPACITIVE AND PIEZOELECTRIC MOTION SENSING TRANSDUCER	US	Issued	13/301,581	Nov 21, 2011	8,991,251	Mar 11, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING A POLE PEDESTAL FOR MICROWAVE ASSIS	US	Issued	13/271,555	Oct 12, 2011	8,456,967	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLIES FOR MINIMIZING STRESS ON SLIDER SOLDER JOINTS	US	Issued	13/220,508	Aug 29, 2011	8,208,224	Jun 26, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY HAVING A FLEXURE BOND PAD SHELF SEPARATE FR	US	Issued	13/231,685	Sep 13, 2011	8,488,281	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SORTED SERPENTINE MAPPING FOR STORAGE DRIVES	US	Issued	13/329,053	Dec 16, 2011	9,213,493	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING TOUCHDOWN EVENT BY EVALUATING FREQUENCY RESPONSE C	US	Issued	13/224,118	Sep 1, 2011	8,699,173	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY WITH FLEXURE HAVING STACKED INTERLEAVED TR	US	Issued	13/302,979	Nov 22, 2011	8,488,279	Jul 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DYNAMICALLY ADJUSTING GARBAGE COLLECTION POLICIES	US	Issued	14/881,103	Oct 12, 2015	9,678,671	Jun 13, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DYNAMICALLY ADJUSTING GARBAGE COLLECTION POLICIES	US	Issued	13/173,266	Jun 30, 2011	9,158,670	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH DYNAMIC FLY HEIGHT HEATING AND HAVING THE	US	Issued	13/328,688	Dec 16, 2011	8,749,920	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULING COMMANDS IN A DEPENDENT ARRAY OF DISK DRIVES	US	Issued	14/065,354	Oct 28, 2013	9,128,639	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC READ TRANSDUCER HAVING A BI	US	Issued	13/854,828	Apr 1, 2013	8,638,529	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC READ TRANSDUCER HAVING A BI	US	Issued	13/297,204	Nov 15, 2011	8,422,176	Apr 16, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH REDUCED-SIZE TRANSLATION TABLE	US	Issued	13/316,039	Dec 9, 2011	8,856,438	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR SELECTIVE DEFRAGMENTATION IN A DATA STORAGE DEVICE	US	Issued	13/308,403	Nov 30, 2011	8,819,375	Aug 26, 2014

WESTERN DIGITAL TECHNOLOGIES, INC.	BUFFER MEMORY PROTECTION UNIT	US	Issued	13/330,450	Dec 19, 2011	9,305,142	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DRIVE ADJUSTING SPIN-UP PROFILE BASED ON CACHE STATUS OF NON-VOLATILE	US	Issued	13/230,638	Sep 12, 2011	8,630,056	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM, DEVICES, AND METHODS FOR BINDING CONT	US	Issued	13/460,604	Apr 30, 2012	9,214,184	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SHUNTING PADS FOR OPTIMIZING TARGET EROSION IN SPUTTERING PROC	US	Issued	13/250,996	Sep 30, 2011	8,685,214	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LOADING DIFFERENT DEVICE DRIVERS FOR ONE DEVICE	US	Issued	13/335,515	Dec 22, 2011	8,832,327	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A SIDE SHIELD FOR A MAGNETIC RECORDING TRANSDUCER	US	Issued	13/851,348	Mar 27, 2013	8,982,508	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING A LASER WRITE POWER FOR HEAT ASSISTED MAGNETIC RECO	US	Issued	13/246,685	Sep 27, 2011	8,897,103	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR AUTHENTICATION AND DATA ENCRYPTION	US	Issued	13/396,546	Feb 14, 2012	8,819,443	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT SENSOR COMPRISING DIFFERENTIAL AMPLIFIER BIASED BY LEAKAGE CURREN	US	Issued	13/235,209	Sep 16, 2011	8,599,512	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR A STORAGE DEVICE	US	Issued	13/673,956	Nov 9, 2012	8,959,281	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING A REDUCED SHIE	US	Issued	13/302,994	Nov 22, 2011	8,675,318	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CONCURRENTLY EXECUTING DATA ACCESS REQUESTS	US	Issued	13/298,272	Nov 16, 2011	8,938,583	Jan 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANISM TO MANAGE ACCESS TO USER DATA AREA WITH BRIDGED DIRECT-ATTACH	US	Issued	13/429,094	Mar 23, 2012	8,646,054	Feb 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLAYERS FOR MAGNETIC RECORDING MEDIA	US	Issued	13/234,399	Sep 16, 2011	8,758,912	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN NFT USING A SACRIFICIAL NFT STRUCTURE	US	Issued	13/291,702	Nov 8, 2011	8,491,801	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING WHEN HEAD IS ON RAMP	US	Issued	14/040,996	Sep 30, 2013	8,861,126	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING WHEN HEAD IS ON RAMP	US	Issued	13/237,727	Sep 20, 2011	8,786,976	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MAGNETIC READ HEAD WITH AFFIXED AND RECESSED LASER DEVICE	US	Issued	13/330,325	Dec 19, 2011	8,665,677	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR STORAGE DEVICE READ/WRITE HEAD MALFUNCTION DETE	US	Issued	13/450,290	Apr 18, 2012	8,755,136	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STRUCTURE AND METHOD TO MEASURE WAVEGUIDE POWER ABSORPTION BY SURFACE	US	Issued	13/314,962	Dec 8, 2011	8,749,790	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR FABRICATING COMPONENTS WITH PRECISE DIMENSION CONTROL	US	Issued	13/221,769	Aug 30, 2011	8,288,204	Oct 16, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	NETWORK ATTACHED STORAGE (NAS) PROTECTION METER AND METHODS FOR ALERTI	US	Issued	13/367,273	Feb 6, 2012	9,122,417	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR CONTENT DISCOVERY, AGGREGATION AND PRE	US	Issued	13/359,371	Jan 26, 2012	8,868,666	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FORMING A FULLY WRAPPED-AROUND SHIELDED PMR WRITER POLE	US	Issued	13/972,002	Aug 21, 2013	9,520,146	Dec 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF RETAINING ELASTOMERIC SEAL	US	Issued	13/308,423	Nov 30, 2011	8,892,762	Feb 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	RUGGEDIZED ENCLOSURE FOR A DATA STORAGE DEVICE	US	Issued	29/505,661	Dec 23, 2015	7/95,874	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	RUGGEDIZED ENCLOSURE FOR A DATA STORAGE DEVICE	US	Issued	29/613,711	Aug 11, 2017	D829,213	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	RUGGEDIZED ENCLOSURE FOR DATA STORAGE DEVICE	US	Issued	13/308,410	Nov 30, 2011	9,994,380	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH A DAMPING INSERT SHEET BETWEEN A HOUSIN	US	Issued	14/225,376	Mar 25, 2014	9,036,295	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION STORAGE DEVICE WITH A DAMPING INSERT SHEET BETWEEN A HOUSIN	US	Issued	13/331,889	Dec 20, 2011	8,705,201	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TO COMMUNICATE WITH A HOST IN A SATA OR A USB MODE	US	Issued	13/287,947	Nov 2, 2011	9,158,722	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SELECTING DISTURBANCE SIGNAL FOR FEED-FORWARD COMPENSATION	US	Issued	14/253,797	Apr 15, 2014	8,953,278	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SELECTING DISTURBANCE SIGNAL FOR FEED-FORWARD COMPENSATION	US	Issued	13/298,241	Nov 16, 2011	8,737,013	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FILE MANAGEMENT AMONG DIFFERENT ZONES OF STORAGE MEDIA	US	Issued	14/817,538	Aug 4, 2015	9,477,681	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FILE MANAGEMENT AMONG DIFFERENT ZONES OF STORAGE MEDIA	US	Issued	13/526,241	Jun 18, 2012	9,128,820	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR NAS-LEVEL DATA PROTECTION BASED ON NAS CONFIGUR	US	Issued	13/408,999	Feb 29, 2012	8,856,293	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METADATA RECOVERY IN A DISK DRIVE	US	Issued	13/333,657	Dec 21, 2011	8,612,706	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASURING PERFORMANCE OF DATA STORAGE SYSTEMS	US	Issued	14/873,629	Oct 2, 2015	10,108,347	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASURING PERFORMANCE OF DATA STORAGE SYSTEMS	US	Issued	13/353,064	Jan 18, 2012	9,158,461	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANT POWER BACKPLANE FOR NAS STORAGE DEVICE	US	Issued	13/436,849	Mar 31, 2012	9,535,472	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH PERFORMANCE MEDIA TRANSPORT MANAGER ARCHITECTURE FOR DATA STORA	US	Issued	13/334,541	Dec 22, 2011	8,904,091	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE GENERATING REDUNDANCY FOR DATA PATH PROTECTION OF A	US	Issued	13/327,326	Dec 15, 2011	8,671,250	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DEFLECTION DAMPER FOR DISK DRIVE	US	Issued	13/327,267	Dec 15, 2011	8,797,677	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHING OF DATA IN DATA	US	Issued	15/040,030	Feb 10, 2016	9,898,406	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHING OF DATA IN DATA STORAGE SYSTEMS BY MANAGING THE SIZE OF READ AND	US	Issued	13/301,594	Nov 21, 2011	9,268,701	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	VARIABLE REDUNDANCY LEVEL IN A STORAGE SYSTEMS	US	Issued	14/625,026	Feb 18, 2015	9,268,657	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	VARYING DATA REDUNDANCY IN STORAGE SYSTEMS	US	Issued	13/301,567	Nov 21, 2011	8,977,804	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DATA CACHING USING A MULTI-TIERED MEMORY	US	Issued	13/301,543	Nov 21, 2011	8,977,803	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SHOCK MOUNT AND RETAINER FOR A DISK DRIVE ENCLOSURE	US	Issued	13/434,772	Mar 29, 2012	8,462,460	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC AND ON-DEMAND TESTING OF NON-VOLATILE STORAGE DEVICES	US	Issued	13/327,535	Dec 15, 2011	8,806,283	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR ALIGNING SUBSTRATES FOR DIRECT LASER COUPLING IN AN	US	Issued	13/332,293	Dec 20, 2011	8,773,664	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH PERFORMANCE CACHING ARCHITECTURE FOR DATA STORAGE SYSTEMS	US	Issued	13/363,200	Jan 31, 2012	8,898,423	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION CLAMP FOR CLAMPING A DISK DRIVE SUSPENSION TO AN ACTUATOR ARM	US	Issued	14/205,342	Mar 11, 2014	9,196,301	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFYING DEFECTIVE SLOTS IN A DISK DRIVE TESTER	US	Issued	13/330,461	Dec 19, 2011	8,717,694	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER CONFIGURED FOR HIGH DATA RATE RECORDING	US	Issued	13/331,020	Dec 20, 2011	8,797,684	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EVALUATING RATIO OF FLY HEIGHT SETTING FOR FIRST AND SECOND HEAD	US	Issued	13/328,267	Dec 16, 2011	8,730,612	May 20, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEFECT MANAGEMENT USING SIGNATURE IDENTIFICATION	US	Issued	13/328,863	Dec 16, 2011	8,959,416	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING ENHANCED THERMAL EXPANSION FOR HARD D	US	Issued	13/928,189	Jun 26, 2013	8,665,561	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING ENHANCED THERMAL EXPANSION FOR HARD D	US	Issued	13/332,241	Dec 20, 2011	8,670,214	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION TAIL DESIGN FOR A HEAD GIMBAL ASSEMBLY OF A HARD DISK DRIVE	US	Issued	13/331,313	Dec 20, 2011	8,665,566	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO MANUFACTURE A FLEXIBLE CABLE FOR A DISK DRIVE	US	Issued	13/416,992	Mar 9, 2012	8,702,908	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING CASCADED VOLTAGE REGULATORS DURING POWE	US	Issued	13/314,475	Dec 8, 2011	8,767,354	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER FAILURE MANAGEMENT IN DISK DRIVES	US	Issued	14/792,798	Jul 7, 2015	9,390,749	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CHARGING CAPACITOR USING MOTOR SUPPLY VOLTAGE DURING POWER F	US	Issued	13/316,128	Dec 9, 2011	9,093,105	Jul 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ALIGNING PARTITION TO BOUNDARY OF SECTOR WHEN PARTI	US	Issued	13/356,453	Jan 23, 2012	8,996,839	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SHIFTING DATA CHUNKS OF ALIGNMENT ZONE RELATIVE TO SE	US	Issued	13/356,542	Jan 23, 2012	9,063,838	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING PERPENDICULAR MAGNETIC WRITERS HAVIN	US	Issued	13/279,105	Oct 21, 2011	8,730,238	Nov 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING METHOD FOR MEDIA HAVING MOMENT KEEPE	US	Issued	14/042,199	Sep 30, 2013	9,047,880	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING MEDIA HAVING MOMENT KEEPER LAYER	US	Issued	13/332,290	Dec 20, 2011	8,565,050	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING STACKED WRITER LEADS FOR MAGNETIC TR	US	Issued	13/291,766	Nov 8, 2011	8,693,141	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR INDICATION OF ACTIVITY STATUS OF A STORAGE DEVICE	US	Issued	13/335,698	Dec 22, 2011	8,751,699	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING SOFT AND HARD	US	Issued	14/290,932	May 29, 2014	9,087,534	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING SOFT AND HARD	US	Issued	13/332,313	Dec 20, 2011	8,760,823	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ASSEMBLY INCLUDING A NVSM TO STORE CONFIGURATION DATA FO	US	Issued	14/197,053	Mar 4, 2014	8,937,782	Jan 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ASSEMBLY INCLUDING A NVSM TO STORE CONFIGURATION DATA FO	US	Issued	13/465,716	May 7, 2012	8,749,910	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING AN ADAPTIVE R	US	Issued	13/332,275	Dec 20, 2011	8,599,520	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	BI-LAYER NFT CORE SPACER FOR EAMR SYSTEM AND METHOD OF MAKING THE SAME	US	Issued	13/312,925	Dec 6, 2011	8,773,956	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEFINING NON-CIRCULAR DATA TRACKS RELATIVE TO A ROTATION AXIS OF	US	Issued	13/406,797	Feb 28, 2012	8,717,704	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	BVCM HOLD DOWN APPARATUS TO PREVENT PIVOT BEARING DAMAGE AT TVCM INSTA	US	Issued	13/298,979	Nov 17, 2011	9,269,402	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR DATA THROTTLING DURING DISK DRIVE POWER DOWN	US	Issued	14/074,592	Nov 7, 2013	9,001,449	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING AND RECONSTRUCTING MAPPING TABLE DATA IN A DATA STORAGE SYST	US	Issued	13/468,999	May 10, 2012	8,984,247	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR HANDLING WRITE DATA ACCESS REQUESTS IN DATA STO	US	Issued	13/330,250	Dec 19, 2011	9,348,741	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS FOR RECYCLING SLURRY MATERIALS DURING POLISHING PROCESSES	US	Issued	13/333,950	Dec 21, 2011	8,696,404	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA STORAGE MECHANISM PROVIDING COHERENCY AND SEGMENTED DATA	US	Issued	14/923,000	Oct 26, 2015	10,379,755	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA STORAGE MECHANISM PROVIDING COHERENCY AND SEGMENTED DATA	US	Issued	16/523,951	Jul 26, 2019	10,942,656	Mar 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA STORAGE MECHANISM PROVIDING COHERENCY AND SEGMENTED DATA	US	Issued	17/153,719	Jan 20, 2021	11,543,974	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA STORAGE MECHANISM PROVIDING COHERENCY AND SEGMENTED DATA	US	Issued	13/478,036	May 22, 2012	9,170,932	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DEFECT SCANNING FOR A DISK DRIVE	US	Issued	13/414,008	Mar 7, 2012	8,749,905	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR TRACK SQUEEZE BY WRITING NON-CIRCULAR SERVO	US	Issued	13/406,778	Feb 28, 2012	8,749,904	Jun 10, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA MANAGEMENT USING GARBAGE COLLECTION AND HYBRID SELF MAPPIN	US	Issued	13/468,946	May 10, 2012	8,966,205	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM DATA MANAGEMENT USING GARBAGE COLLECTION AND LOGS	US	Issued	13/470,206	May 11, 2012	9,977,612	May 22, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING RADIALLY COHERENT REFERENCE PATTERN FOR SERVO BURST	US	Issued	13/418,966	Mar 13, 2012	8,824,081	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR LASER INDUCED HEAD PROTRUSION IN HEAT ASSISTE	US	Issued	13/418,904	Mar 13, 2012	8,456,980	Jun 4, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING SIDE SHIELDS HAVING NON-CONFORMAL REGIONS FOR A M	US	Issued	13/481,158	May 25, 2012	8,792,208	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCREASING LASER POWER AT BEGINNING OF WRITE IN HEAT ASSISTED M	US	Issued	13/418,843	Mar 13, 2012	8,441,909	May 14, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CORRECTING READ/WRITE OVERLAY ERRORS IN THE MA	US	Issued	13/537,018	Jun 28, 2012	9,427,842	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING ADSORPTIVE SURFACE COATINGS ON INTERN	US	Issued	13/324,807	Dec 13, 2011	8,773,812	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR AN ENHANCED CONTROLLER ARCHITECTURE IN DATA ST	US	Issued	14/185,032	Feb 20, 2014	9,021,168	Apr 28, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR AN ENHANCED CONTROLLER ARCHITECTURE IN DATA STORAGE SYSTEMS	US	Issued	13/226,393	Sep 6, 2011	8,700,834	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVED DATA MANAGEMENT IN DATA STORAGE SYSTEMS	US	Issued	13/226,437	Sep 6, 2011	9,195,530	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ERROR INJECTION IN DATA STORAGE SYSTEMS	US	Issued	13/297,089	Nov 15, 2011	8,707,104	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ERROR INJECTION IN DATA STORAGE SYSTEMS	US	Issued	14/185,255	Feb 20, 2014	9,542,287	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR DETAILED ERROR REPORTING IN DATA STORAGE SYSTEMS	US	Issued	14/185,770	Feb 20, 2014	9,058,261	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR DETAILED ERROR REPORTING IN DATA STORAGE SYSTEMS	US	Issued	13/226,418	Sep 6, 2011	8,713,357	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR TUNABLE PLATING SEED STEP COVERAGE	US	Issued	13/422,997	Mar 16, 2012	8,670,213	Mar 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	VIRTUAL EXTENSION OF BUFFER TO REDUCE BUFFER OVERFLOW DURING TRACING	US	Issued	13/419,214	Mar 13, 2012	8,612,650	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	CHANGING THE PERFORMANCE LEVEL OF A DISK DRIVE	US	Issued	13/433,856	Mar 29, 2012	8,773,787	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR JOINT TWO-DIMENSIONAL SELF-ITERATING EQUALIZATION	US	Issued	13/404,380	Feb 24, 2012	8,760,782	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING INLINE PARAMETER SERVICE IN DATA STORAGE SYSTEMS	US	Issued	13/430,447	Mar 26, 2012	9,053,008	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING ESTIMATED SERVO STATE TO COMPENSATE FOR TRANSIENT WRITE ERRORS	US	Issued	14/644,415	Mar 11, 2015	9,454,989	Sep 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING ESTIMATED SERVO STATE TO COMPENSATE FOR TRANSIENT WRITE ERRORS	US	Issued	13/529,958	Jun 21, 2012	8,995,075	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FASTENER CONTAINER TO PROVIDE FASTENERS TO A FASTENER FEEDER	US	Issued	13/429,176	Mar 23, 2012	9,150,345	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE QUADRUPLER COMPRISING A SECOND CHARGING CAPACITOR CHARGED USING A SECOND CHARGING CAPACITOR	US	Issued	13/347,562	Jan 10, 2012	8,717,699	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GENERATING A DISK LOCKED CLOCK USING RADIAL DEPENDENT TIMING FEEDBACK	US	Issued	14/149,565	Jan 7, 2014	8,934,191	Jan 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC TRANSDUCER HAVING A HIGH MAGNETIC FIELD	US	Issued	13/479,095	May 23, 2012	8,582,241	Nov 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCREASING INTEGRATOR OUTPUT RANGE TO COMPLETE SEEK OPERATION	US	Issued	13/454,752	Apr 24, 2012	8,767,343	Jul 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MRAM-BASED SECURITY FOR DATA STORAGE SYSTEMS	US	Issued	13/436,327	Mar 30, 2012	8,909,942	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CHARGING BACK-UP CHARGE STORAGE ELEMENT FOR DATA STORAGE SYSTEMS	US	Issued	13/407,984	Feb 29, 2012	8,724,422	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW FOAM MEDIA CLEANING DETERGENT	US	Issued	13/433,037	Mar 28, 2012	9,029,308	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PRECAUTIONARY MEASURES FOR DATA STORAGE DEVICE ENVIRONMENTAL CONDITION MONITORING	US	Issued	14/582,091	Dec 23, 2014	9,257,143	Jun 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ASSEMBLY INCLUDING A NVSM LOCATED WITHIN A PREAMPLIFIER TRAILING EDGE	US	Issued	13/465,672	May 7, 2012	8,755,141	Feb 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING FLY HEIGHT ACTUATOR TO COMPENSATE FOR LASER INDUCED WRITE ERRORS	US	Issued	13/556,132	Jul 23, 2012	8,619,508	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING UNRELIABLE MEMORY IN DATA STORAGE SYSTEMS	US	Issued	13/455,491	Apr 25, 2012	9,003,224	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR IMPROVING ADHESION ON DIELECTRIC SUBSTRATES	US	Issued	15/145,205	May 3, 2016	9,940,950	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR IMPROVING ADHESION ON DIELECTRIC SUBSTRATES	US	Issued	13/480,278	May 24, 2012	9,349,392	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITER POLE WITH LEADING AND TRAILING EDGE	US	Issued	13/436,712	Mar 30, 2012	8,520,337	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL CONFIGURATION ENCLOSURE WITH OPTIONAL SHIELDING	US	Issued	13/363,025	Jan 31, 2012	8,780,004	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING TRANSDUCER WITH AFM INSERTION LAYER	US	Issued	13/436,694	Mar 30, 2012	8,493,693	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CONTROLLING LIGHT PHASE DIFFERENCE IN INTERFEROMETER	US	Issued	13/399,325	Feb 17, 2012	8,675,455	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR DISSIPATING HEAT FROM A NEAR-FIELD TRANSDUCER IN A DISK DRIVE	US	Issued	13/458,949	Apr 27, 2012	8,526,275	Sep 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCREASING CAPACITY BY ADJUSTING A SERVO GATE DURING WRITE OPERATION	US	Issued	13/485,373	May 31, 2012	8,711,506	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING EXTENDED RANGE HEAD PROXIMITY SENSOR	US	Issued	14/185,909	Feb 20, 2014	9,053,730	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING EXTENDED RANGE HEAD PROXIMITY SENSOR	US	Issued	13/470,190	May 11, 2012	8,681,442	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR CHARACTERIZING CARBON OVERCOAT	US	Issued	13/490,214	Jun 6, 2012	9,343,275	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EVALUATING MULTIPLE VIBRATION SENSOR OUTPUTS TO ENABLE WRITE PROTECTION	US	Issued	13/451,373	Apr 19, 2012	8,922,937	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ANTIFERROMAGNETICALLY-COUPLED SOFT BIAS MAGNETORESISTIVE READ HEAD, AND METHODS FOR USING SUCH HEADS	US	Issued	13/444,723	Apr 11, 2012	8,611,054	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIVERSAL TEST CONNECTOR FOR CONNECTING A SATA OR USB DATA STORAGE DEVICE TO A TEST SYSTEM	US	Issued	13/527,460	Jun 19, 2012	8,753,146	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR UNIFORMLY IMPLANTING MATERIALS ON SUBSTRATES USING A MASK	US	Issued	13/468,919	May 10, 2012	8,674,327	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ALIGNING COMPONENTS OF A HEAD STACK ASSEMBLY ON A SUBSTRATE	US	Issued	13/431,660	Mar 27, 2012	8,611,052	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH BALANCE PLUG HAVING THERMALLY DEFORMABLE PORTION	US	Issued	13/476,563	May 21, 2012	8,922,946	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING IMPROVED PINNACLES	US	Issued	14/556,411	Dec 1, 2014	9,269,382	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUSES FOR PERFORMING WAFER LEVEL CHARACTERIZATION OF DISK DRIVES	US	Issued	13/478,058	May 22, 2012	8,753,903	Jun 17, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MAPPING LOW FREQUENCY WRITE ADDRESSES TO CIRCULAR BUFFER WRITING	US	Issued	13/554,994	Jul 20, 2012	8,699,175	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GARBAGE COLLECTION BASED ON THE INACTIVITY LEVEL OF STORED DATA	US	Issued	13/488,249	Jun 4, 2012	8,788,778	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING SERVO TIMING TO COMPENSATE FOR TRANSIENT WHEN CROSSING TRACKS	US	Issued	13/529,904	Jun 21, 2012	8,780,477	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR IMPROVING LASER ALIGNMENT AND OPTICAL TRANSMISSION	US	Issued	13/631,641	Sep 28, 2012	8,681,594	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	RECODING MEDIA WITH MULTIPLE BI-LAYERS OF HEATSINK LAYER AND AMORPHOUS MEDIA	US	Issued	13/451,380	Apr 19, 2012	8,605,555	Dec 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	UNDERLAYERS FOR HEAT ASSISTED MAGNETIC RECORDING (HAMR) MEDIA	US	Issued	13/479,217	May 23, 2012	8,941,950	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MULTIPLEXING READ SIGNAL AND FLY HEIGHT SIGNAL TO A TRANSMISSION LINE	US	Issued	13/588,999	Aug 17, 2012	8,665,547	Mar 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANISMS FOR EFFICIENT MANAGEMENT OF SYSTEM DATA IN DATA STORAGE SYSTEMS	US	Issued	13/533,529	Jun 26, 2012	8,954,653	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR SYSTEM-LEVEL DISK DRIVE VIBRATION AND SHOCK TESTING	US	Issued	13/458,863	Apr 27, 2012	9,116,066	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR FORMING MAGNETIC RECORDING MEDIA WITH IMPROVED SURFACE PROPERTIES	US	Issued	13/436,596	Mar 30, 2012	9,269,480	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESS-FIT EMI SHIELD AND ELECTRONIC DEVICES INCLUDING SAME	US	Issued	13/479,208	May 23, 2012	8,929,087	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR CORRECTING FOR THERMAL DRIFT IN MICROSCOPY IMAGES	US	Issued	13/537,007	Jun 28, 2012	9,989,511	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING EFFECTS OF WIDE AREA TRACK ERASURE IN A DISK DRIVE	US	Issued	13/525,611	Jun 18, 2012	8,699,159	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STRESS BUFFER FOR NEAR-FIELD TRANSDUCER IN ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	13/531,380	Jun 22, 2012	8,619,512	Dec 31, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED ACTIVE FEEDBACK SLICE & VIEW MILLING OF MAGNETIC HEAD CROSS SECTIONS	US	Issued	14/088,215	Nov 22, 2013	9,293,157	Mar 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING SENSOR WITH AFM EXCHANGE COUPLED SHIELD STABILIZATION	US	Issued	13/607,593	Sep 7, 2012	8,797,692	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING FEED-FORWARD COMPENSATION AND PHASE SHIFT COMPENSATION	US	Issued	13/564,653	Aug 1, 2012	8,937,784	Jan 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR REDUCING THERMAL PROTRUSION OF AN NFT	US	Issued	13/533,150	Jun 26, 2012	8,565,049	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING A LOW ASPECT RATIO TWO LAYER COIL	US	Issued	13/532,658	Jun 25, 2012	8,786,983	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE READ HEAD WITH NARROW SHIELD-TO-SHIELD SPACING	US	Issued	14/242,717	Apr 1, 2014	9,065,043	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE READ HEAD WITH NARROW SHIELD-TO-SHIELD SPACING	US	Issued	14/740,027	Jun 15, 2015	9,412,400	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE READ HEAD WITH NARROW SHIELD-TO-SHIELD SPACING	US	Issued	13/538,650	Jun 29, 2012	8,711,528	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT ERROR HANDLING MECHANISMS IN DATA STORAGE SYSTEMS	US	Issued	14/581,846	Dec 23, 2014	9,208,020	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT ERROR HANDLING MECHANISMS IN DATA STORAGE SYSTEMS	US	Issued	14/961,856	Dec 7, 2015	9,626,118	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT ERROR HANDLING MECHANISMS IN DATA STORAGE SYSTEMS	US	Issued	13/533,152	Jun 26, 2012	8,924,832	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT RETRY MECHANISM FOR SOLID-STATE MEMORY FAILURES	US	Issued	13/592,218	Aug 22, 2012	8,788,880	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	OUT-OF-ORDER DATA TRANSFER MECHANISMS FOR DATA STORAGE SYSTEMS	US	Issued	13/659,865	Oct 24, 2012	10,095,433	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFORMAL HIGH MOMENT SIDE SHIELD SEED LAYER FOR PERPENDICULAR MAGNETIC RECORDING	US	Issued	14/246,821	Apr 7, 2014	9,123,358	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFORMAL HIGH MOMENT SIDE SHIELD SEED LAYER FOR PERPENDICULAR MAGNETIC RECORDING	US	Issued	13/493,903	Jun 11, 2012	8,724,259	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR HAVING A HIGH SPIN POLARIZATION REFERENCE LAYER	US	Issued	13/488,219	Jun 4, 2012	8,582,253	Nov 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	STARTUP CIRCUIT DETECTING STABLE SYSTEM CLOCK	US	Issued	13/570,118	Aug 8, 2012	8,885,438	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINDLE MOTOR MAGNET DIAMETER INCREASE ABOVE HEAD PLANE	US	Issued	14/448,689	Jul 31, 2014	9,007,716	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINDLE MOTOR HAVING AN INCREASED MAGNET DIAMETER ABOVE HEAD PLANE	US	Issued	13/625,692	Sep 24, 2012	8,824,095	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ULTRA-THIN HDD EMBEDDED DISK CLAMP DESIGN	US	Issued	14/225,418	Mar 25, 2014	9,299,384	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ULTRA-THIN HDD EMBEDDED DISK CLAMP DESIGN	US	Issued	13/565,713	Aug 2, 2012	8,693,139	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DRIVE RETENTION MONITOR USING REFERENCE BLOCKS	US	Issued	13/590,489	Aug 21, 2012	8,966,343	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ERROR CORRECTION CODES FOR DATA STORAGE SYSTEMS	US	Issued	14/570,820	Dec 15, 2014	10,216,574	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ERROR CORRECTION CODES FOR DATA STORAGE SYSTEMS	US	Issued	13/659,099	Oct 24, 2012	8,972,826	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING PARAMETER BY INJECTING NOISE SIGNAL AND MEASURING CROSS CORRELATION	US	Issued	13/678,495	Nov 15, 2012	8,891,192	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTING CODE ENCODER SUPPORTING MULTIPLE CODE RATES AND THROUGHPUTS	US	Issued	14/841,607	Aug 31, 2015	9,495,243	Nov 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODER SUPPORTING MULTIPLE CODE RATES AND CODE LENGTHS FOR DATA STORAGE SYSTEMS	US	Issued	13/742,243	Jan 15, 2013	8,966,339	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MONITORING DATA CHANNEL TO ENABLE USE OF DYNAMIC DATA RATE	US	Issued	13/725,965	Dec 21, 2012	9,214,963	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODER HAVING EARLY DECODING TERMINATION DETECTION	US	Issued	13/742,248	Jan 15, 2013	9,619,317	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A WRAPAROUND SHIELD FOR A MAGNETIC RECORDING TRANSDUCER	US	Issued	13/631,696	Sep 28, 2012	8,760,807	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR PREVENTING POTENTIAL MEDIA ERRORS FROM GROWING	US	Issued	13/528,686	Jun 20, 2012	8,694,841	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN NFT HAVING IMPROVED MECHANICAL STABILITY	US	Issued	13/631,756	Sep 28, 2012	8,958,168	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING A RESONANCE MODE BY INJECTING SINUSOIDS INTO A SERVO MOTOR	US	Issued	13/585,679	Aug 14, 2012	9,052,701	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CORRECTING AN ERROR IN A DETECTED GRAY CODE	US	Issued	14/576,063	Dec 18, 2014	9,424,871	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CORRECTING AN ERROR IN A DETECTED GRAY CODE	US	Issued	13/614,894	Sep 13, 2012	8,917,469	Dec 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE SENSOR FOR A MAGNETIC STORAGE SYSTEM READ HEAD, AND METHODS FOR USING SUCH HEADS	US	Issued	14/657,420	Mar 13, 2015	9,396,742	Jul 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM AND METHODS FOR ACCESSING CONTENT FROM A STORAGE DEVICE	US	Issued	13/460,616	Apr 30, 2012	8,831,217	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM AND METHODS FOR PROVISIONING CONTENT TO A STORAGE DEVICE	US	Issued	14/464,023	Aug 20, 2014	9,342,701	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM AND METHODS FOR PROVISIONING CONTENT TO A STORAGE DEVICE	US	Issued	13/460,766	Apr 30, 2012	8,831,218	Sep 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM TRANSFER OF CONTENT AND DISTRIBUTION	US	Issued	14/571,178	Dec 15, 2014	9,424,400	Aug 23, 2016

WESTERN DIGITAL TECHNOLOGIES, INC.	DIGITAL RIGHTS MANAGEMENT SYSTEM TRANSFER OF CONTENT AND DISTRIBUTION	US	Issued	13/460,805	Apr 30, 2012	8,914,634	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINDLE MOTOR HAVING CONNECTING MECHANISM CONNECTING LEAD WIRE AND CIRCUIT	US	Issued	13/029,143	Feb 17, 2011	8,416,524	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER SUPPLY WITH VOLTAGE OUTPUT RESPONSIVE TO LOAD DEMAND	US	Issued	13/923,290	Jun 20, 2012	9,252,671	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE POINTER MANAGEMENT FOR A DISK DRIVE	US	Issued	13/662,353	Oct 26, 2012	9,383,923	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICALLY CONDUCTIVE UNDERLAYER TO GROW FEET GRANULAR MEDIA WITH OXIDE	US	Issued	13/537,379	Jun 29, 2012	8,993,134	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE LOGGING FAILURE ANALYSIS DATA WHEN PERFORMING AN EMERGENCY UI	US	Issued	13/631,588	Sep 28, 2012	8,970,977	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR PHYSICAL-TO-LOGICAL MAPPING IN SOLID STATE	US	Issued	13/645,822	Oct 5, 2012	9,268,682	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TRIM COMMAND PROCESSING IN A SOLID STATE DRIVE	US	Issued	14/990,100	Jan 7, 2016	9,792,067	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED TRIM COMMAND PROCESSING IN A SOLID STATE DRIVE	US	Issued	13/666,883	Nov 1, 2012	9,251,067	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR TWO STAGE POWER-ON MAP REBUILD WITH FR	US	Issued	15/275,670	Sep 26, 2016	9,817,577	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR TWO STAGE POWER-ON MAP REBUILD WITH FR	US	Issued	13/786,352	Mar 5, 2013	9,454,474	Sep 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DATA STORAGE DEVICES AND SYSTEMS FOR FRAGMENTED FIRMWARE TAB	US	Issued	13/677,704	Nov 15, 2012	8,954,694	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR VARIABLE SIZE LOGICAL PAGE MANAGEMENT I	US	Issued	13/651,313	Oct 12, 2012	9,507,523	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	COMB GRIPPER FOR USE WITH A SHIPPING COMB AND A RAMP IN THE ASSEMBLY OF A	US	Issued	13/624,835	Sep 21, 2012	9,230,579	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PREVENTING UNDESIRABLE SUBSTANTIALLY CONCURRENT	US	Issued	13/538,844	Jun 29, 2012	9,443,431	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DATA STORAGE DEVICES AND SYSTEMS HAVING VARIABLE SIZE ECC PAGE S	US	Issued	13/594,696	Aug 24, 2012	8,898,548	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR HARDWARE-BASED GARBAGE COLLECTION IN S	US	Issued	13/654,288	Oct 17, 2012	9,489,296	Nov 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR SOLID STATE DRIVE CONTROL	US	Issued	15/345,100	Nov 7, 2016	10,055,345	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR AVOIDING LOWER PAGE CORRUPTION IN DATA STORAGE	US	Issued	13/675,913	Nov 13, 2012	9,177,638	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, SOLID STATE DRIVE CONTROLLERS AND DATA STORAGE DEVICES HAVING A	US	Issued	13/756,328	Jan 31, 2013	9,059,736	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING OVERLAPPING SERVO ZONES TO FACILITATE SERVO ZONE CRO	US	Issued	13/529,861	Jun 21, 2012	8,724,245	May 13, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ENERGY ASSISTED MAGNETIC RECORDING R	US	Issued	13/631,493	Sep 28, 2012	8,908,480	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVOING ON ZONED CONCENTRIC SERVO SECTORS OF A FIRST DISK SURFACE TO WRIT	US	Issued	13/558,243	Jul 25, 2012	8,743,504	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITY-BASED GARBAGE COLLECTION FOR DATA STORAGE SYSTEMS	US	Issued	13/727,278	Dec 26, 2012	9,430,376	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC OVERPROVISIONING FOR DATA STORAGE SYSTEMS	US	Issued	13/727,150	Dec 26, 2012	9,141,532	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR REDUCING CONDENSATION ALONG A SLIDER AIR BEARIN	US	Issued	13/610,157	Sep 11, 2012	8,599,653	Dec 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	POLARITY DETECTION OF PIEZOELECTRIC ACTUATOR IN DISK DRIVE	US	Issued	13/726,007	Dec 22, 2012	8,797,664	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ESTIMATING MICROACTUATOR GAIN BY INJECTING A SINUSOID INTO A CLO	US	Issued	13/682,673	Nov 20, 2012	8,780,489	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CHARACTERIZING NEAR FIELD TRANSDUCER PERFORMAN	US	Issued	13/621,728	Sep 17, 2012	8,836,949	Sep 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR A DATA STORAGE DEVICE	US	Issued	15/651,560	Jul 17, 2017	10,248,362	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR A DATA STORAGE DEVICE	US	Issued	13/784,494	Mar 4, 2013	9,720,627	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR FABRICATING A MAGNETIC RECORDING POLE	US	Issued	13/623,839	Sep 20, 2012	8,625,233	Jan 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DEPOSITION IN HIGH ASPECT RATIO MAGNETIC WRITER HE	US	Issued	13/628,793	Sep 27, 2012	8,711,518	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA FLUSH FROM CACHE TO DISK BASED ON TRACK LIMIT	US	Issued	13/716,059	Dec 14, 2012	9,141,531	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD LOCK WITH VARIABLE CONDUCTANCE VALVE	US	Issued	13/665,764	Oct 31, 2012	9,096,934	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ACCESSING GARBAGE COLLECTED MEMORY SEGMENTS	US	Issued	13/675,211	Nov 13, 2012	9,448,919	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD	US	Issued	13/631,808	Sep 28, 2012	9,478,236	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING AN EXTENDED P	US	Issued	13/688,043	Nov 28, 2012	8,760,822	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR PROVIDING MAGNETIC STORAGE ELEMENTS WITH HIGH MAGNETO-RES	US	Issued	14/290,961	May 29, 2014	9,042,057	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING MAGNETIC STORAGE ELEMENTS WITH HIGH	US	Issued	13/737,374	Jan 9, 2013	8,760,818	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DEFINING GUARD BANDS TO SUPPORT ZONE SEQUENTIALITY WHEN BUTTE	US	Issued	13/709,470	Dec 10, 2012	8,699,185	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE FILTERING DISTURBANCE SIGNAL AND ERROR SIGNAL FOR ADAPTIVE FEED-	US	Issued	13/668,142	Nov 2, 2012	8,922,938	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF IMBALANCE CORRECTION USING A GROOVED DISK CLAMP	US	Issued	14/316,377	Jun 26, 2014	9,129,639	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF IMBALANCE CORRECTION USING A GROOVED DISK CLAMP	US	Issued	13/672,668	Nov 8, 2012	8,780,491	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR SUPPRESSING BACKGROUND ENERGY OF A WAVEGUIDE	US	Issued	13/664,981	Oct 31, 2012	9,001,629	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKUP ENERGY STORAGE MODULE WITH SELECTABLE CHARGE STORAGE ELEMENTS	US	Issued	13/725,867	Dec 21, 2012	9,143,005	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT-DECISION INPUT GENERATION FOR DATA STORAGE SYSTEMS	US	Issued	16/112,429	Aug 24, 2018	10,635,524	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT-DECISION INPUT GENERATION FOR DATA STORAGE SYSTEMS	US	Issued	16/823,235	Mar 18, 2020	11,175,983	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR DECODING DATA BASED ON ASSOCIATION OF FIRST MEMO	US	Issued	17/503,198	Oct 15, 2021	11,630,722	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT-DECISION INPUT GENERATION FOR DATA STORAGE SYSTEMS	US	Issued	13/797,943	Mar 12, 2013	10,061,640	Aug 28, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTER FOR MEASURING A PITCH STATIC ATTITUDE OF A HEAD STACK ASSEMBLY	US	Issued	13/685,665	Nov 26, 2012	8,947,651	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DE-SWAGE MACHINE FOR REMOVAL OF A HEAD FROM A HEAD STACK ASSEMBLY AND	US	Issued	13/791,818	Mar 8, 2013	9,180,563	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MODIFYING ROTATIONAL POSITION OPTIMIZATION ALGORITHM TO ACHIE	US	Issued	13/677,136	Nov 14, 2012	8,879,191	Nov 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR FOR MICROWAVE ASSISTED MAGNETIC RECORDING WITH C	US	Issued	13/725,683	Dec 21, 2012	8,908,330	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR FOR MICROWAVE ASSISTED MAGNETIC RECORDING WITH I	US	Issued	13/725,731	Dec 21, 2012	9,355,654	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MANUFACTURING ELECTRONIC LAPPING GUIDES FOR WRITER HEADS T	US	Issued	13/719,809	Dec 19, 2012	9,082,426	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHING DATA IN A HIGH PERFORMANCE ZONE OF A DATA STORAGE SYSTEM	US	Issued	13/802,183	Mar 13, 2013	9,280,472	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR LOWER PAGE DATA RECOVERY IN A SOLID STATE DRIVE	US	Issued	14/700,760	Apr 30, 2015	9,952,939	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR LOWER PAGE DATA RECOVERY IN A SOLID STATE DRIVE	US	Issued	13/708,873	Dec 7, 2012	9,032,271	May 12, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING LASER POWER FOR HEAT ASSISTED MAGNETIC RECORDING B	US	Issued	13/763,972	Feb 11, 2013	8,929,186	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A PER-DRIVE AND PER-HEAD FLY HEIGHT FILTER	US	Issued	13/840,225	Mar 15, 2013	9,053,749	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODING DATA STORED IN SOLID-STATE MEMORY	US	Issued	13/829,904	Mar 14, 2013	8,990,668	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR ATTACHING A LASER DIODE AND A SLIDER IN AN ENER	US	Issued	13/664,271	Oct 30, 2012	9,475,151	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A STRUCTURE HAVING REDUCED VOIDS IN A MAGNETIC REC	US	Issued	13/710,199	Dec 10, 2012	9,087,542	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ANALOG-TO-DIGITAL CONVERTER WITH INPUT VOLTAGE BIASING DC LEVEL OF RESO	US	Issued	13/681,371	Nov 19, 2012	8,711,027	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH ACTUATOR PIVOT BEARING HAVING A SURFACE COATING INHIBITING	US	Issued	13/708,793	Dec 7, 2012	8,553,366	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER USING A COMBINED	US	Issued	13/711,160	Dec 11, 2012	8,980,109	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR ERROR-MINIMIZING VOLTAGE THRESHOLD SELECTION	US	Issued	13/842,771	Mar 15, 2013	9,542,258	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND CONTROLLERS FOR CONTROLLING A DATA STORAGE DEVICE AND DATA	US	Issued	13/838,535	Mar 15, 2013	9,554,110	Jan 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL FREQUENCY CRYSTAL OSCILLATOR	US	Issued	13/682,686	Nov 20, 2012	8,902,529	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR COMPENSATING FOR PHASE VARIATIONS IN AN INTERFEROMETRIC TAPE	US	Issued	13/756,379	Jan 31, 2013	9,286,920	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD DYNAMIC SCALING OF LDPC DECODER IN A SOLID STATE DRIVE	US	Issued	14/722,673	May 27, 2013	9,350,391	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DYNAMIC SCALING OF LDPC DECODER IN A SOLID STATE DR	US	Issued	15/162,504	May 23, 2016	9,985,652	May 29, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DECODING ITERATIONS AND DYNAMIC SCALING	US	Issued	16/453,882	Jun 26, 2019	10,951,233	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DYNAMIC SCALING OF LDPC DECODER IN A SOLID STATE DR	US	Issued	13/842,956	Mar 15, 2013	9,059,742	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING NOISE SPECTRUM TO REDUCE RESONANCE EXCITATION OF SHO	US	Issued	13/693,318	Dec 4, 2012	8,717,696	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	REAL-TIME ANALYSIS OF QUALITY OF SERVICE FOR MULTIMEDIA TRAFFIC IN A LOCAL A	US	Issued	15/419,925	Jan 30, 2017	10,069,747	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	REAL-TIME ANALYSIS OF QUALITY OF SERVICE FOR MULTIMEDIA TRAFFIC IN A LOCAL A	US	Issued	16/116,874	Aug 29, 2018	10,637,792	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	REAL-TIME ANALYSIS OF QUALITY OF SERVICE FOR MULTIMEDIA TRAFFIC IN A LOCAL A	US	Issued	13/631,970	Sep 29, 2012	9,559,975	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY ASSIGNING INACTIVE PAGES NOT USED IN REED-SOLOMON CODE IN NO	US	Issued	13/713,561	Dec 13, 2012	9,026,893	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GENERATING FEED-FORWARD COMPENSATION VALUE BASED ON TWO POI	US	Issued	13/746,230	Jan 21, 2013	8,982,503	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR FORMING IMPLANTED CAPPING LAYERS IN MAGNETIC M	US	Issued	13/773,466	Feb 21, 2013	9,183,867	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CONTROLLING DAMPING OF MAGNETIC MEDIA FOR HEA	US	Issued	13/740,115	Jan 11, 2013	9,034,492	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY THROTTLING HOST COMMANDS TO DISK DRIVES	US	Issued	13/772,295	Feb 20, 2013	9,274,966	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS FOR PROVIDING A MAGNETIC RECORDING TRANSDUCER HAVING A SMOOTH	US	Issued	13/691,712	Nov 30, 2012	8,984,740	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION ASSEMBLY WITH PIEZO ELEMENT STRESS RELIEF FEATUR	US	Issued	13/683,974	Nov 21, 2012	8,797,689	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH PERFORMANCE READ-MODIFY-WRITE SYSTEM PROVIDING LINE-RATE MERGING O	US	Issued	14/698,766	Apr 28, 2015	9,948,322	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INITIALIZING SERVO READ CHANNEL BY READING DATA PRECEDING SERVO	US	Issued	13/797,953	Mar 12, 2013	9,047,919	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TETHERED GIMBAL ON SUSPENSION FOR IMPROVED FLYABILITY	US	Issued	13/772,298	Feb 20, 2013	8,792,213	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING DEFECT THRESHOLD BASED ON STATISTICAL QUALITY METRIC	US	Issued	13/762,850	Feb 8, 2013	9,202,517	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ACTUATOR PIVOT BEARING HAVING AN ADSORPTIVE ELEMENT WITHIN	US	Issued	13/709,654	Dec 10, 2012	8,547,664	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH REMOVABLY EXTERNALLY FIXED CANISTER UNDER A HERMETIC SEAL	US	Issued	13/786,374	Mar 5, 2013	8,885,290	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING A COMPOSITE M	US	Issued	13/723,099	Dec 20, 2012	8,531,801	Sep 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE UPDATING COMPENSATION VALUES FOR MULTIPLE SERVO SECTORS BASED	US	Issued	13/794,263	Mar 11, 2013	8,743,503	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	LEAKAGE TEST METHOD FOR A HERMETICALLY SEALED DISK DRIVE ENCLOSURE	US	Issued	13/684,004	Nov 21, 2012	9,429,494	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERFEROMETRIC WAVEGUIDE USABLE IN SHINGLED HEAT ASSISTED MAGNETIC RECO	US	Issued	13/927,996	Jun 26, 2013	9,064,528	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT-DECISION INPUT GENERATION FOR DATA STORAGE SYSTEMS	US	Issued	14/584,326	Dec 29, 2014	10,545,819	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM AND METHOD FOR DECODING DATA BASED ON EXTRAPOLATE	US	Issued	16/716,378	Dec 16, 2019	11,074,125	Jul 27, 2021

WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT-DECISION INPUT GENERATION FOR DATA STORAGE SYSTEMS	US	Issued	13/797,923	Mar 12, 2013	8,924,824	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING FLY HEIGHT BY APPLYING A BIAS VOLTAGE TO AN ELECTRICAL	US	Issued	13/794,771	Mar 11, 2013	9,042,208	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING LASER POWER AND WRITE CURRENT FOR HEAT ASSISTED MA	US	Issued	13/787,760	Mar 6, 2013	8,854,929	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING HEAD TOUCHDOWN BY APPLYING DC-AC CONTROL SIGNAL TO	US	Issued	13/657,016	Oct 22, 2012	8,970,978	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PERFORMING A DEFECT PROCESS ON A DATA STORAGE	US	Issued	13/781,374	Feb 28, 2013	9,236,085	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING MICROACTUATOR DEGRADATION BY EVALUATING FREQUENCY	US	Issued	13/720,832	Dec 19, 2012	8,929,022	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING GENERAL NOISE WHITENING FILTER TO REDUCE LENGTH OF DA	US	Issued	13/789,071	Mar 7, 2013	8,896,949	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPRESSION AND FORMATTING OF DATA FOR DATA STORAGE SYSTEMS	US	Issued	15/250,264	Aug 29, 2016	10,055,171	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPRESSION AND FORMATTING OF DATA FOR DATA STORAGE SYSTEMS	US	Issued	13/902,504	May 24, 2013	9,448,738	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE STREAM COMPRESSION AND FORMATTING OF DATA FOR DATA STORAGE SY	US	Issued	13/902,485	May 24, 2013	9,335,950	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING TOUCHDOWN SENSOR	US	Issued	13/781,052	Feb 28, 2013	8,941,941	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DESTABILIZING MAGNETIZATION OF TEST PATTERN USING HEAD LASER TO	US	Issued	13/780,847	Feb 28, 2013	8,773,957	Jul 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING PHASE OF ADAPTIVE FEED-FORWARD CONTROLLER WHEN RECO	US	Issued	13/862,320	Apr 12, 2013	9,001,454	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERNAL STORAGE MANAGER FOR RAID DEVICES	US	Issued	13/837,586	Mar 15, 2013	9,417,822	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR PROVISIONING A BOOTABLE IMAGE ON TO AN EXTERNA	US	Issued	13/714,385	Dec 13, 2012	9,280,482	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ATOMIC WRITE COMMAND SUPPORT IN A SOLID STATE DRIVE	US	Issued	14/976,574	Dec 21, 2015	9,594,520	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ATOMIC WRITE COMMAND SUPPORT IN A SOLID STATE DRIVE	US	Issued	15/458,901	Mar 14, 2017	10,254,983	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ATOMIC WRITE COMMAND SUPPORT IN A SOLID STATE DRIVE	US	Issued	13/895,016	May 15, 2013	9,218,279	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INITIALIZATION OF A STORAGE DEVICE	US	Issued	13/754,854	Jan 30, 2013	8,972,655	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCLOSURE ENABLING USE OF A COMMON SHOCK MOUNT AC	US	Issued	13/655,297	Oct 18, 2012	8,547,658	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TRANSDUCERS HAVING SLIM SHAPED ADDITIONAL POLES	US	Issued	13/918,251	Jun 14, 2013	8,917,480	Dec 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INCREASING SEQUENCE DETECTOR CLOCK FREQUENCY WHEN B	US	Issued	13/787,743	Mar 6, 2013	9,619,379	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING FAILURE THRESHOLD BASED ON NOISE POWER EFFECT ON FA	US	Issued	13/752,758	Jan 29, 2013	9,053,747	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MONITORING THE POWER OF A LIGHT SOURCE UTILIZED	US	Issued	13/797,266	Mar 12, 2013	9,431,037	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTMENT OF COMPRESSION RATIOS FOR DATA STORAGE	US	Issued	13/797,529	Mar 12, 2013	9,641,378	May 2, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING DISK DRIVE USING MODULATED LASER LIGH	US	Issued	13/794,166	Mar 11, 2013	8,891,341	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH PERFORMANCE SYSTEM PROVIDING SELECTIVE MERGING OF DATAFRAME SEGM	US	Issued	14/020,653	Sep 6, 2013	9,304,709	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HERMETICALLY SEALED DISK DRIVE WITH FILL PORT VALVE	US	Issued	13/826,244	Mar 14, 2013	8,699,179	Apr 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS OF CONFIGURING A MODE OF OPERATION IN A SOLID-STATE	US	Issued	13/741,299	Jan 14, 2013	8,954,655	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR CONFIGURING AND UPDATING SESSION-BASED QUALITY	US	Issued	13/631,967	Sep 29, 2012	9,942,161	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MINIMIZING INITIAL SEEK DISTANCE AFTER LOAD OPERATION	US	Issued	13/872,029	Apr 26, 2013	8,995,081	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING DIGITAL PHASE LOCKED LOOP OVER SECTOR DATA WITH FREQU	US	Issued	13/794,501	Mar 11, 2013	8,780,470	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING CHANNEL TRANSITION RESPONSE BY AVERAGING ISOLATED TR	US	Issued	13/840,513	Mar 15, 2013	8,908,306	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CORRECTING FABRICATION ERROR IN MAGNETIC RECORD	US	Issued	13/779,693	Feb 27, 2013	9,387,568	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR REPLACING AND CONFIGURING A ROUTER IN A NETWORK	US	Issued	14/666,685	Mar 24, 2015	9,497,078	Nov 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR REPLACING AND CONFIGURING A ROUTER IN A NETWORK	US	Issued	13/716,014	Dec 14, 2012	9,001,697	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSS-PLATFORM SOFTWARE FRAMEWORK FOR EMBEDDED SYSTEMS ON DATA STOR	US	Issued	13/925,697	Jun 24, 2013	9,110,758	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CLOUD STORAGE BROKERING SERVICE	US	Issued	15/090,770	Apr 5, 2016	9,912,753	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CLOUD STORAGE BROKERING SERVICE	US	Issued	13/965,085	Aug 12, 2013	9,325,791	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CLOUD TO LOCAL ROUTER SECURITY	US	Issued	13/724,875	Dec 21, 2012	9,397,978	Jul 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST INITIALIZATION OF STORAGE DEVICE	US	Issued	13/842,020	Mar 15, 2013	9,122,405	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SHARED MEDIA CRAWLER DATABASE METHOD AND SYSTEM	US	Issued	13/841,789	Mar 15, 2013	9,171,003	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS CONFIGURED TO CONTROL NETWORK ACCESS TIME	US	Issued	15/943,129	Apr 2, 2018	10,511,604	Dec 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS CONFIGURED TO CONTROL NETWORK ACCESS TIME	US	Issued	13/717,481	Dec 17, 2012	9,935,956	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CHIP ON SUBMOUNT CARRIER FIXTURE	US	Issued	13/797,706	Mar 12, 2013	9,337,613	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING FLY HEIGHT ACTUATOR TO ENABLE LASER BIASING DURING N	US	Issued	13/802,583	Mar 13, 2013	8,787,125	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING AN IMPROVED C	US	Issued	13/795,333	Mar 12, 2013	8,780,505	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A JUMPER IN A FLEXIBLE PRINTED CIRCU	US	Issued	13/797,893	Mar 12, 2013	8,760,812	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO STRESS RELIEVE A MAGNETIC RECORDING HEAD TRANSDUCER UTILIZING	US	Issued	13/797,746	Mar 12, 2013	9,242,340	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE ENCLOSURE	US	Issued	29/440,387	Dec 20, 2012	9,077,667	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC ENCLOSURE WITH TOP-FACING VENTING	US	Issued	13/723,079	Dec 20, 2012	8,981,218	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC PEAK CURRENT THROTTLE OF TIERED STORAGE ELEMENTS	US	Issued	13/898,288	May 20, 2013	9,280,200	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR REPEATABLE RUN OUT SELECTIVELY PER ZONE	US	Issued	13/928,845	Jun 27, 2013	8,953,271	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR MEDIA STRUCTURE HAVING AN ANISOTROPIC THERMAL BARRIER LAYER	US	Issued	13/769,232	Feb 15, 2013	10,115,428	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING THRESHOLD AND GAIN OF TOUCHDOWN SENSOR	US	Issued	13/890,937	May 9, 2013	8,891,193	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THREADED DISK CLAMPING ELEMENT WITH STEP ON DISK CONTACT SURFACE	US	Issued	13/791,865	Mar 8, 2013	8,908,325	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION FLAGS IN SOLID- STATE DRIVES	US	Issued	15/043,443	Feb 12, 2016	9,620,220	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION FLAGS IN SOLID- STATE DRIVES	US	Issued	15/484,044	Apr 10, 2017	10,109,352	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION FLAGS IN SOLID- STATE DRIVES	US	Issued	14/090,426	Nov 26, 2013	9,263,136	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INVERSE TAPERED WAVEGUIDE FOR USE IN A HEAT ASSISTED MAGNETIC RECORDING H	US	Issued	13/797,268	Mar 12, 2013	9,336,814	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GENERATING FEED-FORWARD FLY HEIGHT CONTROL BASED ON TEMPERAT	US	Issued	13/922,417	Jun 20, 2013	8,922,939	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING HIGH PERFORMANCE SOFT MAGNETIC UNDE	US	Issued	13/799,659	Mar 13, 2013	9,548,073	Jan 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE (HDD) MOUNTING SYSTEM FOR SHOCK AND VIBRATION	US	Issued	13/918,847	Jun 14, 2013	9,099,163	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE RELEASING VARIABLE AMOUNT OF BUFFERED WRITE DATA BASED ON SLID	US	Issued	13/928,329	Jun 26, 2013	8,922,931	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER FOR MAGNETIC RECORDING SYSTEM	US	Issued	14/809,775	Jul 27, 2015	9,149,631	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE APPLYING FEED-FORWARD COMPENSATION WHEN WRITING CONSECUTIVE	US	Issued	13/911,365	Jun 6, 2013	9,026,728	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	VIRTUAL NAND CAPACITY EXTENSION IN A HYBRID DRIVE	US	Issued	13/928,318	Jun 26, 2013	9,208,101	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA CACHE EGRESS FOR A DATA STORAGE SYSTEM	US	Issued	13/789,564	Mar 7, 2013	9,122,615	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED SENSOR FOR MONITORING LASER POWER IN A HEAT ASSISTED MAGNETIC	US	Issued	13/829,438	Mar 14, 2013	8,861,124	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS CONFIGURED FOR AUTOMATED DUPLICATION OF NETWORK S	US	Issued	13/802,281	Mar 13, 2013	9,646,023	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	BANDWIDTH MANAGEMENT FOR DATA SERVICES OPERATING ON A LOCAL NETWORK	US	Issued	13/802,380	Mar 13, 2013	9,363,199	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION ASSEMBLY HAVING A DLC COATING BETWEEN DIMPLE	US	Issued	13/776,719	Feb 26, 2013	8,760,814	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR OPTIMIZED STAGGERED DISK DRIVE SPINUP	US	Issued	13/802,337	Mar 13, 2013	9,058,835	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL MANAGEMENT FOR SOLID-STATE DRIVE	US	Issued	14/810,391	Jul 27, 2015	9,880,594	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL MANAGEMENT FOR SOLID-STATE DRIVE	US	Issued	13/904,992	May 29, 2013	9,123,686	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Head Gimbal Assembly Carrier With Adjustable Protective Bar	US	Issued	14/303,481	Jun 12, 2014	9,105,282	Aug 11, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	COINED VCM TAB TO LIMIT COVER DEFLECTION UNDER PINCH LOAD	US	Issued	13/802,486	Mar 13, 2013	9,019,657	Apr 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT FOR A DATA STORAGE SYSTEM	US	Issued	14/038,733	Sep 26, 2013	9,417,810	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	GESTURE-BASED NETWORK CONFIGURATION	US	Issued	13/869,820	Apr 24, 2013	9,461,882	Oct 4, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL CONTROL OF A STORAGE DEVICE RECEIVING A LIMITED AMOUNT OF POWER	US	Issued	13/829,955	Mar 14, 2013	9,158,366	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE READ CIRCUIT COMPRISING AN AC COUPLED SENSE AMPLIFIER FOR AMPLIF	US	Issued	13/890,131	May 9, 2013	9,159,344	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANTS COMPRISING FLUORINATED GRAPHENE NANORIBBONS FOR MAGNETIC R	US	Issued	13/770,885	Feb 19, 2013	9,153,268	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETERMINING FREQUENCY RESPONSE OF ACTUATOR NEAR SERVO SAMPLE	US	Issued	14/133,417	Dec 18, 2013	8,970,979	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH A BIASED ACTUATOR LATCH, AND HAVING A FIRST PERMANENT MAG	US	Issued	13/860,505	Apr 10, 2013	8,760,816	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	USING DUAL PHYS TO SUPPORT MULTIPLE PCIE LINK WIDTHS	US	Issued	14/026,062	Sep 13, 2013	9,436,630	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING CRACK IN MICROACTUATOR	US	Issued	13/932,705	Jul 1, 2013	8,902,538	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ACCESS FOR SHINGLED MAGNETIC RECORDING MEDIA	US	Issued	13/914,463	Jun 10, 2013	9,153,287	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALING MEMBER FOR CONSTRAINING BALANCE WEIGHTS	US	Issued	13/868,615	Apr 23, 2013	8,760,800	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH IMPROVED SPIN-UP CONTROL	US	Issued	14/480,566	Sep 8, 2014	9,147,428	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING SPIRAL TRACK ERROR BY MEASURING A SLOPE OF A SPIRAL TR	US	Issued	13/903,197	May 28, 2013	9,047,901	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING DESIGN TO MITIGATE LUBE WATERFALL EFFECT	US	Issued	13/893,188	May 13, 2013	8,988,830	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR MICROACTUATOR GAIN VARIATIONS	US	Issued	13/923,024	Jun 20, 2013	9,147,418	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE OPTIMIZING FILTERS BASED ON SENSOR SIGNAL AND DISTURBANCE SIGNAL	US	Issued	13/927,096	Jun 25, 2013	9,058,827	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM COMPRISING A COMMUNICATIONS PORT FOR CHARGING AN ELECTR	US	Issued	15/872,995	Jan 17, 2018	10,877,550	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM COMPRISING A COMMUNICATIONS PORT FOR CHARGING AN ELECTR	US	Issued	13/902,722	May 24, 2013	9,891,693	Feb 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER ADAPTER WITH RECESS	US	Issued	13/892,704	Mar 13, 2013	9,627,792	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR DISPENSING MATERIAL ON AN ELECTRONIC DE	US	Issued	13/931,163	Jun 28, 2013	9,349,405	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SHORT YOKE LENGTH COILS FOR MAGNETIC HEADS IN DISK DRIVES	US	Issued	13/899,260	May 21, 2013	9,245,545	Jan 26, 2016

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING READ-BEFORE-WRITE CONDITIONS AND RETURNING	US	Issued	13/922,099	Jun 19, 2013	9,164,694	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MEASURING AMBIENT AND LASER TEMPERATURE IN HEAD	US	Issued	13/827,089	Mar 14, 2013	9,074,941	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	USER CONTROLLED DATA STORAGE DEVICE POWER AND PERFORMANCE SETTINGS	US	Issued	13/961,799	Aug 7, 2013	9,195,293	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER CONSERVATION BASED ON CACHING	US	Issued	14/149,722	Jan 7, 2014	9,430,031	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE REDUCING WRITE UNSAFE THRESHOLD WHEN DETECTING AN UNRECOVERED	US	Issued	13/924,791	Jun 24, 2013	8,913,338	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DEVICE HAVING LASER DRIVING SIGNAL AND	US	Issued	13/870,931	Apr 25, 2013	8,929,180	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING DYNAMIC FLY HEIGHT WRITE PROFILE FOR FLY HEIGHT ACTUA	US	Issued	13/908,265	Jun 3, 2013	8,902,718	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CALIBRATING FLY HEIGHT ACTUATOR AND LASER POWER FOR HEAT ASSISTE	US	Issued	13/927,100	Jun 25, 2013	8,922,929	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE HEAT SINK MOUNTING STRUCTURE	US	Issued	15/456,267	Mar 10, 2017	10,289,173	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE HEAT SINK MOUNTING STRUCTURE	US	Issued	14/661,952	Mar 18, 2015	9,594,409	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR PRIVILEGED EXECUTION SUPPORT FOR FILE SYSTEM COM	US	Issued	16/126,579	Sep 10, 2018	11,126,756	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR PRIVILEGED EXECUTION SUPPORT FOR FILE SYSTEM COM	US	Issued	14/061,592	Oct 23, 2013	10,073,987	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTION OF USER BEHAVIOR USING TIME SERIES MODELING	US	Issued	14/063,982	Oct 25, 2013	9,152,490	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR TESTING MAGNETIC MEDIA DISKS DURING MANUFACTU	US	Issued	13/928,206	Jun 26, 2013	8,929,008	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ADJUSTING CLOSED-LOOP FLY HEIGHT TARGET BASED ON CHANGE IN OPEN	US	Issued	13/927,109	Jun 25, 2013	9,183,864	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION ASSEMBLY WITH LOAD BEAM INNER RAILS BETWEEN PI	US	Issued	13/917,654	Jun 14, 2013	8,788,504	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING READ TRANSDUCER HAVING A LAMINATED FREE LAYER	US	Issued	13/919,782	Jun 17, 2013	9,070,381	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL INTERFACE MATERIAL PAD AND METHOD OF FORMING THE SAME	US	Issued	13/913,068	Jun 7, 2013	9,338,927	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH ORDER TAPERED WAVEGUIDE FOR USE IN A HEAT ASSISTED MAGNETIC RECORDIN	US	Issued	13/919,949	Jun 17, 2013	9,064,527	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DOUBLE EXPOSURE TECHNIQUE FOR HIGH RESOLUTION DISK IMAGING	US	Issued	13/906,293	May 30, 2013	8,993,217	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR PREPOSITIONING FOR DISK DRIVE	US	Issued	13/907,347	May 31, 2013	8,949,521	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULED LOAD OF HEADS TO REDUCE LUBRICANT MIGRATION ON POLE TIP AND DE	US	Issued	13/903,464	May 28, 2013	9,064,542	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Mapping of Shingled Magnetic Recording Media	US	Issued	13/928,156	Jun 26, 2013	9,330,715	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD, SYSTEM, AND PROGRAM FOR PERSONAL DATA MANAGEMENT USING CONT	US	Issued	12/273,339	Nov 18, 2008	8,341,117	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD, SYSTEM, AND PROGRAM FOR PERSONAL DATA MANAGEMENT USING CONT	US	Issued	10/924,403	Aug 24, 2004	7,454,443	Nov 18, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING DATA BLOCK SIZE FOR DEPLICATION	US	Issued	15/486,224	Apr 12, 2017	10,552,379	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING DATA BLOCK SIZE FOR DEPLICATION	US	Issued	13/802,167	Mar 13, 2013	9,626,373	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUSES FOR STREAMING CONTENT	US	Issued	13/931,821	Jun 29, 2013	9,516,080	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ROAMING MANAGEMENT FOR CLIENT DEVICES	US	Issued	13/902,748	May 24, 2013	9,479,990	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING HEAT ASSISTED MAGNETIC RECORDING MEDI	US	Issued	13/931,812	Jun 29, 2013	8,787,130	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE IMPROVEMENT FOR ATTACHED MULTI-STORAGE DEVICES	US	Issued	13/925,746	Jun 24, 2013	8,943,237	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE SELECTIVELY UTILIZING POWER FROM A HOST AND POWER FROM AN	US	Issued	13/923,301	Jun 20, 2013	9,372,529	Jun 21, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLIES AND METHODS FOR MEASURING SLIDER PARAMETERS	US	Issued	13/906,205	May 30, 2013	8,693,144	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING AN ANTIFERROMAGNETICALLY COUPLED RETU	US	Issued	13/894,281	May 14, 2013	9,013,836	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK LUBRICANT MANAGEMENT IN DATA STORAGE DEVICE	US	Issued	14/034,427	Sep 23, 2013	8,817,413	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANISM TO DELIVER FASTENER VERTICALLY	US	Issued	14/134,164	Dec 19, 2013	9,150,360	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	RECORDING READ HEADS WITH A MULTI-LAYER AFM LAYER METHODS AND APPARATU	US	Issued	15/153,357	May 12, 2016	10,008,219	Jun 26, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	RECORDING READ HEADS WITH A MULTI-LAYER AFM LAYER METHODS AND APPARATU	US	Issued	13/923,991	Jun 21, 2013	9,361,913	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR BOOTING A NETWORK ATTACHED STORAGE WITH TWO L	US	Issued	14/632,085	Feb 26, 2015	9,479,588	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR BOOTING A NETWORK ATTACHED STORAGE WITH TWO L	US	Issued	15/331,406	Oct 21, 2016	9,990,136	Jun 5, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND DEVICES FOR BOOTING A NETWORK ATTACHED STORAGE WITH TWO L	US	Issued	13/931,825	Jun 29, 2013	8,984,190	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC START OF AN APPLICATION AT START UP FOR A MEDIA PLAYER APPLIANCE	US	Issued	14/028,295	Sep 16, 2013	9,569,229	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PERFORMING OFF-DISK MEASUREMENTS OF LASER-INDUC	US	Issued	13/895,357	May 16, 2013	8,897,104	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH A COVER SUPPORTING PORTION	US	Issued	14/798,779	Jul 14, 2015	9,305,599	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH A COVER SUPPORTING PORTION	US	Issued	13/897,655	May 20, 2013	9,099,153	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION DISTAL NON-OP SHOCK LIMITER WITH BRANCHED ARM	US	Issued	13/918,876	Jun 14, 2013	8,976,491	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING TRANSDUCER HAVING PROTECTIVE PADS	US	Issued	13/903,121	May 28, 2013	8,861,317	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE SHINGLE GUARD BAND	US	Issued	14/017,136	Sep 3, 2013	8,908,310	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	CUSTOMIZED HEAD GIMBAL ASSEMBLY BONDING SKEW ANGLE FOR ADJUSTING TWO-	US	Issued	14/099,849	Dec 6, 2013	9,135,935	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKUP POWER FOR REDUCING HOST CURRENT TRANSIENTS	US	Issued	13/957,898	Aug 2, 2013	9,304,560	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SHIELD DESIGNED FOR MIDDLE SHIELDS IN A MULTIPLE SENSOR ARRAY	US	Issued	14/097,157	Dec 4, 2013	9,042,058	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MIGRATION OF ENCRYPTED DATA FOR DATA STORAGE SYSTEMS	US	Issued	14/010,350	Aug 26, 2013	9,274,978	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING AN IMPROVED AFM READER SHIELD	US	Issued	13/927,007	Jun 25, 2013	9,431,047	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH OVERVOLTAGE PROTECTION	US	Issued	14/040,426	Sep 27, 2013	9,251,839	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER FAIL PROTECTION AND RECOVERY USING LOW POWER STATES IN A DATA STOR	US	Issued	14/020,686	Sep 6, 2013	9,042,197	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST SAYING OF DATA DURING POWER INTERRUPTION IN DATA STORAGE SYSTEMS	US	Issued	13/967,292	Aug 14, 2013	9,830,257	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PROVIDING DATA MAINTENANCE SERVICES	US	Issued	14/673,392	Mar 30, 2015	10,444,998	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SUPPORTING ACCELERATED DATABASE OPERATIONS	US	Issued	14/133,302	Dec 18, 2013	9,330,143	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic recording writer having a main pole with multiple flare angles	US	Issued	13/903,124	May 28, 2013	9,111,564	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MEASURING LIGHT DELIVERY OFFSETS IN A HEAT ASSISTED	US	Issued	13/908,968	Jun 3, 2013	8,897,102	Nov 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH SLOW ACTING DESICCANT	US	Issued	13/900,085	May 22, 2013	8,908,319	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATIONS CABLE FOR A STORAGE DEVICE	US	Issued	13/918,895	Jun 14, 2013	8,954,637	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DECELERATION OF SPINDLE MOTOR IN DISK DRIVE	US	Issued	13/960,738	Aug 6, 2013	8,953,274	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING MEDIA WITH GRAIN ISOLATION INITIATION LAYER AND E	US	Issued	13/911,944	Jun 6, 2013	9,190,094	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY UNIT ASSIGNMENT AND SELECTION FOR INTERNAL MEMORY OPERATIONS IN	US	Issued	15/495,900	Apr 24, 2017	10,114,744	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY UNIT ASSIGNMENT AND SELECTION FOR INTERNAL MEMORY OPERATIONS IN	US	Issued	14/028,377	Sep 16, 2013	9,632,926	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING GARBAGE COLLECTION AND WEAR LEVELING	US	Issued	14/028,412	Sep 16, 2013	10,417,123	Sep 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SHOCK SENSOR ON AN EXTERNAL SURFACE OF A DISK DRIVE BASE ADJACENT A DISK DR	US	Issued	13/968,344	Aug 15, 2013	8,964,328	Feb 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DETECTING DIFFERENT ASPERITIES ON A DISK USING DIFFERENT SENSOR B	US	Issued	14/015,748	Aug 30, 2013	8,902,533	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING DIGITAL ACCUMULATORS TO LIMIT VELOCITY AND/OR ACCELE	US	Issued	14/052,666	Oct 11, 2013	9,025,273	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING ACCURACY OF TEST MEASUREMENTS INVOLV	US	Issued	13/925,734	Jun 24, 2013	9,093,122	Jul 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE IMPLEMENTING HYSTERESIS FOR PRIMARY SHOCK DETECTOR BASED ON A	US	Issued	14/054,738	Oct 15, 2013	8,947,819	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING CAPPING LAYERS FOR HEAT ASSISTED MAGN	US	Issued	13/932,370	Jul 1, 2013	8,947,987	Feb 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FIFO BUFFER CLEAN-UP	US	Issued	14/812,933	Jul 29, 2015	9,652,198	May 16, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING THERMAL BARRIER BILAYERS FOR HEAT ASSIS	US	Issued	13/932,348	Jul 1, 2013	8,867,322	Oct 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE SENSOR ARRAY USABLE IN TWO-DIMENSIONAL MAGNETIC RECORDING	US	Issued	13/928,799	Jun 27, 2013	9,431,039	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION WITH A SINGLE PIEZOELECTRIC ELEMENT ADHERED TO	US	Issued	13/931,588	Jun 28, 2013	8,797,691	Aug 5, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GRADIENT WRITE GAP FOR PERPENDICULAR MAGNETIC RECORDING WRITER	US	Issued	14/717,179	May 20, 2015	9,214,166	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	GRADIENT WRITE GAP FOR PERPENDICULAR MAGNETIC RECORDING WRITER	US	Issued	14/096,503	Dec 4, 2013	9,042,051	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION WITH DUAL PIEZOELECTRIC ELEMENTS ADHERED TO RO	US	Issued	13/931,610	Jun 28, 2013	8,982,513	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ACTUATING FIRST HEAD MICROACTUATOR WHILE SENSING SIGNAL FROM S	US	Issued	14/023,776	Sep 11, 2013	9,053,724	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING ORTHOGONAL EQUALIZATION AND SEQUENCE DE	US	Issued	13/968,323	Aug 15, 2013	9,047,205	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING A TEMPERATURE DEPENDENT WRITE OFFSET	US	Issued	14/034,514	Sep 23, 2013	8,792,200	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS FOR MAKING PMR WRITER WITH CONSTANT SIDE WALL ANGLE	US	Issued	13/929,705	Jun 27, 2013	9,263,067	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR INTER-TRACK INTERFERENCE IN ANALOG READ SIGNA	US	Issued	14/089,912	Nov 26, 2013	9,245,578	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NEGATIVE POOL MANAGEMENT FOR DEPLICATION	US	Issued	14/053,532	Oct 14, 2013	9,348,531	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PMR WRITER WITH NON-CONFORMAL SIDE GAPS	US	Issued	15/053,211	Feb 25, 2016	9,940,951	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESS FOR MAKING PMR WRITER WITH NON-CONFORMAL SIDE GAPS	US	Issued	14/046,790	Oct 4, 2013	9,275,657	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CONNECTION SCHEMES FOR A MULTIPLE SENSOR ARRAY USABLE IN TWO-DIMENSIONA	US	Issued	13/963,172	Aug 9, 2013	8,891,207	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING STROKE DIFFERENCE BETWEEN HEADS BY DETECTING A DIFFER	US	Issued	14/733,027	Jun 8, 2015	9,355,666	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING RADIAL OFFSET BETWEEN HEADS BY DETECTING A DIFFEREN	US	Issued	14/040,960	Sep 30, 2013	9,064,537	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATING FOR CYCLE SLIP OF DISK LOCKED CLOCK WHEN READING M	US	Issued	14/152,129	Jan 10, 2014	9,025,269	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED HEAT-ASSISTED MAGNETIC RECORDING HEAD/LASER ASSEMBLY	US	Issued	14/051,397	Oct 10, 2013	9,070,387	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING LASER TRANSMISSION LINE OPTIMIZED FOR HEAT ASSISTED M	US	Issued	14/091,098	Nov 26, 2013	9,064,525	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MIGRATION FOR DATA STORAGE DEVICE	US	Issued	14/086,916	Nov 21, 2013	9,070,379	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDISCOVERY OF PAST DATA	US	Issued	14/099,720	Dec 6, 2013	9,503,532	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK BUFFING APPARATUS WITH ABRASIVE TAPE LOADING PAD HAVING A VIBRATION	US	Issued	14/097,137	Dec 4, 2013	9,296,082	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE ASSEMBLY FOR ARCHIVE COLD STORAGE	US	Issued	14/608,980	Jan 29, 2015	9,135,205	Sep 15, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING SCHEME FOR IMPROVED VOLTAGE DISTRIBUTION IN SOLID-STATE ME	US	Issued	14/102,356	Dec 10, 2013	9,007,841	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER USING MULTIPLE ETCHES	US	Issued	14/229,297	Mar 28, 2014	9,280,990	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR RESTRICTING WRITES TO SOLID STATE MEMORY WHEN	US	Issued	14/275,032	May 12, 2014	9,268,487	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRIC GAPS AND METHOD FOR MAKING ELECTRIC GAPS FOR MULTIPLE SENSOR AR	US	Issued	14/253,358	Apr 15, 2014	8,970,988	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER WITH HIGH REFRACTIVE INDEX PIN FOR HEAT ASSISTED MAG	US	Issued	14/227,340	Mar 27, 2014	8,971,160	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDING HIGH POWER DELIVERY TO AN INCOMPATIBLE DEVICE BY EMULATING A CO	US	Issued	14/088,811	Nov 25, 2013	9,698,604	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WRITING TRACKS ON A DISK WITH EQUAL SPACING	US	Issued	14/305,753	Jun 16, 2014	8,953,277	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TAMPER-EVIDENT SEALS HAVING ADHESIVE-FREE AREAS TO MINIMIZE REWORK TIME	US	Issued	14/198,386	Mar 5, 2014	9,159,205	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR CONFIGURING AN ELECTRONIC DEVICE	US	Issued	14/100,521	Dec 9, 2013	9,584,873	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA CAPABLE OF IMPROVING MAGNETIC PROPERTIES AND THERMAL MA	US	Issued	14/096,332	Dec 4, 2013	9,177,585	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REVERSIBLE PLUG	US	Issued	14/087,642	Nov 22, 2013	10,079,461	Sep 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE SUPPORTING PERIODIC WRITES WHILE IN A LOW POWER MODE FOR	US	Issued	14/047,955	Oct 7, 2013	9,021,150	Apr 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MIGRATION SERVICE	US	Issued	13/965,066	Aug 12, 2013	9,960,979	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FASTER FILE COMPRESSION USING SLIDING COMPRESSION WINDOW AND BACKWARD	US	Issued	14/154,974	Jan 14, 2014	9,405,479	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT FOR DATA STORAGE DEVICE	US	Issued	14/105,603	Dec 13, 2013	8,917,471	Dec 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING AN ULTRA-SHARP TIP MODE CONVERTER FOR A HAMR HEAD	US	Issued	14/287,467	May 27, 2014	9,202,493	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER HAVING HALF-SIDE SHIELDS	US	Issued	14/279,608	May 16, 2014	8,988,265	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE STARTUP	US	Issued	14/105,696	Dec 13, 2013	9,323,467	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NEGATIVE VOLTAGE TESTING METHODOLOGY AND TESTER	US	Issued	14/278,957	May 15, 2014	8,823,294	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER USING MULTIPLE ETCHES OF DAMAS	US	Issued	14/280,342	May 16, 2014	9,305,583	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE TRANSDUCER HAVING AN IMPROVED TRAILING SURFAC	US	Issued	14/223,957	Mar 24, 2014	9,082,423	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO MAKE INTERFEROMETRIC TAPER WAVEGUIDE FOR HAMR LIGHT DELIVERY	US	Issued	14/303,876	Jun 13, 2014	9,183,854	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING GLITCH COMPENSATION FOR POWER LOSS DETECT	US	Issued	14/289,413	May 28, 2014	9,141,177	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING A POWER LOSS THRESHOLD BASED ON SAMPLES OF	US	Issued	14/260,426	Apr 24, 2014	9,047,932	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA PLAYER	US	Issued	29/521,107	Mar 19, 2015	9,765,140	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA PLAYER	US	Issued	29/574,816	Aug 18, 2016	9,797,808	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA PLAYER	US	Issued	29/467,896	Sep 24, 2013	9,727,360	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR HYSTERETIC RESPONSE OF MICROACTUA	US	Issued	14/501,471	Sep 30, 2014	9,153,283	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING RANGE OF MICROACTUATOR DIGITAL-TO-ANALOG	US	Issued	14/246,401	Apr 7, 2014	8,913,342	Dec 16, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH MEDIA RECOVERY MECHANISM AND METHOD OF OPERATI	US	Issued	14/260,641	Apr 24, 2014	9,064,504	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LATCH SYSTEM	US	Issued	14/081,877	Nov 15, 2013	9,247,656	Feb 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR SOFT DECODING THROUGH SINGLE READ	US	Issued	14/100,435	Dec 9, 2013	9,270,296	Jan 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PERIODICALLY RE-INITIALIZING SPINDLE MOTOR COMMUTATI	US	Issued	14/315,143	Jun 25, 2014	9,171,568	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY WITH FLEXURE HAVING DUAL CONDUCTIVE LAYERS	US	Issued	14/278,316	May 15, 2014	9,064,513	Jun 23, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE OPENING SPIRAL CROSSING WINDOW BASED ON DC AND AC SPIRAL TRACK	US	Issued	14/293,889	Jun 2, 2014	9,053,727	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING DUAL READ SENSORS AND DUAL SERVO CHANNEL	US	Issued	14/295,475	Jun 4, 2014	9,013,824	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITE POLE USING VACUUM DEPOSITION	US	Issued	14/300,482	Jun 10, 2014	9,135,930	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING SLIDING MODE CONTROL OF SPINDLE MOTOR	US	Issued	14/287,511	May 27, 2014	9,171,567	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF TESTING A HEAD FOR CONTAMINATION	US	Issued	14/497,166	Sep 25, 2014	8,995,078	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DRIVE MOUNTING AND SHOCK SYSTEM	US	Issued	14/134,350	Dec 19, 2013	9,230,607	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF DIFFRACTIVE FOCUSING OF LIGHT IN A WAVEGUIDE	US	Issued	14/279,654	May 16, 2014	9,111,558	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION TAIL WITH A NOBLE METAL LAYER DISPOSED ON A PLUR	US	Issued	14/670,374	Mar 26, 2015	9,330,695	May 3, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION TAIL WITH A NOBLE METAL LAYER DISPOSED ON A PLUR	US	Issued	15/083,413	Mar 29, 2016	9,881,640	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR HEAD STACK ASSEMBLY REWORK	US	Issued	14/628,111	Feb 20, 2015	9,972,347	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION TAIL WITH GROUND PAD OUTSIDE OF BONDING REGION	US	Issued	14/322,616	Jul 2, 2014	9,324,344	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION TAIL WITH STIFFENED EDGE ALIGNMENT FEATURES	US	Issued	14/860,010	Sep 21, 2015	9,530,439	Dec 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION TAIL WITH STIFFENED EDGE ALIGNMENT FEATURES	US	Issued	14/209,909	Mar 13, 2014	9,165,580	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REDUCING SEEK POWER CONSUMPTION	US	Issued	14/276,192	May 13, 2014	8,902,539	Dec 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH UNLOAD MANAGEMENT MECHANISM AND METHOD OF OP	US	Issued	14/305,923	Jun 16, 2014	9,208,808	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT RAM USAGE IN COMPUTING DEVICES	US	Issued	15/250,762	Aug 29, 2016	9,720,699	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	FIRMWARE RAM USAGE WITHOUT OVERLAYS	US	Issued	14/135,890	Dec 20, 2013	9,436,480	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ASSISTANT WAVEGUIDES FOR EVALUATING MAIN WAVEGUIDE COUPLING EFFICIENCY	US	Issued	14/229,416	Mar 28, 2014	9,001,628	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TRACK MEASUREMENT FOR DATA STORAGE DEVICE	US	Issued	14/294,061	Jun 2, 2014	8,988,810	Mar 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LASER-IGNITED REACTIVE HAMR BONDING	US	Issued	14/503,042	Sep 30, 2014	9,042,048	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WRITING A MULTI-SECTOR CODEWORD IN SEGMENTS OVER M	US	Issued	14/173,895	Feb 6, 2014	8,908,311	Dec 9, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH CURRENT CONSERVATION MECHANISM AND METHOD OF C	US	Issued	14/188,381	Feb 24, 2014	9,025,270	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE COMPENSATION MANAGEMENT IN SOLID-STATE MEMORY	US	Issued	15/053,133	Feb 25, 2016	9,672,934	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE COMPENSATION MANAGEMENT IN SOLID-STATE MEMORY	US	Issued	14/482,852	Sep 10, 2014	9,275,741	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	RETRIEVAL OF NETWORK SITE DATA WITH DATA STORAGE DEVICE UTILIZING USER AUT	US	Issued	16/591,473	Oct 2, 2019	11,595,463	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA TRANSFER BY DATA STORAGE DEVICE BASED ON RECEIVED UNIFORM RESOURCE	US	Issued	14/195,079	Mar 3, 2014	10,601,895	Mar 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CALIBRATING A LOAD CELL OF A DISK BURNISHING MACH	US	Issued	14/200,666	Mar 7, 2014	9,389,135	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH SELF SEALING SCREW ATTACHMENT OF ACTUATOR PIVOT	US	Issued	14/280,358	May 16, 2014	9,025,284	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH VIBRATION MANAGEMENT MECHANISM AND METHOD OF	US	Issued	14/310,944	Jun 20, 2014	9,013,824	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANTS WITH HIGH THERMAL STABILITY FOR HEAT-ASSISTED MAGNETIC RECORDI	US	Issued	14/231,252	Mar 31, 2014	9,382,496	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SERVOING HEADS BASED ON VIRTUAL SERVO TRACKS	US	Issued	14/298,734	Jun 6, 2014	8,941,945	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING SLEW RATE ANTI-WINDUP COMPENSATION FOR N	US	Issued	14/335,653	Jul 18, 2014	9,007,714	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITE POLE HAVING A LEADING EDGE BEVEL	US	Issued	14/307,174	Jun 17, 2014	9,508,363	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MOVEABLE SLIDER FOR USE IN A DEVICE ASSEMBLY PROCESS	US	Issued	14/314,012	Jun 24, 2014	9,996,071	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	GROOVED CYLINDRICAL SEAL WITH INCREASED RADIAL CLEARANCE FOR REDUCED COS	US	Issued	14/264,337	Apr 29, 2014	8,970,984	Mar 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BINARY LDPC DECODER USING BINARY SUBGROUP PROCESSING	US	Issued	14/231,511	Mar 31, 2014	9,337,864	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BINARY LDPC DECODER USING BINARY SUBGROUP PROCESSING	US	Issued	15/150,340	May 9, 2016	9,748,974	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-BINARY LOW-DENSITY PARITY CHECK (LDPC) DECODING USING TRELLIS MAXIMIZ	US	Issued	14/231,531	Mar 31, 2014	9,250,994	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL LAPPING GUIDE FOR DIMENSIONAL CONTROL OF BACK SIDE OF HEAT ASSIS	US	Issued	14/287,586	May 27, 2014	9,361,916	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR EXPEDITED LOADING OF AN IMAGE ONTO A STORAGE DEVI	US	Issued	14/085,608	Nov 20, 2013	9,417,863	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCATION-AWARE BEHAVIOR FOR A DATA STORAGE DEVICE	US	Issued	15/461,379	Mar 16, 2017	10,216,442	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCATION-AWARE BEHAVIOR FOR A DATA STORAGE DEVICE	US	Issued	14/137,537	Dec 20, 2013	9,612,744	Apr 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED N-STREAM SEQUENTIAL MEDIA PLAYBACK CACHING METHOD AND SYSTEM	US	Issued	15/840,816	Dec 13, 2017	10,715,624	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED N-STREAM SEQUENTIAL MEDIA PLAYBACK CACHING METHOD AND SYSTEM	US	Issued	14/146,194	Jan 2, 2014	9,871,882	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SELECTIVE WRITE TO A FIRST STORAGE MEDIA OR A SECC	US	Issued	14/716,610	May 19, 2015	9,298,380	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SELECTIVE WRITE TO A FIRST STORAGE MEDIA OR A SECC	US	Issued	14/227,191	Mar 27, 2014	9,036,283	May 19, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR CONTROLLING STRAY FIELDS OF MAGNETIC FEATURES USING MAGNET	US	Issued	14/312,317	Jun 23, 2014	9,934,811	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEMODULATING SERVO BURST BY COMPUTING SLOPE OF INTE	US	Issued	14/571,461	Dec 16, 2014	9,286,927	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING AN ASYMMETRIC GAP AND SHIELDS	US	Issued	14/847,634	Sep 8, 2015	9,349,393	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER HAVING AN ASYMMETRIC GAP AND	US	Issued	14/289,345	May 28, 2014	9,153,255	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REDUCING SPINDLE MOTOR VOLTAGE BOOST DURING POWER	US	Issued	14/287,550	May 27, 2014	8,922,940	Dec 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING ONE-DIMENSIONAL AND TWO-DIMENSIONAL CHA	US	Issued	14/301,326	Jun 10, 2014	9,013,821	Apr 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD SUSPENSION WITH A DUAL DIMPLE AND A FLEXURE TONGUE WITH A	US	Issued	14/298,709	Jun 6, 2014	8,995,094	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WITH INTERLACED HIGH-POWER HEATED AND	US	Issued	14/520,064	Oct 21, 2014	9,099,103	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER AWARE POWER SAFE WRITE BUFFER	US	Issued	14/492,439	Sep 22, 2014	9,600,205	Mar 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR DATA STORAGE DEVICE WITH MULTIPLE TYPES OF NON-VOL	US	Issued	14/188,088	Feb 24, 2014	10,140,067	Nov 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SPUTTER CHAMBER PRESSURE GAUGE WITH VIBRATION ABSORBER	US	Issued	14/287,924	May 27, 2014	9,581,510	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITER HAVING A RECESSED POLE	US	Issued	14/297,975	Jun 6, 2014	9,142,233	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER ARCHITECTURE FOR LOW POWER MODES IN STORAGE DEVICES	US	Issued	14/537,363	Nov 10, 2014	9,058,834	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE RE-QUALIFYING STATE ESTIMATOR WHILE DECELERATING HEAD	US	Issued	14/302,088	Jun 11, 2014	8,958,169	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM TO MONITOR MAGNETIC HEAD LOADING AND UNLOADING STA	US	Issued	14/303,955	Jun 13, 2014	9,401,165	Jul 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCAL AREA NETWORK DISTRIBUTED STORAGE	US	Issued	14/244,672	Apr 3, 2014	9,626,376	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING READ TRANSDUCER HAVING A LAMINATED FREE LAYER	US	Issued	14/310,222	Jun 20, 2014	9,214,169	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT MODULATION ON LASER DIODE FOR ENERGY ASSISTED MAGNETIC RECORDI	US	Issued	14/461,595	Aug 18, 2014	9,135,937	Sep 15, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING FLY HEIGHT INSTABILITY OF HEAD DURING LOAD O	US	Issued	14/457,425	Aug 12, 2014	9,076,473	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER ASSEMBLY AND METHOD OF MANUFACTURING SAME	US	Issued	14/526,207	Oct 28, 2014	9,257,138	Feb 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/478,517	Jan 6, 2014	0,740,808	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING FLUSH REQUESTS BY UTILIZING STORAGE SYSTEM WRITE NOTIFICATIONS	US	Issued	14/322,520	Jul 2, 2014	9,632,711	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER USING A FULL-FILM METAL PLANARI	US	Issued	14/310,360	Aug 20, 2014	9,053,735	Jun 9, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS ENABLING WRITING SERVO DATA WHEN DISK REACHES TARGET ROTATION	US	Issued	14/464,943	Jun 21, 2014	9,076,472	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATIONS CABLE WITH STATUS INDICATOR FOR ELECTRONIC DEVICES	US	Issued	15/458,930	Mar 14, 2017	9,893,476	Feb 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATIONS CABLE WITH STATUS INDICATOR FOR ELECTRONIC DEVICES	US	Issued	15/865,021	Jan 8, 2018	10,109,962	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATIONS CABLE WITH STATUS INDICATOR FOR ELECTRONIC DEVICES	US	Issued	14/277,362	May 14, 2014	9,608,386	Mar 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR A DATA STORAGE DEVICE USING A LAST RESORT ZONE	US	Issued	14/295,497	Jun 4, 2014	9,263,088	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT UNDERLAYER FOR HEAT ASSISTED MAGNETIC RECORDING MEDIA	US	Issued	14/315,101	Jun 25, 2014	9,824,711	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ADAPTIVE VOLTAGE SCALING	US	Issued	14/322,438	Jul 2, 2014	9,471,072	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-THE-FLY MEDIA-TAGGING, MEDIA-UPLOADING AND MEDIA NAVIGATING BY TAGS	US	Issued	14/230,753	Mar 31, 2014	9,614,894	Apr 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CIRCUIT TECHNIQUE TO INTEGRATE VOICE COIL MOTOR SUPPORT ELEMENTS	US	Issued	14/304,718	Jun 13, 2014	9,350,278	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING BRANCH METRIC FROM ADJACENT TRACK TO COMPENS	US	Issued	14/299,309	Jun 9, 2014	9,025,267	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AN ACTUATOR PIVOT ASSEMBLY INCLUDING A BONDING ADHESIVE BARRIER CONFIGUR	US	Issued	14/534,014	Nov 5, 2014	9,263,070	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SPINDLE WITH FLUID JOURNAL BEARING HAVING INCREASED RADIAL CLEAR	US	Issued	14/287,496	May 27, 2014	9,662,753	May 30, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE OPTIMIZED POWER MANAGEMENT	US	Issued	14/256,693	Apr 18, 2014	9,524,015	Dec 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING FLY HEIGHT ACTUATOR BASED ON READ MODE T	US	Issued	14/335,724	Jul 18, 2014	9,001,453	Apr 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INJECTION MOLDING PART WITH "ZERO DRAFT" DESIGN AND MANUFACTURING METH	US	Issued	14/246,730	Apr 7, 2014	9,573,306	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUSES AND METHODS FOR PROVIDING THIN SHIELDS IN A MULTIPLE SENSOR A	US	Issued	14/557,941	Dec 2, 2014	9,786,301	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST COMPATIBILITY FOR HOST MANAGED STORAGE MEDIA	US	Issued	14/606,921	Jan 27, 2015	9,864,529	Jan 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR WITH THIN CAPPING LAYER	US	Issued	14/308,421	Jun 18, 2014	9,361,914	Jan 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND DEVICES FOR ACHIEVING HIGH THROUGHPUT ATTACHMENT AND SUB-M	US	Issued	15/873,863	Jan 17, 2018	10,297,276	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND DEVICES FOR ACHIEVING HIGH THROUGHPUT ATTACHMENT AND SUB-M	US	Issued	14/748,607	Jun 24, 2015	9,902,023	Feb 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MEASURING DOWN-TRACK SPACING OF READ SENSORS	US	Issued	14/264,244	Apr 29, 2014	9,257,145	Feb 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ORDERING COMMITMENT OF DATA FROM A DATA CACHE TO NONVOLATILE MEMORY	US	Issued	15/481,247	Apr 6, 2017	10,162,534	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFICATION OF DATA COMMITTED TO NON-VOLATILE MEMORY BY USE OF NOTIFI	US	Issued	14/322,594	Jul 2, 2014	9,645,752	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTENT MATCHING SYSTEM FOR A NETWORKED MEDIA PLAYER	US	Issued	14/244,306	Apr 3, 2014	10,182,308	Jan 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE PAIRING OVER DIFFERENT NETWORKS	US	Issued	14/287,421	May 27, 2014	10,091,694	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH DATA MANAGEMENT MECHANISM AND METHOD OF OPER	US	Issued	14/539,847	Nov 12, 2014	9,245,558	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A MEDIA SUBSTRATE GRIPPER INCLUDING A PLURALITY OF SNAP-FIT FINGERS	US	Issued	14/575,776	Dec 18, 2014	9,401,300	Jul 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PROVIDING A PROTECTIVE LAYER HAVING A GRADED INTER	US	Issued	14/313,550	Jun 24, 2014	9,805,748	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SEPARATOR CONNECTED TO A RAMP	US	Issued	14/336,820	Jul 21, 2014	9,390,736	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD SEPARATOR FIN MATERIAL TO PREVENT PARTICULATE CONTAMINATI	US	Issued	14/312,592	Jun 23, 2014	9,196,275	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL GARBAGE COLLECTION FOR FAST ERROR HANDLING AND OPTIMIZED GARBAG	US	Issued	15/166,694	May 27, 2016	10,061,696	Aug 28, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL GARBAGE COLLECTION FOR FAST ERROR HANDLING AND OPTIMIZED GARBAG	US	Issued	14/250,000	Apr 10, 2014	9,354,955	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DOUBLE WRITING MAP TABLE ENTRIES IN A DATA STORAGE SYSTEM TO GUARD AGAIN	US	Issued	14/250,212	Apr 10, 2014	9,384,088	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED REMOTE DATA STORAGE ACCESS	US	Issued	14/280,208	May 16, 2014	9,886,216	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKUP OF BASELINE INSTALLATION	US	Issued	14/246,706	Apr 7, 2014	9,514,000	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH EMBEDDED SOFTWARE	US	Issued	16/752,445	Jan 24, 2020	10,887,393	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH EMBEDDED SOFTWARE	US	Issued	14/621,314	Feb 12, 2015	10,587,689	Mar 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-AMPLIFIER CARTRIDGE FOR TEST EQUIPMENT OF HEAD GIMBAL ASSEMBLY	US	Issued	14/313,842	Jun 24, 2014	9,404,939	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING ADAPTIVE FEED-FORWARD CONTROL IN TIMING LO	US	Issued	14/522,404	Oct 23, 2014	9,111,575	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY STABILIZED PERPENDICULAR MAGNETIC RECORDING MEDIUM	US	Issued	14/313,910	Jun 24, 2014	9,042,053	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NOTIFICATION PROPAGATION IN VIRTUAL COMPUTING ENVIRONMENT	US	Issued	14/299,332	Jun 9, 2014	9,189,264	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SHIELD FOR MAGNETIC RECORDING HEAD	US	Issued	14/313,069	Jun 24, 2014	9,230,565	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING MEDIA DEFECTS BY WRITING OPPOSITE POLARITY T	US	Issued	14/312,431	Jun 23, 2014	9,171,575	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH DATA MANAGEMENT MECHANISM AND METHOD OF OPER	US	Issued	14/307,345	Jun 17, 2014	9,075,714	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE GENERATING AN OPERATING SEEK TIME PROFILE AS A FUNCTI	US	Issued	14/706,881	May 7, 2015	9,418,689	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DYNAMICALLY REDUCING COAST VELOCITY DURING SEEK TO RE	US	Issued	14/510,951	Oct 9, 2014	9,208,815	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR REDUCING OPERATIONAL LATENCY OF DATA STORAGE SYSTEMS	US	Issued	14/514,689	Oct 15, 2014	9,236,086	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	LIFETIME EXTENSION OF NON-VOLATILE SEMICONDUCTOR MEMORY FOR DATA STORA	US	Issued	14/266,234	Apr 30, 2014	9,348,520	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH DAMPING CAP LAYER FOR MAGNETIC RECORDING MEDIA	US	Issued	14/322,000	Jul 2, 2014	9,159,350	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATION BETWEEN A HOST AND A SECONDARY STORAGE DEVICE	US	Issued	14/271,683	May 7, 2014	9,448,742	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INVENTORY MANAGEMENT SYSTEM USING INCREMENTAL CAPACITY FORMATS	US	Issued	14/338,498	Jul 23, 2014	9,916,616	Mar 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER HAVING SHOCK AND PARTICLE RESISTANCE	US	Issued	14/307,067	Jun 17, 2014	9,431,044	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INFORMATION-STORAGE DEVICE INCLUDING AN OXYGEN ABSORBING DEVICE	US	Issued	14/322,764	Jul 2, 2014	9,058,851	Jun 16, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER HAVING A GRADIENT SATURATION M	US	Issued	14/871,553	Sep 30, 2015	9,741,366	Aug 22, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING A GRADIENT IN SATURATION MAGNETIZATION OF THE SHI	US	Issued	14/575,090	Dec 18, 2014	9,214,165	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD STACK ASSEMBLY HAVING A FLEXIBLE PRINTED CIRCUIT WITH BOND	US	Issued	14/300,415	Jun 10, 2014	8,941,952	Jan 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING AREA CONFIGURATION FOR REDUCING FLYING HEIGHT HUMP ACROSS A	US	Issued	14/499,011	Sep 26, 2014	9,165,579	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING LASER PROTRUSION FLY HEIGHT PROFILE	US	Issued	14/483,397	Sep 11, 2014	9,153,266	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR MIDDLE SHIELD CONNECTION IN MAGNETIC RECORDIN	US	Issued	14/526,335	Oct 28, 2014	9,087,527	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR A DATA STORAGE DEVICE WITH ZONE RELOCATION	US	Issued	14/322,064	Jul 2, 2014	9,424,864	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	COHERENCY OF DATA IN DATA RELOCATION	US	Issued	15/342,895	Nov 3, 2016	10,282,130	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM GARBAGE COLLECTION BASED ON AT LEAST ONE ATTRIBUTE	US	Issued	14/538,513	Nov 11, 2014	9,501,393	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANDREL FOR SUBSTRATE TRANSPORT SYSTEM WITH NOTCH	US	Issued	14/497,213	Sep 25, 2014	9,227,324	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH A METHOD OF MOTOR SPINDLE BANDWIDTH ESTIMATION	US	Issued	14/582,123	Dec 23, 2014	9,230,592	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING AND ACCESSING DATA STORAGE SYSTEMS	US	Issued	14/308,566	Jun 18, 2014	10,652,193	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CORRUPTION-PREVENTATIVE PROGRAMMING IN SOLID-STATE DATA STORAGE	US	Issued	15/413,360	Jan 23, 2017	10,020,065	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE MEMORY CORRUPTION MITIGATION	US	Issued	14/312,144	Jun 23, 2014	9,564,212	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	CHECK-POINTING OF METADATA	US	Issued	14/451,115	Aug 4, 2014	9,875,055	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING LASER INPUT POWER TO COMPENSATE FOR TEMPE	US	Issued	14/509,322	Oct 8, 2014	9,025,421	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR CRYOGENIC DYNAMIC COOLING	US	Issued	14/461,153	Aug 15, 2014	10,054,363	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSOR WITH POSITIVE COUPLING BETWEEN DUAL FERROMAGNETIC FREE LAYER LAM	US	Issued	14/508,697	Oct 7, 2014	9,007,725	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SUSPENSION HAVING A FLEXURE TAIL WITH A COVERED CONDUCTIVE LAYER AND	US	Issued	14/492,266	Sep 22, 2014	9,633,680	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SYSTEM	US	Issued	15/429,228	Feb 10, 2017	9,953,667	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING LASER WRITE POWER FOR HEAT ASSISTED MAGN	US	Issued	14/494,710	Sep 24, 2014	9,117,479	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	LIFETIME EXTENSION OF MEMORY FOR DATA STORAGE SYSTEM	US	Issued	14/307,408	Jun 17, 2014	9,690,696	Jun 27, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING A PARTIALLY SHUNTED COIL	US	Issued	14/312,635	Jun 23, 2014	9,042,052	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF DATA OBJECTS IN A DATA OBJECT ZONE	US	Issued	14/335,539	Jul 18, 2014	8,953,269	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR A NETWORK CONNECTED STORAGE SYSTEM	US	Issued	14/621,318	Feb 12, 2015	9,621,653	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STRIP HEIGHT LAPPING CONTROL STRUCTURES FOR A MULTIPLE SENSOR ARRAY	US	Issued	15/648,594	Jul 13, 2017	10,008,222	Jun 26, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STRIP HEIGHT LAPPING CONTROL STRUCTURES FOR A MULTIPLE SENSOR ARRAY	US	Issued	15/988,122	May 24, 2018	10,460,751	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A STORAGE DEVICE	US	Issued	14/560,731	Dec 4, 2014	9,721,595	Aug 1, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMMUTATING A SPINDLE MOTOR USING CLOSED-LOOP ROTA	US	Issued	14/492,357	Sep 22, 2014	9,099,147	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ALIGNING BRACKET ASSEMBLY	US	Issued	14/314,942	Jun 25, 2014	9,265,171	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR REPEATABLE DISTURBANCE WHEN COMM	US	Issued	14/492,318	Sep 22, 2014	8,982,501	Mar 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SHROUD FOR AN ELECTRONIC DEVICE	US	Issued	15/640,050	Jun 30, 2017	10,278,296	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SHROUD FOR AN ELECTRONIC DEVICE	US	Issued	14/275,363	May 12, 2014	9,699,923	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SAVING ABSOLUTE POSITION AT EACH SERVO WEDGE FOR PRE	US	Issued	14/538,610	Nov 11, 2014	9,355,667	Jan 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH MEDIA SCAN MECHANISM AND METHOD OF OPERATION TH	US	Issued	14/526,710	Oct 29, 2014	9,349,401	May 24, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MODIFYING WRITE OPERATION WHEN A LASER MODE HOP IS	US	Issued	15/657,353	Jul 24, 2017	9,972,344	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MODIFYING WRITE OPERATION WHEN A LASER MODE HOP IS	US	Issued	14/497,285	Sep 25, 2014	9,747,928	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE COMPENSATION IN DATA STORAGE DEVICE	US	Issued	14/519,396	Oct 21, 2014	9,405,356	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	VIRTUALIZED AND AUTOMATED SOFTWARE BUILD SYSTEM	US	Issued	14/532,275	Nov 4, 2014	9,250,893	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING SEEK PROFILE BASED ON SEEK LENGTH WHEN ENDI	US	Issued	14/526,742	Oct 29, 2014	9,165,583	Oct 20, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	INTERFERING NEAR FIELD TRANSDUCER FOR ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	14/609,580	Jan 30, 2015	9,311,952	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERFERING NEAR FIELD TRANSDUCER FOR ENERGY ASSISTED MAGNETIC RECORDING	US	Issued	14/324,466	Jul 7, 2014	8,958,272	Feb 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER USING DIELECTRIC WAVEGUIDE CORE WITH FINE RIDGE FEAT	US	Issued	14/598,490	Jan 16, 2015	9,159,346	Oct 13, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER USING DIELECTRIC WAVEGUIDE CORE WITH FINE RIDGE FEAT	US	Issued	14/324,505	Jul 7, 2014	8,953,422	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE POLE HAVING ENGINEERED RADIUS OF CURVATURE AND CHISEL AN	US	Issued	14/492,545	Sep 22, 2014	9,190,079	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERFERING NEAR FIELD TRANSDUCER HAVING A WIDE METAL BAR FEATURE FOR EN	US	Issued	14/324,294	Jul 7, 2014	9,007,879	Apr 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR FIELD TRANSDUCER DRIVEN BY A TRANSVERSE ELECTRIC WAVEGUIDE FOR ENER	US	Issued	14/324,303	Jul 7, 2014	8,976,635	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH ACTUATOR CONTROL MECHANISM AND METHOD OF OPERA	US	Issued	14/308,373	Jun 18, 2014	9,142,225	Sep 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	VIBRATION MITIGATION FOR A DATA STORAGE DEVICE	US	Issued	14/300,439	Jun 10, 2014	9,472,222	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SEED STRUCTURE FOR PERPENDICULAR MAGNETIC RECORDING MEDIA	US	Issued	14/586,727	Dec 30, 2014	9,990,940	Jun 5, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MAXIMIZING AREAL DENSITY BASED ON A TARGET QUALITY ME	US	Issued	14/556,645	Dec 1, 2014	9,230,605	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SEED LAYER USED WITH AN UNBALANCED SOFT UNDERLAYER	US	Issued	14/695,463	Apr 24, 2015	9,431,045	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE TUNNELING MAGNETORESISTIVE DEVICE HAVING A LAMINAT	US	Issued	14/993,127	Jan 12, 2016	9,705,072	Jul 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE TUNNELING MAGNETORESISTIVE DEVICE HAVING A LAMINAT	US	Issued	14/563,721	Dec 8, 2014	9,236,560	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INTER-VIA CONDUCTIVE PATH ROUTING	US	Issued	15/946,534	Apr 5, 2018	10,852,762	Dec 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLER BOARD HAVING EXPANDABLE MEMORY	US	Issued	14/311,224	Jun 20, 2014	9,958,897	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVIDING DIGITAL VIDEO ASSETS WITH MULTIPLE AGE RATING LEVELS	US	Issued	16/115,462	Aug 28, 2018	10,848,825	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVIDING DIGITAL VIDEO ASSETS WITH MULTIPLE AGE RATING LEVELS	US	Issued	14/582,067	Dec 23, 2014	10,063,925	Aug 28, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SPACE EFFICIENT ENCLOSURES FOR DIFFERENT SIZED DRIVES	US	Issued	14/314,794	Jun 25, 2014	9,025,276	May 5, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/522,307	Mar 30, 2015	D778,280	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/507,571	Oct 29, 2014	D760,223	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE TESTING SYSTEMS AND METHODS	US	Issued	14/303,910	Jun 13, 2014	10,036,783	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH DATA REFRESH MECHANISM AND METHOD OF OPERATION	US	Issued	14/563,871	Dec 8, 2014	9,269,393	Feb 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER (NFT) FOR A HEAT ASSISTED MAGNETIC RECORDING (HAMR)	US	Issued	15/859,922	Jan 2, 2018	10,553,241	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A NEAR FIELD TRANSDUCER (NFT) FOR A HEAT ASSISTED MA	US	Issued	14/574,188	Dec 17, 2014	9,881,638	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE CACHING FOR SEQUENCE OF DATA	US	Issued	14/526,134	Oct 28, 2014	9,123,382	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DRIVE COMPATIBILITY INFORMATION MAINTENANCE	US	Issued	14/497,272	Sep 25, 2014	9,569,112	Feb 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	VOICE COIL MOTOR TEMPERATURE SENSING CIRCUIT TO REDUCE CATASTROPHIC FAILU	US	Issued	14/526,618	Oct 29, 2014	9,245,540	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/507,644	Oct 29, 2014	D777,725	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/592,455	Jan 30, 2017	D825,558	Aug 14, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE	US	Issued	29/493,635	Jun 11, 2014	D758,366	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A MAGNETIC WRITER HAVING A DUAL SIDE GAP	US	Issued	14/574,250	Dec 17, 2014	9,286,919	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVER WITH STORAGE DRIVE COOLING SYSTEM	US	Issued	14/531,537	Nov 3, 2014	9,443,560	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NAS OFF-LOADING OF NETWORK TRAFFIC FOR SHARED FILES	US	Issued	14/569,075	Dec 12, 2014	9,596,183	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MULTIPLE JOG PROFILES FOR A BUTTERFLY WRIT	US	Issued	14/607,040	Jan 27, 2015	9,099,134	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH DECLUSTERED DATA PROTECTION BY PARITY BASED ON REL	US	Issued	14/607,055	Jan 27, 2015	10,365,836	Jul 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NIFEX-BASED SEED LAYER FOR MAGNETIC RECORDING MEDIA	US	Issued	14/497,299	Sep 25, 2014	9,685,184	Jun 20, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DELAYING SEEK OPERATION TO AVOID THERMAL ASPERITIES	US	Issued	14/565,635	Dec 10, 2014	9,251,823	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	READ FAILOVER METHOD AND APPARATUS FOR A DATA STORAGE SYSTEM	US	Issued	14/664,730	Mar 20, 2015	9,251,856	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WATERFALL METHOD AND APPARATUS FOR A DATA STORAGE DEVICE READ SYSTEM	US	Issued	14/682,048	Apr 8, 2015	9,251,844	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ATTENUATING THERMAL DECAY EFFECT ON FLY HEIGHT MEASU	US	Issued	14/582,004	Dec 23, 2014	9,076,474	Jul 7, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK CLAMP AND MOTOR HUB CLEANING WITH STAMPING ADHESIVE	US	Issued	14/508,870	Oct 7, 2014	9,895,725	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD HAVING TDMR READER TO READER SHUNTS	US	Issued	14/579,785	Dec 22, 2014	9,437,251	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA HAVING IMPROVED MAGNETIC GRAIN SIZE DISTRIBUTION AND INTE	US	Issued	15/794,140	Oct 26, 2017	10,783,915	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA HAVING IMPROVED MAGNETIC GRAIN SIZE DISTRIBUTION AND INTE	US	Issued	14/556,993	Dec 1, 2014	9,818,442	Nov 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SLOPING TRANSITION ON A RAMP OF A HARD DISK DRIVE	US	Issued	14/574,284	Dec 17, 2014	9,171,560	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATION OF DOWNSTREAM PORTS IN A MULTIPLE INTERFACE DEVICE	US	Issued	14/557,148	Dec 1, 2014	9,672,183	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE TRANSDUCER HAVING A MAGNETIC BUFFER LAYER SPACED BETWEEN A SIDE SH	US	Issued	14/560,212	Dec 4, 2014	9,111,550	Aug 18, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR WRITER POLE LENGTH CHARACTERIZATION	US	Issued	14/538,676	Nov 11, 2014	9,183,859	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING FULL SERVO SECTORS ON FIRST DISK SURFACE AND	US	Issued	14/571,521	Dec 16, 2014	9,129,630	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING HEAD HAVING A PLURALITY OF DIFFUSION BAR	US	Issued	14/582,902	Dec 24, 2014	9,449,625	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING VARIABLE SIZE INTERLEAVE WRITTEN TRACK SEGME	US	Issued	14/575,634	Dec 18, 2014	9,281,009	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MONITORING VOLTAGE LEVELS FOR DATA STORAGE DEVICES	US	Issued	14/497,275	Sep 25, 2014	9,778,293	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MIRRORRED CROSS-TRACK PROFILES FOR TOP AND	US	Issued	14/678,816	Apr 3, 2015	9,368,131	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WAKEUP DETECTOR	US	Issued	14/563,633	Dec 8, 2014	9,454,212	Sep 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISPLAY SCREEN OR PORTION THEREOF WITH GRAPHICAL USER INTERFACE	US	Issued	29/504,004	Oct 1, 2014	D777,177	Jan 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOTE METADATA EXTRACTION AND TRANSCODING OF FILES TO BE STORED ON A N	US	Issued	14/582,043	Dec 23, 2014	10,715,595	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MAGNETIC RECORDING WRITE APPARATUS BY PREDEFININ	US	Issued	15/156,877	May 17, 2016	9,711,168	Jul 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE	US	Issued	29/566,048	May 26, 2016	D837,211	Jan 1, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE	US	Issued	29/671,737	Nov 29, 2018	D949,149	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE	US	Issued	29/830,184	Mar 10, 2022	D977,477	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE	US	Issued	29/507,576	Oct 29, 2014	D760,222	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE-THROUGH MEDIA CACHING	US	Issued	14/582,025	Dec 23, 2014	9,311,939	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE OPTIMIZING SPINDLE MOTOR POWER WHEN TRANSITIONING I	US	Issued	14/987,581	Jan 4, 2016	9,761,266	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE OPTIMIZING SPINDLE MOTOR POWER WHEN TRANSITIONING I	US	Issued	14/582,068	Dec 23, 2014	9,230,593	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR DATA STORAGE DEVICE WITH DIFFERENT TRACK DENSITY RE	US	Issued	14/522,451	Oct 23, 2014	9,129,628	Sep 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DRIVES WITH ACTIVE PHOTOCATALYTIC FILTRATION	US	Issued	14/573,873	Dec 17, 2014	9,123,387	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA PROTECTION FOR A DATA STORAGE DEVICE	US	Issued	14/619,968	Feb 11, 2015	9,672,107	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE TOLERANCE RING WITH EDGE ROUNDING FROM OPPOSITE MAJOR FACES	US	Issued	14/636,077	Mar 2, 2015	9,908,167	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ALLOWING FAST DATA ZONE SWITCHES ON DATA STORAGE DEVICES	US	Issued	15/001,730	Jan 20, 2016	9,466,318	Oct 11, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ALLOWING FAST DATA ZONE SWITCHES ON DATA STORAGE DEVICES	US	Issued	14/582,663	Dec 24, 2014	9,257,134	Feb 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HAND HELD STORAGE DEVICE	US	Issued	14/341,653	Jul 25, 2014	10,068,619	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITER HAVING HALF SHIELDS	US	Issued	14/578,449	Dec 21, 2014	9,343,087	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC POWER DISCONNECT METHOD	US	Issued	15/202,226	Jul 5, 2016	9,930,788	Mar 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC POWER DISCONNECT DEVICE	US	Issued	14/585,111	Dec 29, 2014	9,407,015	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO DETECT POWER LOSS THROUGH DATA STORAGE DEVICE SPINDLE SPEED	US	Issued	14/627,590	Feb 20, 2015	9,437,237	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SMOOTH STRUCTURES FOR HEAT-ASSISTED MAGNETIC RECORDING MEDIA	US	Issued	14/535,130	Nov 6, 2014	9,449,633	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A COMMUNICATIONS DEVICE THAT LOGICALLY CONNECTS AN UPSTREAM SIGNAL LINE	US	Issued	14/547,462	Nov 19, 2014	9,911,011	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING SYMMETRIC AN	US	Issued	14/578,460	Dec 21, 2014	10,074,387	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH MEDIA MAINTENANCE MECHANISM AND METHOD OF OPE	US	Issued	14/662,163	Mar 18, 2015	9,196,302	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	TRACKING SEQUENTIAL RANGES OF NON-ORDERED DATA	US	Issued	14/642,666	Mar 9, 2015	9,959,204	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER SAFE WRITE BUFFER FOR DATA STORAGE DEVICE	US	Issued	14/639,555	Mar 5, 2015	9,933,955	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITER WITH A COMPOSITE MAIN POLE	US	Issued	14/673,748	Mar 30, 2015	9,245,562	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING AND ACCESSING DATA STORAGE SYSTEMS	US	Issued	14/498,320	Sep 26, 2014	9,866,634	Jan 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ETCHING CONTINUOUS PERIODIC PATTERN ON A SUSPENSION TO ADJUST PITCH AND R	US	Issued	14/578,454	Dec 21, 2014	9,236,071	Jan 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	A METHOD OF OPTIMIZING DEVICE PERFORMANCE BY MAINTAINING DEVICE WITHIN T	US	Issued	14/525,373	Oct 28, 2014	9,763,116	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATION INTERFACE TESTING	US	Issued	14/582,545	Dec 24, 2014	9,742,654	Aug 22, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SWAGE KEY ENABLING SIMULTANEOUS TRANSFER OF TWO HEAD GIMBAL ASSEMBLIES	US	Issued	14/738,797	Jun 12, 2015	9,299,372	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER LOSS MITIGATION FOR DATA STORAGE DEVICE	US	Issued	14/664,674	Mar 20, 2015	9,870,281	Jan 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURING MULTI-LINE SERIAL COMPUTER EXPANSION BUS COMMUNICATION LINK	US	Issued	14/740,144	Jun 15, 2015	10,002,093	Jun 19, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH SERVO MANAGEMENT MECHANISM AND METHOD OF OPE	US	Issued	14/574,339	Dec 17, 2014	9,581,978	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	EXCHANGE BREAK LAYER FOR HEAT-ASSISTED MAGNETIC RECORDING MEDIA	US	Issued	14/581,274	Dec 23, 2014	9,218,850	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFICATION OF DATA WITH PREDETERMINED DATA PATTERN	US	Issued	14/574,123	Dec 17, 2014	10,282,096	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL FREE LAYER MAGNETIC READER HAVING A REAR BIAS STRUCTURE HAVING A HIG	US	Issued	14/674,899	Mar 31, 2015	9,449,621	Sep 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL FREE LAYER MAGNETIC READER HAVING A REAR BIAS STRUCTURE HAVING A HIG	US	Issued	15/236,386	Aug 12, 2016	9,922,672	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL FREE LAYER MAGNETIC READER HAVING A REAR BIAS STRUCTURE INCLUDING A S	US	Issued	14/670,340	Mar 26, 2015	9,384,763	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CABLE INTERFACE	US	Issued	14/633,102	Feb 26, 2015	9,785,203	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING DATA ACCESS REQUESTS FROM MULTIPLE INTERFACES FOR DATA STORA	US	Issued	15/728,419	Oct 9, 2017	10,025,516	Jul 17, 2018

WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING DATA ACCESS REQUESTS FROM MULTIPLE INTERFACES FOR DATA STORAGE	US	Issued	14/667,470	Mar 24, 2015	9,785,361	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DOCKING STATION	US	Issued	14/740,206	Jun 15, 2015	10,097,636	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFYING DISK DRIVES AND PROCESSING DATA ACCESS REQUESTS	US	Issued	15/785,054	Oct 16, 2017	10,067,685	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFYING DISK DRIVES AND PROCESSING DATA ACCESS REQUESTS	US	Issued	14/746,598	Jun 22, 2015	9,792,048	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING A GRADIENT IN SATURATION MAGNETIZATION OF THE SHIELD	US	Issued	14/667,506	Mar 24, 2015	9,443,541	Sep 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	GAS-CHARGING HEAD WITH INTEGRAL VALVES	US	Issued	14/739,286	Jun 15, 2015	9,799,377	Oct 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR AFC SHIELDS FOR MULTIPLE SENSOR MAGNETIC TRANSDUCERS AND MEDIA	US	Issued	15/219,474	Jul 26, 2016	9,754,613	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR AFC SHIELDS FOR MULTIPLE SENSOR MAGNETIC TRANSDUCERS AND MEDIA	US	Issued	15/672,857	Aug 9, 2017	10,115,419	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MAGNETIC TRANSDUCERS HAVING MULTIPLE SENSORS AND MEDIA	US	Issued	14/667,433	Mar 24, 2015	9,431,031	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND DEVICES FOR PICKING AND PLACING WORKPIECES INTO DEVICES UNDER	US	Issued	14/868,320	Sep 28, 2015	10,039,219	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ACTUATOR HAVING A RADially STEPPED PIVOT BORE	US	Issued	14/669,931	Mar 26, 2015	9,153,262	Oct 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING A PHASE OFFSET TO GENERATE POWER FROM A SPIN	US	Issued	14/668,940	Mar 25, 2015	9,343,102	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE WITH COLLAPSIBLE SUPPORT	US	Issued	14/752,701	Jun 26, 2015	9,886,983	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING SPINDLE MOTOR DRIVING PROFILE DURING SEEK	US	Issued	14/740,098	Jun 15, 2015	9,424,868	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER BACK SIDE ETCHING TO INCREASE SHEAR STRENGTH BETWEEN SUSPENSION AN	US	Issued	14/664,425	Mar 20, 2015	9,368,139	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING TWO-DIMENSIONAL DATA DEPENDENT NOISE WH	US	Issued	14/664,570	Mar 20, 2015	9,183,877	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE UPDATING LASER POWER DURING NON-WRITE MODE FOR HEAT	US	Issued	14/682,021	Apr 8, 2015	9,552,068	Nov 22, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONTROLLING AMPLITUDE AND PHASE OF DRIVING VOLTAGE T	US	Issued	14/668,949	Mar 25, 2015	9,305,676	May 31, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A TOP COVER CHANNEL VENTED TO A CENTRAL CAVITY VIA A HOLE	US	Issued	14/666,168	Mar 23, 2015	9,183,889	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA BASED CACHE FOR DATA STORAGE DEVICE	US	Issued	14/857,467	Sep 17, 2015	9,959,052	May 1, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC REVERSIBLE POWER AND DATA CONNECTOR	US	Issued	14/871,139	Sep 30, 2015	9,577,372	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA DEDUPLICATION USING CHUNK FILES	US	Issued	14/673,785	Mar 30, 2015	9,684,569	Jun 20, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD PROVIDING NON-VOLATILE MEMORY BUFFER FOR	US	Issued	14/642,597	Mar 9, 2015	9,857,995	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING A LASER POWER FOR HEAT ASSISTED MAGNETIC	US	Issued	14/666,080	Mar 23, 2015	9,384,774	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ROTARY SPINDLE HAVING A DISK CLAMP BOTTOM LAND FACING AND IN CONTACT WITH	US	Issued	14/615,339	Feb 5, 2015	9,196,292	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC SYSTEM WITH HEAD MANAGEMENT MECHANISM AND METHOD OF OPER	US	Issued	14/754,340	Jun 29, 2015	9,842,617	Dec 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT IN RAID ENVIRONMENT	US	Issued	14/741,157	Jun 16, 2015	9,952,950	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT IN RAID ENVIRONMENT	US	Issued	14/741,287	Jun 16, 2015	10,572,358	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITER HAVING AN INTEGRATED POLARIZATIO	US	Issued	14/621,287	Feb 12, 2015	9,123,374	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE FILTER INCLUDING FLUORINATED AND NON-FLUORINATED NANOPOROUS	US	Issued	14/617,847	Feb 9, 2015	9,190,114	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WRITING MULTIPLE BURST CORRECTION VALUES AT THE SAME	US	Issued	14/669,994	Mar 26, 2015	9,286,925	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING READER/WRIter OFFSET BY READING SPIRAL TRAC	US	Issued	14/642,684	Mar 9, 2015	9,245,560	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING DATA STORAGE COMMANDS FOR ENCLOSURE SERVICES	US	Issued	14/639,442	Mar 5, 2015	9,710,170	Jul 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE STREAM BUFFER ON NETWORK ATTACHED STORAGE	US	Issued	15/954,359	Apr 16, 2018	10,447,667	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE STREAM BUFFER ON NETWORK ATTACHED STORAGE	US	Issued	16/575,358	Sep 18, 2019	11,196,725	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE STREAM BUFFER ON NETWORK ATTACHED STORAGE	US	Issued	14/615,367	Feb 5, 2015	9,948,618	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING AREA CONFIGURATION FOR CONTAMINATING PARTICLE REMOVAL	US	Issued	14/582,921	Dec 24, 2014	9,190,089	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI STEP LUBE BLOCKING AIR BEARING AREA CONFIGURATION	US	Issued	14/583,017	Dec 24, 2014	9,190,090	Nov 17, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE FILTERING BURST CORRECTION VALUES BEFORE DOWNSAMPLI	US	Issued	14/669,724	Mar 26, 2015	9,343,094	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY PROGRAMMING PROVIDING CORRUPTION PROTECTION	US	Issued	14/748,616	Jun 24, 2015	9,971,659	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FLAT NPT FOR HEAT ASSISTED MAGNETIC RECORDING	US	Issued	14/674,509	Mar 31, 2015	9,263,071	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING SYSTEM SELECTION FOR DATA STORAGE	US	Issued	14/871,639	Sep 30, 2015	10,013,174	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING SPINDLE MOTOR CURRENT SENSING WITH SUPPL	US	Issued	14/670,353	Mar 26, 2015	9,245,577	Jan 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A READ TRANSDUCER HAVING A DUAL FREE LA	US	Issued	14/675,326	Mar 31, 2015	9,147,404	Sep 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANICAL SHOCK MITIGATION FOR DATA STORAGE	US	Issued	14/671,434	Mar 27, 2015	9,823,859	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY INTERFACE INITIALIZATION WITH PRECESSOR IN RESET	US	Issued	15/874,165	Jan 18, 2018	10,114,657	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMUNICATION INTERFACE INITIALIZATION	US	Issued	14/675,531	Mar 31, 2015	9,886,285	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED METAL LAYER TO CONTROL SOLDER CONNECTION BETWEEN LASER AND SU	US	Issued	14/663,031	Mar 19, 2015	9,171,562	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	IRIDIUM UNDERLAYER FOR HEAT ASSISTED MAGNETIC RECORDING MEDIA	US	Issued	14/674,185	Mar 31, 2015	9,822,441	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR REDUCING UNDESIRABLE REFLECTIONS IN A HAMR WRITE	US	Issued	14/936,584	Nov 9, 2015	9,484,051	Nov 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR INTEGRATED BRIDGE FIRMWARE TO BE RET	US	Issued	14/605,910	Jan 26, 2015	9,734,117	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF SEQUENTIALLY WRITTEN DATA	US	Issued	14/692,635	Apr 21, 2015	9,418,699	Aug 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE TACKING OF HEAD GIMBAL ASSEMBLY LONG TAIL AND HSA ARM SLOT	US	Issued	14/752,646	Jun 26, 2015	9,286,922	Mar 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYNCING WITH A LOCAL PAIRED DEVICE TO OBTAIN DATA FROM A REMOTE SERVER US	US	Issued	14/674,681	Mar 31, 2015	10,574,745	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TBFCO IN PMR MEDIA FOR SNR IMPROVEMENT	US	Issued	14/675,588	Mar 31, 2015	9,275,669	Mar 1, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	BROWSABLE OF BACKUP FILES USING DATA STORAGE PARTITIONING	US	Issued	16/551,235	Aug 26, 2019	11,593,304	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	BROWSABLE DATA BACKUP	US	Issued	14/736,784	Jun 11, 2015	10,394,760	Aug 27, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLE MAGNETIC WRITER HAVING A LOW SIDEWALL ANGLE POLE	US	Issued	14/729,403	Jun 3, 2015	9,508,372	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISASTER RECOVERY ON DISSIMILAR HARDWARE	US	Issued	14/582,983	Dec 24, 2014	9,619,340	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH A DIELECTRIC LAYE	US	Issued	14/749,910	Jun 25, 2015	9,524,738	Dec 20, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DISASTER RECOVERY ? MULTIPLE RESTORE OPTIONS AND AUTOMATIC MANAGEMENT	US	Issued	14/752,249	Jun 26, 2015	9,846,621	Dec 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE MOTOR CUP SUPPORT	US	Issued	14/735,461	Jun 10, 2015	9,361,947	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND STRUCTURE FOR SOLDERING A LASER SUBMOUNT TO A MOUNTING FAC	US	Issued	14/619,030	Feb 10, 2015	9,202,478	Dec 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC RECORDING DEVICE HAVING A HIGH ASPECT	US	Issued	14/750,239	Jun 25, 2015	9,530,443	Dec 27, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FABRICATING A MAGNETIC WRITE POLE HAVING AN IMPROVED SIDEWA	US	Issued	14/753,630	Jun 29, 2015	9,431,038	Aug 30, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FULLNESS CONTROL FOR MEDIA-BASED CACHE OPERATING IN A STEADY STATE	US	Issued	14/728,293	Jun 2, 2015	9,588,898	Mar 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DEFECT MANAGEMENT FOR A DATA STORAGE DEVICE	US	Issued	14/737,822	Jun 12, 2015	9,361,938	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ANGULAR POSITION TRACKING OF DATA ACCESSSES TO MITIGATE RISKS OF DATA LOSS	US	Issued	14/732,015	Jun 5, 2015	9,466,321	Oct 11, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MANAGEMENT FOR OBJECT BASED STORAGE	US	Issued	14/747,098	Jun 23, 2015	10,089,023	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYMMETRIC AND CONTINUOUS MEDIA STREAM FROM MULTIPLE SOURCES	US	Issued	15/938,388	Mar 28, 2018	11,089,071	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYMMETRIC AND CONTINUOUS MEDIA STREAM FROM MULTIPLE SOURCES	US	Issued	14/673,544	Mar 30, 2015	9,942,294	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	BRIDGE CONFIGURATION IN COMPUTING DEVICES	US	Issued	14/737,307	Jun 11, 2015	9,836,417	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	FREE-STANDING REFLECTOR USABLE IN HEAT ASSISTED MAGNETIC RECORDING TECHN	US	Issued	14/869,606	Sep 29, 2015	9,659,589	May 23, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITER HAVING INTEGRATED POLARIZATION R	US	Issued	15/587,571	May 5, 2017	10,037,773	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITER HAVING INTEGRATED POLARIZATION R	US	Issued	14/752,482	Jun 26, 2015	9,646,639	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST CONFIGURED MULTI SERIAL INTERFACE DEVICE	US	Issued	15/949,355	Apr 10, 2018	10,095,652	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST CONFIGURED MULTI SERIAL INTERFACE DEVICE	US	Issued	14/753,944	Jun 29, 2015	9,946,681	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIAL DUAL FREE LAYER MAGNETIC READER	US	Issued	14/863,309	Sep 23, 2015	9,472,216	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TIERED STORAGE USING STORAGE CLASS MEMORY	US	Issued	16/176,997	Oct 31, 2018	10,761,777	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TIERED STORAGE USING STORAGE CLASS MEMORY	US	Issued	14/968,278	Dec 14, 2015	10,126,981	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READER HAVING A CRYSTAL DECOUPLING STRUCTURE	US	Issued	14/749,260	Jun 24, 2015	9,508,365	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUPPORT IN USE ENCLOSURE TO IMPROVE VIBRATION ISOLATION	US	Issued	14/735,411	Jun 10, 2015	9,947,370	Apr 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING PARAMETER FOR HEAT ASSISTED MAGNETIC REC	US	Issued	14/736,860	Jun 11, 2015	9,472,219	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ACIDIC POST SPITTER WASH FOR MAGNETIC RECORDING MEDIA	US	Issued	14/673,676	Mar 30, 2015	9,280,998	Mar 8, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING DIFFERENT FREQUENCY PREAMBLES IN ADJACENT	US	Issued	14/853,313	Sep 14, 2015	9,437,242	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE-BASED DATA REFRESHING	US	Issued	15/602,725	May 23, 2017	10,021,777	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE MANAGEMENT IN DATA STORAGE DEVICES	US	Issued	14/848,158	Sep 8, 2015	9,668,337	May 30, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A HAMR WRITER HAVING IMPROVED OPTICAL	US	Issued	14/864,665	Sep 24, 2015	9,384,765	Jul 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READER HAVING A NONMAGNETIC INSERTION LAYER FOR THE PINNING LAY	US	Issued	15/817,543	Nov 20, 2017	10,242,700	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READER HAVING A NONMAGNETIC INSERTION LAYER FOR THE PINNING LAY	US	Issued	14/752,659	Jun 26, 2015	9,842,615	Dec 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITE APPARATUS HAVING A DIELECTRIC GAP	US	Issued	14/864,716	Sep 24, 2015	9,424,866	Aug 23, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE COMMAND REPORTING	US	Issued	14/753,507	Jun 29, 2015	9,639,287	May 2, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SHINGLE MAGNETIC WRITER HAVING NONCONFORMAL SHIELDS	US	Issued	14/871,763	Sep 30, 2015	9,595,273	Mar 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A STEPPED CONFORMAL TRAILING	US	Issued	15/677,145	Sep 15, 2017	10,121,495	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A STEPPED CONFORMAL TRAILING	US	Issued	14/953,982	Nov 30, 2015	9,754,611	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING (HAMR) MEDIA WITH CURIE TEMPERATURE RE	US	Issued	14/865,501	Sep 25, 2015	11,074,934	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXECUTING RETRY OPERATION BY BUFFERING SIGNAL SAMPLE	US	Issued	14/799,536	Jul 14, 2015	9,318,137	Apr 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR USING SECONDARY NON-VOLATILE MEMOR	US	Issued	14/870,571	Sep 30, 2015	9,836,232	Dec 5, 2017

WESTERN DIGITAL TECHNOLOGIES, INC.	DIVISION OF DATA STORAGE IN SINGLE-STORAGE DEVICE ARCHITECTURE	US	Issued	14/920,834	Oct 22, 2015	10,102,138	Oct 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR FABRICATION TOLERANCES WHEN MEASU	US	Issued	14/752,751	Jun 26, 2015	9,396,751	Jul 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A HAMR WRITER INCLUDING A MULTI-MODE I	US	Issued	15/923,044	Nov 16, 2018	10,381,029	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A HAMR WRITER INCLUDING A MULTI-MODE I	US	Issued	14/936,967	Nov 10, 2015	9,953,670	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A TOP COVER CHANNEL VENTED TO A CENTRAL CAVITY VIA A PERI	US	Issued	14/666,184	Mar 23, 2015	9,171,583	Oct 27, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE	US	Issued	29/531,264	Jun 24, 2015	0,777,724	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING SETUP FOR WIRELESS DEVICES	US	Issued	14/936,602	Nov 9, 2015	9,763,082	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING DIFFERENTIAL WRITE DATA SIGNAL AND DIFFEREN	US	Issued	14/846,019	Sep 4, 2015	9,368,132	Jun 14, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONCURRENTLY CONTROLLING AND SENSING A SECONDARY AD	US	Issued	14/865,858	Sep 25, 2015	9,437,231	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC-RECORDING MEDIUM INCLUDING A CARBON OVERCOAT IMPLANTED WITH	US	Issued	14/982,394	Dec 29, 2015	10,121,506	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES AND METHODS WITH FREQUENCY-SHAPED SLIDING MODE CO	US	Issued	14/828,255	Aug 17, 2015	9,542,966	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL BARRIER LAYERS AND SEED LAYERS FOR CONTROL OF THERMAL AND STRUCT	US	Issued	14/935,337	Nov 6, 2015	10,236,026	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING A READER OVERCOAT WITH DLC AND A RECESSED WRITER O	US	Issued	14/934,453	Nov 6, 2015	9,659,587	May 23, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	EJECTION MECHANISM ASSEMBLY FOR STORAGE DRIVE AND STORAGE DRIVE HAVING	US	Issued	14/813,634	Jul 30, 2015	10,126,786	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION MANAGEMENT FOR DATA STORAGE DEVICE	US	Issued	14/870,562	Sep 30, 2015	9,875,031	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA REGION MANAGEMENT BASED ON STORAGE HINTS FOR A DATA STORAGE DEVI	US	Issued	14/871,054	Sep 30, 2015	10,162,521	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSING DEVICE DATA CACHING	US	Issued	16/020,992	Jun 27, 2018	10,740,242	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CACHING SENSING DEVICE DATA IN DATA STORAGE DEVICE	US	Issued	14/971,995	Dec 16, 2015	10,019,372	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ APPARATUS HAVING AN IMPROVED READ SENSOR ISOLATION CIRCUIT	US	Issued	14/951,411	Nov 24, 2015	9,564,150	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR MEDIA STRUCTURE WITH INTERMEDIATE LAYER UNDERLYING A MAGNETIC REC	US	Issued	14/954,397	Nov 24, 2015	9,406,329	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC DISCOVERY AND ONBOARDING OF ELECTRONIC DEVICES	US	Issued	14/752,716	Jun 26, 2015	10,567,518	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	READ COMMAND PROCESSING FOR DATA STORAGE SYSTEM BASED ON PREVIOUS WRI	US	Issued	14/825,738	Aug 13, 2015	9,785,563	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER CONTROL MODULE USING PROTECTION CIRCUIT FOR REGULATING BACKUP VO	US	Issued	15/896,596	Feb 14, 2018	10,127,952	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER CONTROL MODULE USING PROTECTION CIRCUIT FOR REGULATING BACKUP VO	US	Issued	14/944,664	Nov 18, 2015	9,899,834	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	JUMPER ASSEMBLY	US	Issued	14/946,007	Nov 19, 2015	9,640,927	May 2, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SHORT YOKE LENGTH WRITER HAVING ASSIST COILS	US	Issued	14/954,293	Nov 30, 2015	9,799,351	Oct 24, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTRUDER FOR THREE-DIMENSIONAL ADDITIVE PRINTER	US	Issued	14/982,706	Dec 29, 2015	10,150,239	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL HEAD EXTRUDER FOR THREE-DIMENSIONAL ADDITIVE PRINTER	US	Issued	14/983,032	Dec 29, 2015	10,150,249	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	REPLICATING DATA ACROSS DATA STORAGE DEVICES OF A LOGICAL VOLUME	US	Issued	14/870,943	Sep 30, 2015	10,459,891	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A STATIONARY PLATE BETWEEN DISKS WITH GROOVES ADJACENT	US	Issued	14/936,890	Nov 10, 2015	9,406,333	Aug 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	READ DISTURB COMPENSATION USING WEIGHTED PROGRAMMING PATTERNS	US	Issued	15/641,258	Jul 4, 2017	10,481,809	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WEIGHTED PROGRAMMING PATTERNS IN SOLID-STATE DATA STORAGE SYSTEMS	US	Issued	14/864,653	Sep 24, 2015	9,727,261	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ENCLOSURE BASE WITH FEED THROUGH FLEXURE DESIGN AND ACCO	US	Issued	14/843,911	Sep 2, 2015	9,472,242	Oct 18, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE ENCLOSURE BASE WITH A HELIUM SEALED GASKET	US	Issued	14/852,333	Sep 11, 2015	9,508,393	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Protection against state transition errors in solid-state data storage systems	US	Issued	15/466,004	Mar 22, 2017	9,922,727	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION CHARGE LOSS AND READ DISTURB COMPENSATION IN SOLID-STATE D	US	Issued	14/929,080	Oct 30, 2015	9,620,226	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MAGNETIC RECORDING WRITE APPARATUS HAVING A SEA	US	Issued	14/939,934	Nov 12, 2015	10,037,770	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING CONVEX TRAILING SURFACE POLE AND CONFORMAL WRIT	US	Issued	15/698,958	Sep 8, 2017	9,997,177	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING CONVEX TRAILING SURFACE POLE AND CONFORMAL WRIT	US	Issued	14/956,168	Dec 1, 2015	9,767,831	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR FABRICATING HIGH JUNCTION ANGLE READ SENSORS	US	Issued	14/949,155	Nov 23, 2015	9,812,155	Nov 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION CHARGE LOSS SENSOR	US	Issued	14/936,353	Nov 9, 2015	9,857,999	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING APPARATUS HAVING A RECESSED ADDITIONAL POLE SEGMENT	US	Issued	15/081,694	Mar 25, 2016	9,478,242	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVIDING SECURE ACCESS TO DIGITAL STORAGE DEVICES	US	Issued	14/972,013	Dec 16, 2015	10,268,814	Apr 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING RESONANT FREQUENCY OF A SHOCK SENSOR BY I	US	Issued	14/981,844	Dec 28, 2015	9,620,160	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING RESONANT FREQUENCY OF A SHOCK SENSOR BY A	US	Issued	14/981,785	Dec 28, 2015	9,564,162	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ORIENTATION-BASED DATA TRANSFER	US	Issued	14/945,240	Nov 18, 2015	10,289,337	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM INCLUDING A BI-LAYER THAT	US	Issued	15/089,145	Apr 1, 2016	9,697,859	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCODING AND INTERLEAVING CODEWORDS TO IMPROVE TRE	US	Issued	14/930,898	Nov 3, 2015	9,761,273	Sep 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MULTILAYER AFM LAYER IN A READ SENSOR	US	Issued	14/955,375	Dec 1, 2015	9,858,951	Jan 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DATA STORAGE SYSTEM WITH PRIVATE STORAGE CLOUD AND PUBLIC STORAGE	US	Issued	15/635,039	Jun 27, 2017	10,733,061	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DATA STORAGE SYSTEM WITH PRIVATE STORAGE CLOUD AND PUBLIC STORAGE	US	Issued	15/635,056	Jun 27, 2017	10,289,310	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	BUS-POWERED DATA STORAGE DEVICE WITH WARNING ALARM TRIGGERED BY IMPRO	US	Issued	14/982,860	Dec 29, 2015	9,753,673	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY HAVING A FLEXURE TAIL WITH COVER LAYER STANDOFF ISLA	US	Issued	15/007,646	Jan 27, 2016	9,564,156	Feb 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ESTABLISHING CONNECTIONS BETWEEN DATA STORAGE DEVICES	US	Issued	16/852,462	Apr 18, 2020	11,032,240	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ESTABLISHING CONNECTIONS BETWEEN DATA STORAGE DEVICES	US	Issued	15/096,102	Apr 11, 2016	10,645,059	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SURVEILLANCE SYSTEMS AND METHODS THEREOF	US	Issued	15/256,397	Sep 2, 2016	10,609,338	Mar 31, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CLAMP CUP TO SECURE ELECTRICAL CONNECTORS HAVING FIRST AND SECOND MATING	US	Issued	15/052,771	Feb 24, 2016	9,634,431	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	EOS EVENT DETECTION CIRCUIT FOR DETECTING EOS EVENT ON SUPPLY VOLTAGE RAIL	US	Issued	15/158,541	May 18, 2016	10,116,129	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING HEAD HAVING NEAR FIELD TRANSDUCER WITH	US	Issued	15/703,108	Sep 13, 2017	10,106,885	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING HEAT ASSISTED MAGNETIC RECORDING WRITE APPARATUS H	US	Issued	15/199,540	Jun 30, 2016	9,786,304	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	OVERVOLTAGE DETECTION CIRCUIT FOR DETECTING AN OVERVOLTAGE SPIKE FROM AN	US	Issued	15/095,605	Apr 11, 2016	9,910,075	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	CHARACTERIZING A SENSING CIRCUIT OF A DATA STORAGE DEVICE	US	Issued	15/635,003	Jun 27, 2017	9,953,674	Apr 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL PHASE MGO-X SEED LAYERS FOR HEAT ASSISTED MAGNETIC RECORDING MEDIA	US	Issued	15/050,032	Feb 22, 2016	10,276,201	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM INCLUDING A SPLIT HEAD-SI	US	Issued	15/136,195	Apr 22, 2016	9,754,618	Sep 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITER HAVING A RECESSED TRAILING SHIELD AND NONMAGNETIC REFILL	US	Issued	15/019,062	Feb 9, 2016	9,934,794	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A POLE INCLUDING AN ASSIST POR	US	Issued	15/081,727	Mar 25, 2016	9,558,763	Jan 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MOTOR BASE ASSEMBLY FOR STORAGE DEVICE	US	Issued	15/866,615	Jan 10, 2018	10,115,421	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK FLEX ASSEMBLY AND BASE ASSEMBLY FOR STORAGE DRIVE AND METHOD	US	Issued	15/137,863	Apr 25, 2016	9,899,048	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING DATA AVERAGING TECHNIQUES DURING RETRY OPERATIONS T	US	Issued	10/080,784	Feb 22, 2002	7,136,244	Nov 14, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A SECTOR CLOCK THAT IS SYNCHRONIZED TO THE ANGULAR SPEED	US	Issued	10/125,131	Apr 17, 2002	7,126,776	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF AND PERSONAL COMPUTER FOR DISPLAYING CONTENT RECEIVED FROM	US	Issued	09/618,209	Jul 18, 2000	7,150,036	Dec 12, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR SETTING A POWER OPERATING MODE TRANSITION INTERVAL OF A DISK	US	Issued	10/105,493	Oct 31, 2001	7,120,806	Oct 10, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOTELY SYNCHRONIZING A MOBILE TERMINAL BY ADAPTING ORDERING AND FILTER	US	Issued	09/863,572	May 23, 2001	7,024,491	Apr 4, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MOBILE TERMINAL SYNCHRONIZING COMPONENTS OF A DOCUMENT SEPARATELY	US	Issued	09/918,666	Jul 30, 2001	7,275,116	Sep 25, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MOBILE TERMINAL FOR DISPLAYING A RICH TEXT DOCUMENT COMPRISING CONDITION	US	Issued	09/888,275	Jun 22, 2001	6,892,217	May 10, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE AND METHOD FOR USING A MAILBOX FILE ASSOCIATED WITH A DISK STOR	US	Issued	10/004,100	Oct 31, 2001	7,415,571	Aug 19, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE USING ROTATIONAL POSITION OPTIMIZATION ALGORITHM TO FACILITATE I	US	Issued	10/080,780	Feb 22, 2002	6,854,022	Feb 8, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION DESIGN FOR ATTENUATION OF DISK FLUTTER INDUCED TRACK MIS-REGIS	US	Issued	10/080,786	Feb 22, 2002	6,965,500	Nov 15, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING OFF-LINE SECTOR VERIFICATION AND RELOCATION OF MARGIN	US	Issued	10/160,955	Jun 1, 2002	7,050,252	May 23, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SERIAL ATA DISK DRIVE HAVING A PARALLEL ATA TEST INTERFACE AND METHOD	US	Issued	10/209,804	Jul 31, 2002	6,979,102	Dec 13, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION DESIGN FOR ATTENUATION OF DISK FLUTTER INDUCED TRACK MIS-REGIS	US	Issued	10/080,849	Feb 22, 2002	7,113,371	Sep 26, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SPLIT VCM ACTUATOR	US	Issued	10/137,227	Apr 30, 2002	6,847,504	Jan 25, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CACHING INITIAL HOST REQUESTED DATA IN NON-VOLATILE SEMICONDUCT	US	Issued	10/160,682	Jun 1, 2002	6,968,450	Nov 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING COVER ASSEMBLY WHICH COMPRESSES A FOAM MEMBER BETWEEN	US	Issued	10/183,208	Jun 26, 2002	6,950,275	Sep 27, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR ASYNCHRONOUSLY TESTING A PLURALITY OF DISK DRIV	US	Issued	10/286,146	Oct 31, 2002	7,076,391	Jul 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING SERVO SECTORS THAT STORE REPEATABLE RUNOUT CORRECTION	US	Issued	10/377,078	Feb 28, 2003	7,027,256	Apr 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A PULSE WIDTH MODULATED DEMAND LIMIT CIRCUIT FOR EN	US	Issued	10/446,885	May 27, 2003	6,970,319	Nov 29, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY INCLUDING LAMINATED NUT PLATE WITH DAMPING LAYER INT	US	Issued	10/306,974	Nov 27, 2002	6,958,890	Oct 25, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY INCLUDING A TRACE SUSPENSION ASSEMBLY BACKING LAYER A	US	Issued	10/676,537	Sep 30, 2003	7,099,117	Aug 29, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	ESD-PROTECTED SLIDER AND HEAD GIMBAL ASSEMBLY	US	Issued	10/377,041	Feb 28, 2003	6,972,930	Dec 6, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING A CONFIGURATION DATA STRUCTURE COMPRISING A PLURALI	US	Issued	10/329,155	Dec 24, 2002	7,024,614	Apr 4, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING A DISK COMMAND DATA STRUCTURE FOR TRACKING A WRITE	US	Issued	10/329,152	Dec 24, 2002	7,076,604	Jul 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING AN AIRFLOW BLOCKER WITH A PLANAR PORTION EXTENDING F	US	Issued	10/328,609	Dec 23, 2002	7,006,324	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE MONITORING A SUPPLY CURRENT TO PROTECT MOTOR DRIVER CIRCUITS	US	Issued	10/377,219	Feb 28, 2003	6,934,135	Aug 23, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING CURRENT SENSE CIRCUITRY FOR A VOICE COIL MOTOR	US	Issued	10/376,819	Feb 28, 2003	6,850,383	Feb 1, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING OSCILLATORS AND COUNTERS FOR SENSING CURRENT IN A VO	US	Issued	10/376,821	Feb 28, 2003	6,850,384	Feb 1, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A SPINDLE MOTOR HAVING A WINDINGS SHIELD FOR REDUC	US	Issued	10/329,127	Dec 24, 2002	7,113,365	Sep 26, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A BASE ASSEMBLY HAVING A FLEX-TO-BOARD EDGE CONNECT	US	Issued	10/328,586	Dec 23, 2002	6,934,126	Aug 23, 2005

WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURING A DISK DRIVE TO SUPPORT A TARGETED STORAGE FORMAT	US	Issued	10/404,990	Mar 31, 2003	7,058,759	Jun 6, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING AN ACTUATOR WITH A CONSTRAINED LAYER DAMPER DISPOSE	US	Issued	10/404,997	Mar 31, 2003	6,879,466	Apr 12, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD STACK ASSEMBLY INCLUDING A GROUND CONDUCTIVE PAD FOR GROUNDING A	US	Issued	10/386,259	Mar 10, 2003	7,006,330	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE ROTARY ACTUATOR ASSEMBLY HAVING A CONSTRAINED LAYER DAMPER A	US	Issued	10/376,833	Feb 28, 2003	6,937,444	Aug 30, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	TIMING COMPENSATION IN A SELF-SERVOWRITING SYSTEM	US	Issued	10/632,880	Jul 31, 2003	6,924,960	Aug 2, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A STAMPED ARM ASSEMBLY AND METHOD OF MAKING AN ACT	US	Issued	10/404,456	Mar 31, 2003	6,922,853	Jan 3, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY INCLUDING A BASE PLATE WITH MASS REDUCTION	US	Issued	10/427,495	Apr 30, 2003	6,967,800	Nov 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A DISK PLATE BODY ATTACHED TO A FIXED SPINDLE SHAFT OF A SP	US	Issued	10/425,897	Apr 28, 2003	6,888,697	May 3, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A DISK PLATE HAVING A DAMPING MEMBER	US	Issued	10/452,569	May 30, 2003	6,862,156	Mar 1, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY INCLUDING A TRACE SUSPENSION ASSEMBLY BACKING LAYER	US	Issued	10/676,538	Sep 30, 2003	7,006,331	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING AN ACOUSTIC DAMPING ASSEMBLY WITH AN ACOUSTIC BARRIER L	US	Issued	10/448,487	May 30, 2003	6,954,329	Oct 11, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE OF A ROTARY ACTUATOR IN A DISK DRIVE	US	Issued	10/607,710	Jun 27, 2003	6,903,897	Jun 7, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	STAMPED ACTUATOR ARM HAVING LONGITUDINALLY SPACED-APART STAMPED PROTR	US	Issued	10/633,145	Jul 31, 2003	7,911,742	Mar 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING AN ACOUSTIC DAMPING SLIDE ASSEMBLY WITH AN ACOUSTIC BA	US	Issued	10/448,488	May 30, 2003	6,958,884	Oct 25, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	INSTRUCTION PREFETCH CACHING FOR REMOTE MEMORY	US	Issued	10/633,257	Jul 31, 2003	7,240,161	Jul 3, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEX CIRCUIT ASSEMBLY WITH AN INTEGRATED CIRCUIT DEVICE ATTACHED TO A BASE	US	Issued	10/609,062	Jun 27, 2003	7,142,397	Nov 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVES AND ACTUATOR ASSEMBLIES HAVING A PAIR OF BONDED VOICE COIL SUP	US	Issued	10/632,351	Jul 31, 2003	7,092,216	Aug 15, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING AN ACTUATOR ARM ASSEMBLY THAT INCLUDES STAMPED ACTUAT	US	Issued	10/651,411	Aug 29, 2003	7,161,769	Jan 9, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	USING AN EXTERNAL SPIRAL SERVO WRITER TO WRITE REFERENCE SERVO SECTORS AN	US	Issued	10/769,387	Jan 31, 2004	6,965,489	Nov 15, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO WRITING A DISK DRIVE FROM SPIRAL TRACKS BY GENERATING A TIME-STAMPED	US	Issued	10/857,468	May 28, 2004	6,967,799	Nov 22, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	VIBRATION ISOLATING DISK DRIVE RECEIVING STATIONS AND CHASSIS USED IN THE MA	US	Issued	11/030,355	Jan 6, 2005	7,092,251	Aug 15, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING REPEATABLE RUNOUT CANCELLATION INFORMATION USING PES INFOR	US	Issued	10/856,658	May 28, 2004	6,937,420	Aug 30, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPRISING A SPINDLE MOTOR EMPLOYING ANIONIC/CATIONIC LUBRICA	US	Issued	10/845,863	May 15, 2004	7,180,703	Feb 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING AN ORTHOGONALLY DISPOSED ACTUATOR COIL AND AN E-SHA	US	Issued	10/724,410	Nov 26, 2003	7,161,768	Jan 9, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH A SLIDER GROUND PAD ELECTRICALLY CONNECTED TO WRITE HEAD POLE	US	Issued	10/698,655	Oct 31, 2003	7,027,264	Apr 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING ASYMMETRIC ACCELERATION/DECELERATION PULSES FOR ACC	US	Issued	10/860,339	Jun 1, 2004	7,054,098	May 30, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A DISK INCLUDING A SERVO BURST PATTERN IN WHICH A PHASE D	US	Issued	10/816,683	Apr 1, 2004	7,027,257	Apr 11, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A SPINDLE MOTOR AND A PIVOT BEARING CARTRIDGE ATTACH	US	Issued	10/837,471	Apr 30, 2004	7,292,406	Nov 6, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY WITH PIEZOELECTRIC MICROACTUATORS ELECTRICALLY CONN	US	Issued	11/047,400	Jan 31, 2005	7,280,319	Oct 9, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	ESTIMATING A WRITER/READER GAP IN A DISK DRIVE BY MEASURING WRITE/READ TIM	US	Issued	10/919,839	Aug 16, 2004	7,006,316	Feb 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	CLUSTER-BASED DEFECT DETECTION TESTING FOR DISK DRIVES	US	Issued	10/948,711	Sep 23, 2004	7,139,145	Nov 21, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING ONE OR MORE PARTIAL SERVO WEDGES THAT INCLUDES A SHORT	US	Issued	10/927,900	Aug 27, 2004	7,046,465	May 16, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCELERATION DISTURBANCE DETECTION SUBSYSTEM FOR USE WITH DISK DRIVES	US	Issued	10/856,400	May 27, 2004	7,023,640	Apr 4, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO WRITING A DISK DRIVE BY PROCESSING SPIRAL TRACKS IN AN INTERLEAVED MA	US	Issued	11/208,358	Aug 19, 2005	7,113,362	Sep 26, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOTE POWER CYCLING OF PERIPHERAL DATA STORAGE SYSTEM	US	Issued	10/816,545	Mar 31, 2004	7,346,790	Mar 18, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE CONFIGURED TO ENABLE NON DESTRUCTIVE LEAK DETECTION AT THE INTE	US	Issued	10/926,249	Aug 24, 2004	7,274,534	Sep 25, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING POWER CONSUMPTION OF DIGITAL CIRCUITRY BY GENERATING FREQUENC	US	Issued	10/983,382	Nov 8, 2004	7,129,763	Oct 31, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DEMAGNETIZING A HEAD IN A DISK DRIVE BY INCREASING THE FREQUENCY OF AN AC	US	Issued	10/996,116	Nov 23, 2004	7,092,186	Aug 15, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE AND METHOD FOR DATA TRANSFER INITIATED BY OPTIONAL DISK-DRIVE C	US	Issued	10/842,937	May 10, 2004	7,200,698	Apr 3, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH COVER INCLUDING A METAL LAYER AND A POLYMER LAYER WITH A P	US	Issued	11/032,940	Jan 11, 2005	7,420,771	Sep 2, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE RECIRCULATION AIR FILTER	US	Issued	11/269,998	Nov 9, 2005	7,388,731	Jun 17, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING ORDER OF ERROR RECOVERY STEPS IN A DISK DRIVE	US	Issued	11/102,330	Apr 8, 2005	7,451,344	Nov 11, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVIDING STREAMING MEDIA DATA	US	Issued	14/160,360	Jan 21, 2014	9,998,390	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PROVIDING STREAMING MEDIA DATA	US	Issued	10/176,498	Jun 21, 2002	7,274,659	Sep 25, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE COMPENSATION OF BIAS IMPARTED BY A FLEX CIRCUIT CABLE UTILIZING A	US	Issued	11/086,814	Mar 21, 2005	7,253,989	Aug 7, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING STREAM DETECTION ENGINE TO ENHANCE CACHE MANAGEMEN	US	Issued	11/086,513	Mar 21, 2005	7,392,340	Jun 24, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVO WRITING SUBSTANTIALLY LINEAR SERVO WEDGES TO REDUCE OVERWRITE EFFE	US	Issued	11/009,761	Dec 9, 2004	7,136,242	Nov 14, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING A MAGNETIC ELEMENT SUPPORT WITH A FIRST TRANSDUCER SE	US	Issued	11/057,678	Feb 14, 2005	7,327,537	Feb 5, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A DISK DRIVE MICROACTUATOR THAT INCLUDES A PIE	US	Issued	12/579,263	Oct 14, 2009	8,756,776	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE IMPLEMENTING WEAR PREVENTION IN A HIGH FREQUENCY ACCESS BAND	US	Issued	11/134,916	Nov 23, 2005	7,149,064	Dec 12, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING POWER CONSUMPTION OF DIGITAL CIRCUITRY RELATIVE TO CRITICAL PATH	US	Issued	10/980,676	May 2, 2004	7,205,805	Apr 17, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTING DISK DRIVE FAILURE AT A CENTRAL PROCESSING FACILITY USING AN EVOL	US	Issued	10/983,982	Nov 8, 2004	8,316,263	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVES, HEAD STACK, HEAD GIMBAL AND SUSPENSION ASSEMBLIES HAVING A CO	US	Issued	11/117,934	Apr 28, 2005	7,414,814	Aug 19, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE EMPLOYING MOMENTUM BASED UNLOAD DURING POWER FAILURE	US	Issued	11/143,839	Jun 2, 2005	7,095,579	Aug 22, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE USING AN OPTICAL SENSOR TO DETECT A POSITION OF AN ACTUATOR ARM	US	Issued	11/253,400	Oct 19, 2005	7,215,504	May 8, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE OR ANY SERIAL ATTACHED DEVICE LOGGING A CABLE LOSS EVENT	US	Issued	11/255,435	Oct 20, 2005	7,406,545	Jul 29, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE DECREASING HEAD TEMPERATURE TO INCREASE FLY-HEIGHT DURING SEEK	US	Issued	11/168,274	Jun 28, 2005	7,088,545	Aug 8, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE GROUPING IN A MULTI-CELL DISK DRIVE TEST SYSTEM	US	Issued	11/287,723	Nov 28, 2005	7,912,666	Mar 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING AN ACTUATOR ARM WITH A REGION OF REDUCED THICKNESS B	US	Issued	11/385,091	Mar 21, 2006	7,440,234	Oct 21, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE INCLUDING AN ACTUATOR LATCH WITH A CATCH PORTION AND A CRASH S	US	Issued	11/345,141	Feb 1, 2006	7,715,149	May 11, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE HAVING A STATIONARY PLATE FACING A DISK AND WITH A RECIRCULATIO	US	Issued	13/099,355	May 2, 2011	8,228,631	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE IMPLEMENTING DATA PATH PROTECTION BY ENCODING LARGE HOST	US	Issued	12/422,738	Apr 13, 2009	8,433,977	Apr 30, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-HEATING DISK DRIVE	US	Issued	11/273,948	Nov 15, 2005	7,203,021	Apr 10, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DISK IN A DISK DRIVE AND METHOD HAVING IMPROVED NULL SERVO BUR	US	Issued	11/499,836	Aug 3, 2006	7,333,290	Feb 19, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR SCREW FEEDING BY VACUUM AND GRAVITY	US	Issued	13/164,259	Jun 20, 2011	8,127,643	Mar 6, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR SCREW FEEDING BY VACUUM AND GRAVITY	US	Issued	11/289,847	Nov 30, 2005	7,178,432	Feb 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTUATOR INCLUDING A COIL AND A WRAP-AROUND SUPPORT SUPPORTING A TANG	US	Issued	11/297,894	Dec 9, 2005	7,505,231	Mar 17, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE SUSPENSION ASSEMBLY WITH A HINGE ARM ATTACHED AT A RECESSED SU	US	Issued	12/782,555	May 18, 2010	7,898,770	Mar 1, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD GIMBAL ASSEMBLY INCLUDING A FLEXURE WITH A FIRST CONDUCTIVE TRACE DIS	US	Issued	11/449,261	Jun 7, 2006	7,595,963	Sep 29, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD SUSPENSION WITH A REINFORCED LIMITER TAB	US	Issued	11/385,266	Mar 21, 2006	7,477,488	Jan 13, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	SWITCHING VOLTAGE REGULATOR COMPRISING A CYCLE COMPARATOR FOR DYNAMIC	US	Issued	11/393,425	Mar 30, 2006	7,486,060	Feb 3, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL DISSIPATION FROM A FLIP CHIP THROUGH AN APERTURE IN A FLEX CABLE	US	Issued	11/500,567	Aug 8, 2006	7,339,268	Mar 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO MONITOR PARTICLES REMOVED FROM A COMPONENT	US	Issued	11/454,734	Jun 16, 2006	7,673,638	Mar 9, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	USING MULTIPLE COMMUNICATION CHANNELS TO SYNCHRONIZE A MOBILE TERMINAL	US	Issued	11/265,752	Nov 2, 2005	7,725,584	May 25, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING ON-TIME FOR A DISCONTINUOUS SWITCHING VOLTAGE REGULATOR	US	Issued	11/590,704	Oct 31, 2006	7,330,019	Feb 12, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	BELLEVILLE DISK CLAMP	US	Issued	11/523,184	Sep 19, 2006	8,824,098	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD-GIMBAL ASSEMBLY INCLUDING A FLEXURE TONGUE WITH STAND-OFFS ARRANG	US	Issued	11/580,542	Oct 13, 2006	7,729,098	Jun 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXURE HAVING ARMS WITH REDUCED CENTROID OFFSET FOR SUPPORTING A HEAD	US	Issued	11/582,794	Oct 18, 2006	7,826,177	Nov 2, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	UPDATING FIRMWARE OF A PERIPHERAL DEVICE	US	Issued	11/515,554	Sep 5, 2006	7,730,295	Jun 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	WEDGE BASED FASTENER	US	Issued	12/628,887	Dec 1, 2009	8,870,507	Oct 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WEDGE BASED FASTENER	US	Issued	11/703,003	Feb 6, 2007	7,686,555	Mar 30, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXURE INCLUDING A HEAT SINK AND A DIELECTRIC LAYER UNDER TRACE TERMINATI	US	Issued	11/590,575	Oct 31, 2006	7,567,410	Jul 28, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	SCREWDRIVER COMPRISING A SLIDER HAVING AN ATTACHED SCREW BIT AND A POSITI	US	Issued	11/602,652	Nov 21, 2006	7,458,282	Dec 2, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, DEVICES AND SYSTEMS FOR ADAPTIVELY DRIVING SCREWS USING A SCREW	US	Issued	11/764,672	Jun 18, 2007	7,506,553	Mar 24, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH A HOUSING HOLE SEAL INCLUDING A CONDUCTIVE LAYER WITH AN E	US	Issued	13/862,884	Apr 15, 2013	8,792,205	Jul 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH AIR CHANNEL	US	Issued	11/652,960	Jan 12, 2007	7,751,145	Jul 6, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SETTING AN OPERATING BIAS CURRENT FOR A MAGNETORESISTIVE HEAD USING RATIO	US	Issued	11/761,224	Jun 11, 2007	7,804,657	Sep 28, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ASSEMBLY INCLUDING A DIMPLE THAT CONTACTS A FLEXURE TONGUE DI	US	Issued	11/717,299	Mar 13, 2007	7,864,488	Jan 4, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEADS FOR PERPENDICULAR RECORDING WITH TRAPEZOIDAL POLE TIPS	US	Issued	10/751,215	Dec 31, 2003	8,609,899	Oct 26, 2004
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETICALLY SOFT, HIGH SATURATION MAGNETIZATION LAMINATE OF IRON-COBAL	US	Issued	10/854,119	May 25, 2004	7,354,664	Apr 8, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD HAVING A RECESSED, MAGNETIC ADJUNCT POLE FORMED ATOP A MAIN	US	Issued	10/903,977	Jul 29, 2004	6,906,894	Jun 14, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	UV CURABLE AND ELECTRICALLY CONDUCTIVE ADHESIVE FOR BONDING MAGNETIC DIS	US	Issued	10/176,016	Jun 19, 2002	6,947,258	Sep 20, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEMORY CELL WITH PLURAL READ TRANSISTORS	US	Issued	10/698,747	Oct 31, 2003	7,012,832	Mar 14, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH STITCHED TOP POLE LAYER AND SINGLE LAYER COIL OR SOLENO	US	Issued	11/780,110	Jun 19, 2007	7,443,632	Oct 28, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH A SIDE SHIELD STRUCTURE FOR CONTROLLING SID	US	Issued	10/364,799	Feb 11, 2003	6,943,993	Sep 13, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	TRAILING EDGE RECORDING MAGNETIC HEAD WITH REVERSED DOUBLE BIAS COIL AND	US	Issued	10/724,385	Nov 26, 2003	7,126,788	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	A WRITE ELEMENT FOR PERPENDICULAR RECORDING IN A DATA STORAGE SYSTEM	US	Issued	10/769,409	Jan 31, 2004	7,239,478	Jul 3, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DETERMINING A MICROACTUATOR RANGE OF MOVEMENT	US	Issued	10/956,234	Sep 30, 2004	7,124,654	Oct 24, 2006

WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN STAND TESTING SYSTEM WITH FINE POSITIONER FOR HEAD STACK ASSEMBLY	US	Issued	10/966,543	Oct 15, 2004	7,131,346	Nov 7, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MANIPULATOR FOR MICROSCOPY SAMPLE PREPARATION AND METHODS FOR MAKING	US	Issued	10/986,631	Nov 12, 2004	7,041,985	May 9, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FABRICATING A PERPENDICULAR RECORDING WRITE HEAD HAVING A GAP	US	Issued	10/837,350	Apr 30, 2004	7,248,431	Jul 24, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF USING A MAGNETIC WRITE HEAD HAVING AN INTERNAL HEATER	US	Issued	10/856,403	May 28, 2004	7,092,195	Aug 15, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	FERROMAGNETIC PINNING STRUCTURE INCLUDING A FIRST SECTION ANTIFERROMAGNETIC	US	Issued	11/856,861	Sep 18, 2007	7,436,638	Oct 14, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	FERROMAGNETIC STRUCTURE INCLUDING A FIRST SECTION SEPARATED FROM A FERRO	US	Issued	10/816,158	Mar 31, 2004	7,280,325	Oct 9, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD FOR PERPENDICULAR RECORDING WITH MAGNETIC LOOP PROVIDING	US	Issued	10/724,309	Nov 26, 2003	7,126,790	Oct 24, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANUFACTURING A SHIELDED POLE MAGNETIC HEAD FOR PERPENDICU	US	Issued	11/699,777	Jan 30, 2007	7,337,530	Mar 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING HEAD WITH SHAPED POLE SURFACES FOR HIGHER LINEAR	US	Issued	11/116,658	Apr 27, 2005	7,869,160	Jan 11, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	DAMASCENE PROCESS FOR FABRICATING POLES IN RECORDING HEADS	US	Issued	11/047,401	Jan 31, 2005	7,444,740	Nov 4, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD WITH DYNAMIC FLYING HEIGHT HEATIN	US	Issued	12/197,612	Aug 25, 2008	7,729,086	Jun 1, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING HEAD WITH DYNAMIC FLYING HEIGHT HEATIN	US	Issued	11/112,112	Apr 22, 2005	7,430,098	Sep 30, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH RESISTIVE HEATING ELEMENT AND THERMAL BARR	US	Issued	11/350,993	Feb 9, 2006	7,428,124	Sep 23, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR BEARING SLIDER WITH A SIDE PAD HAVING A SHALLOW RECESS DEPTH	US	Issued	11/296,735	Dec 7, 2005	7,477,486	Jan 13, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING PERPENDICULAR MAGNETIC RECORDING TRAN	US	Issued	11/367,819	Mar 3, 2006	7,508,627	Mar 24, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING PERPENDICULAR MAGNETIC RECORDING TRAN	US	Issued	13/905,773	May 30, 2013	8,861,134	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A MAGNETORESISTIVE ELEMENT HAVING SMALL CRITICAL DI	US	Issued	11/635,830	Dec 7, 2006	9,196,270	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH WRAP AROUND SHIELD	US	Issued	14/220,012	Mar 19, 2014	8,995,087	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR PROVIDING A PERPENDICULAR MAGNETIC RECORDING (PMR) HEAD	US	Issued	11/605,635	Nov 29, 2006	8,689,430	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A SPIN TUNNELING MAGNETIC ELEMENT HAVIN	US	Issued	12/712,085	Feb 24, 2010	8,547,730	Oct 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TUNNELING MAGNETIC ELEMENT PROMOTING FREE LAYER CRYSTAL GROWTH FR	US	Issued	11/800,553	May 7, 2007	8,559,141	Oct 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITER HAVING A SPLIT YOKE	US	Issued	11/789,190	Apr 23, 2007	8,373,945	Feb 12, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD WITH A TRANSDUCER OVERCOAT HAVING A TRAILING AIR FLOW DAM THAT IS SH	US	Issued	11/860,667	Sep 25, 2007	7,872,833	Jan 18, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD WITH AN AIR BEARING SURFACE HAVING A SHALLOW RECESSED TRAILING AIR FL	US	Issued	11/787,515	Apr 17, 2007	7,855,854	Dec 21, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR PROVIDING A MAGNETIC WRITER USING A BARC	US	Issued	11/803,071	May 11, 2007	8,072,705	Dec 6, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF PROCESSING OF DUPLICATE DATA AT A DATA STORAGE DEVI	US	Issued	13/839,128	Mar 15, 2013	9,639,461	May 2, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Overprovision Capacity in a Data Storage Device	US	Issued	13/828,071	Mar 14, 2013	9,804,960	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	UPDATING READ VOLTAGES TRIGGERED BY THE RATE OF TEMPERATURE CHANGE	US	Issued	15/615,175	Jun 6, 2017	10,475,523	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSS-POINT SPIN-TRANSFER TORQUE MAGNETORESISTIVE MEMORY ARRAY AND ME	US	Issued	17/477,958	Sep 17, 2021	11,631,716	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSS-POINT SPIN-TRANSFER TORQUE MAGNETORESISTIVE MEMORY ARRAY AND ME	US	Issued	16/666,967	Oct 29, 2019	11,152,425	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW RESISTANCE MONOSILICIDE ELECTRODE FOR PHASE CHANGE MEMORY AND METH	US	Issued	16/857,053	Apr 23, 2020	11,114,157	Sep 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LICENSEABLE FUNCTION FOR SECURING STORED DATA	US	Issued	14/811,708	Jul 28, 2015	10,642,962	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING FLUSH REQUESTS BY UTILIZING STORAGE SYSTEM WRITE NOTIFICATIONS	US	Issued	14/322,781	Jul 2, 2014	9,632,712	Apr 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	TASK QUEUES	US	Issued	14/693,685	Apr 22, 2015	10,073,714	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	TASK QUEUES	US	Issued	15/970,412	May 3, 2018	10,379,903	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TASK QUEUES	US	Issued	16/504,848	Jul 8, 2019	11,061,721	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD OF OPERATION USING MULTIPLE SECURITY PROT	US	Issued	14/924,545	Oct 27, 2015	10,255,200	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Scheduling Scheme(s) for a Multi-Die Storage Device	US	Issued	14/749,498	Jun 24, 2015	10,289,327	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY HEALTH MONITORING	US	Issued	16/002,391	Jun 7, 2018	10,402,117	Sep 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY HEALTH MONITORING	US	Issued	14/924,615	Oct 27, 2015	9,996,299	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULING SCHEME(S) FOR A MULTI-DIE STORAGE DEVICE	US	Issued	15/876,253	Jan 22, 2018	10,572,169	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEDULING SCHEME(S) FOR A MULTI-DIE STORAGE DEVICE	US	Issued	14/883,496	Oct 14, 2015	9,875,053	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE TEMPERATURE ADJUSTMENT BASED ON AGING CONDITION	US	Issued	15/061,702	Mar 4, 2016	9,875,062	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE TEMPERATURE ADJUSTMENT BASED ON A POWER CONDITION	US	Issued	15/876,119	Jan 20, 2018	10,379,754	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE TEMPERATURE ADJUSTMENT BASED ON A POWER CONDITION	US	Issued	15/225,884	Aug 2, 2016	9,880,752	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE TEMPERATURE ADJUSTMENT BASED ON AGING CONDITION	US	Issued	15/970,826	May 3, 2018	10,642,681	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE TEMPERATURE ADJUSTMENT BASED ON AGING CONDITION	US	Issued	14/867,999	Sep 28, 2015	9,983,922	May 29, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE OPERATIONS BASED ON BIT ERROR RATE (BER) ESTIMATE	US	Issued	15/614,140	Jun 5, 2017	10,180,874	Jan 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	15/619,157	Jun 9, 2017	10,446,242	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	16/751,615	Jan 24, 2020	11,194,523	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	16/004,806	Jun 11, 2018	10,564,900	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	16/833,310	Mar 27, 2020	11,385,802	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	16/002,359	Jun 7, 2018	10,642,510	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE VARIATION COMPENSATION	US	Issued	15/167,316	May 27, 2016	9,996,281	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY ERASE MANAGEMENT	US	Issued	15/092,236	Apr 6, 2016	10,114,743	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND DATA STORAGE DEVICE USING CONVOLUTIONAL LOW-DENSITY PARITY-C	US	Issued	15/617,059	Jun 8, 2017	10,389,389	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ERASURE CORRECTING CODING USING TEMPORARY ERASURE DATA	US	Issued	15/782,618	Oct 12, 2017	10,218,789	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ECC AND RAID-TYPE DECODING	US	Issued	15/817,535	Nov 20, 2017	10,536,172	Jan 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-Volatile Memory Over Fabric Controller with Memory Bypass	US	Issued	15/683,710	Aug 22, 2017	10,732,893	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Parity Offload for Multiple Data Storage Devices	US	Issued	15/680,112	Aug 17, 2017	10,635,529	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ECC ADJUSTMENT BASED ON DYNAMIC ERROR INFORMATION	US	Issued	15/408,823	Jan 18, 2017	10,284,233	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE BIT-FLIPPING DECODER BASED ON DYNAMIC ERROR INFORMATION	US	Issued	15/896,440	Feb 14, 2018	10,374,639	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Locality Grouping During Garbage Collection of a Storage Device	US	Issued	15/983,026	May 17, 2018	10,740,228	Jun 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Locality Grouping During Garbage Collection with Flush of Buffered Write Data Upon C	US	Issued	15/983,028	May 17, 2018	10,901,892	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Error Locator Polynomial Decoder And Method	US	Issued	15/373,313	Dec 8, 2016	10,461,777	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR LOCATOR POLYNOMIAL DECODER AND METHOD	US	Issued	15/456,648	Mar 13, 2017	10,097,208	Oct 9, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR LOCATOR POLYNOMIAL DECODER AND METHOD	US	Issued	15/821,382	Nov 22, 2017	10,439,644	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH COMPUTE ENGINE TO ACCELERATE BIG DATA A	US	Issued	15/673,143	Aug 9, 2017	10,387,303	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR HOST SYSTEM MEMORY TRANSLATION	US	Issued	15/637,344	Jun 29, 2017	10,635,584	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ECC DECODER WITH SELECTIVE COMPONENT DISABLING BASED ON DECODING MESSAG	US	Issued	15/630,906	Jun 22, 2017	10,565,040	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURABLE ECC DECODER	US	Issued	15/638,045	Jun 29, 2017	10,530,393	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for User Experience Event Processing and Analysis	US	Issued	15/621,460	Jun 13, 2017	10,503,526	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for User Experience Event Processing and Analysis	US	Issued	15/621,476	Jun 13, 2017	10,154,429	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Processing and Arbitrating Submission and Completion Queues	US	Issued	15/585,717	May 3, 2017	10,466,904	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Processing and Arbitrating Submission and Completion Queues	US	Issued	15/585,753	May 3, 2017	10,387,081	Nov 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Processing Non-Contiguous Submission and Completion Queues	US	Issued	15/585,808	May 3, 2017	10,296,249	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Speculative Execution of Commands Using a Controller Memor	US	Issued	15/585,827	May 3, 2017	10,725,835	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH INTEGRATED COMPUTE ENGINE AND OPTIMIZE	US	Issued	15/726,903	Oct 6, 2017	10,459,644	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED TO PERFORM A NON-BLOCKING CONTROL UPDA	US	Issued	15/615,368	Jun 6, 2017	10,359,955	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUES FOR PERFORMING A NON-BLOCKING CONTROL SYNC OPERATION	US	Issued	16/287,336	Feb 27, 2019	11,288,201	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Dynamic and Adaptive Interrupt Coalescing	US	Issued	15/468,620	Mar 24, 2017	10,466,903	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTING REVERSIBLE RESISTANCE MEMORY CELLS BASED ON INITIAL RESISTANCE SW	US	Issued	15/468,512	Mar 24, 2017	9,837,153	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Handling Overheating of the Storage System	US	Issued	15/583,738	May 1, 2017	10,115,471	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR IMPLEMENTING SUPER WORD LINE ZONES IN A MEMORY D	US	Issued	15/418,455	Jan 27, 2017	10,223,022	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Thermal Throttling via Command Arbitration	US	Issued	15/457,676	Mar 13, 2017	10,817,191	Oct 27, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ACTUATING LATCH FOR A RACK MOUNTED DRIVE CHASSIS	US	Issued	15/428,952	Feb 9, 2017	10,492,321	Nov 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA BUFFER POINTER FETCHING FOR DIRECT MEMORY ACCESS	US	Issued	15/452,039	Mar 7, 2017	10,275,378	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH PROGRAM FAILURE RECOVERY	US	Issued	15/456,237	Mar 10, 2017	10,019,332	Jul 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DELAYED DATA RELEASE AFTER PROGRAMMING TO REDUCE READ ERRORS IN MEMOR	US	Issued	15/408,943	Jan 18, 2017	10,255,000	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY WRITE VERIFICATION USING TEMPERATURE COMPENSATION	US	Issued	15/395,279	Dec 30, 2016	10,304,559	May 28, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for String-Based Erase Verify to Create Partial Good Blocks	US	Issued	15/606,931	May 26, 2017	10,535,411	Jan 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Thin Provisioning	US	Issued	16/365,562	Mar 26, 2019	10,901,620	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Thin Provisioning	US	Issued	15/476,626	Mar 31, 2017	10,282,097	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE DEVICE WITH MULTIPLE BOOT PARTITIONS	US	Issued	15/483,035	Apr 10, 2017	10,725,792	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE DEVICE WITH PHYSICAL AUTHENTICATION	US	Issued	15/435,668	Feb 17, 2017	10,438,664	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR ADAPTIVE COMMAND COMPLETION POSTIN	US	Issued	17/069,663	Oct 13, 2020	11,487,434	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Adaptive Early Completion Posting Using Controller Memory B	US	Issued	16/455,644	Jun 27, 2019	10,817,182	Oct 27, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Adaptive Early Completion Posting Using Controller Memory B	US	Issued	15/602,874	May 23, 2017	10,452,278	Oct 22, 2019

WESTERN DIGITAL TECHNOLOGIES, INC.	POST WRITE ERASE CONDITIONING	US	Issued	16/744,097	Jan 15, 2020	10,818,366	Oct 27, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	POST WRITE ERASE CONDITIONING	US	Issued	16/258,405	Jan 25, 2019	10,553,294	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Post Write Erase Conditioning	US	Issued	15/471,781	Mar 28, 2017	10,269,439	Apr 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA MAPPING ENABLING FAST READ MULTI-LEVEL 3D NAND TO IMPROVE LIFETIME C	US	Issued	15/472,326	Mar 29, 2017	10,360,973	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR INPUT-OUTPUT THROTTLING TO IMPROVE QUALITY OF SER	US	Issued	15/693,021	Aug 31, 2017	10,956,083	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Adaptive Scheduling of Background Operations	US	Issued	15/911,815	Mar 5, 2018	11,269,764	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Efficient Pipeline Gap Utilization for Background Oper	US	Issued	16/014,502	Jun 21, 2018	10,635,335	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Predictive Block Allocation for Efficient Garbage Collec	US	Issued	15/465,367	Mar 21, 2017	11,188,456	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DECRYPTION AND VARIANT PROCESSING	US	Issued	17/160,263	Jan 27, 2021	11,606,214	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DECRYPTION AND VARIANT PROCESSING	US	Issued	15/801,037	Nov 1, 2017	10,944,572	Mar 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VIRTUAL ROOT OF TRUST FOR DATA STORAGE DEVICE	US	Issued	15/638,179	Jun 29, 2017	10,970,232	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ALLOCATING SHARED MEMORY AMONG MULTIPLE TASKS IN A MULTIPROCESSOR ENV	US	Issued	15/474,355	Mar 30, 2017	10,289,330	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Bad Block Recycling	US	Issued	15/583,747	May 1, 2017	10,229,751	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Decoding Optimization for Channel Mismatch	US	Issued	16/719,408	Dec 18, 2019	10,938,421	Mar 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Decoding Optimization for Channel Mismatch	US	Issued	15/589,332	May 8, 2017	10,554,227	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC SELECTION OF SOFT DECODING INFORMATION	US	Issued	15/614,415	Jun 5, 2017	10,083,754	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	PASSIVATED NITROGENATED DIAMOND-LIKE CARBON LAYER AND METHOD FOR PASSIV	US	Issued	15/446,818	Mar 1, 2017	10,783,916	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Adaptive Command Fetch Aggregation	US	Issued	16/693,175	Nov 22, 2019	11,169,709	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Adaptive Command Fetch Aggregation	US	Issued	17/493,719	Oct 4, 2021	11,635,898	Apr 25, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Adaptive Command Fetch Aggregation	US	Issued	15/613,795	Jun 5, 2017	10,509,569	Dec 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NESTING AND SHOCK ABSORBING PACKAGE	US	Issued	15/639,988	Jun 30, 2017	10,654,613	May 19, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NESTING AND SHOCK ABSORBING PACKAGE	US	Issued	29/592,244	Jan 27, 2017	0833,301	Nov 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Key Data Store Entry Traversal and Result Generation	US	Issued	16/009,933	Jun 15, 2018	11,055,266	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFLICT RESOLUTION AND GARBAGE COLLECTION IN DISTRIBUTED DATABASES	US	Issued	16/016,551	Jun 23, 2018	11,210,212	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Key Ticketing System with Lock-Free Concurrency and Versioning	US	Issued	15/986,789	May 22, 2018	10,824,612	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Key Data Store Garbage Collection and Multi-part Object Management	US	Issued	16/010,518	Jun 18, 2018	11,210,211	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Intermittent Operation Of Compartmented Pneumatics For Sealed Data Storage System	US	Issued	15/629,641	Jun 21, 2017	10,262,698	Apr 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-HOST PERIPHERAL COMPONENT INTERCONNECT EXPRESS (PCI-E) SWITCHING BA	US	Issued	15/490,490	Apr 18, 2017	10,503,687	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FAN NOISE ATTENUATION AT HARD DISK DRIVE IN RACK-MOUNT	US	Issued	15/445,128	Feb 28, 2017	10,388,327	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT DATA DEPLICATION LEVERAGING SEQUENTIAL CHUNKS OR AUXILIARY DA	US	Issued	15/613,012	Jun 2, 2017	10,809,928	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Locality Detection to Identify Read or Write Streams in a Mem	US	Issued	15/497,547	Apr 26, 2017	10,564,853	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/727,700	Mar 12, 2020	D964,358	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/599,985	Apr 7, 2017	D881,186	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL THROTTLING FOR MEMORY DEVICES	US	Issued	15/473,044	Mar 29, 2017	11,016,545	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BIT REORDERING FOR MEMORY DEVICES	US	Issued	15/490,724	Apr 18, 2017	10,445,259	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE MOUNT ELECTRICAL CONNECTION	US	Issued	15/627,632	Jun 20, 2017	10,431,261	Oct 1, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO-DIMENSIONAL MAGNETIC RECORDING (TDMR) DISK DRIVE WITH MULTIPLE SENS	US	Issued	15/614,454	Jun 5, 2017	9,837,106	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTION OF LOGICAL-TO-PHYSICAL ADDRESS ENTRIES ACROSS BANK GROUPS	US	Issued	16/824,587	Mar 19, 2020	11,221,771	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTION OF LOGICAL-TO-PHYSICAL ADDRESS ENTRIES ACROSS BANK GROUPS	US	Issued	15/641,708	Jul 5, 2017	10,635,331	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Identifying System Device Locations	US	Issued	15/629,457	Jun 21, 2017	10,289,517	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF FORMING A MAGNETIC HEAD	US	Issued	15/492,141	Apr 20, 2017	10,629,230	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PERIPHERAL COMPONENT INTERCONNECT EXPRESS (PCI-E) SWITCHING FOR MULTI-HOS	US	Issued	15/624,937	Jun 16, 2017	10,599,600	Mar 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BASEPLATE DIVERTER AND DOWNSTREAM SPOILER	US	Issued	15/592,621	May 11, 2017	10,056,117	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLENOID FILTER BUILT INTO A PRINTED CIRCUIT BOARD	US	Issued	15/632,108	Jun 23, 2017	10,285,259	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPACT BROADBAND COMMON-MODE FILTER	US	Issued	15/633,865	Jun 27, 2017	10,411,670	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERNED GROUND STRUCTURE FILTER DESIGNS WITH IMPROVED PERFORMANCE	US	Issued	15/631,336	Jun 23, 2017	10,244,618	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE EVENT FILTERING	US	Issued	15/825,490	Nov 29, 2017	10,502,780	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE EVENT LOGGING	US	Issued	15/614,044	Jun 5, 2017	10,579,611	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CONTROLLING METAPAGE STORAGE ON DATA STORAGE	US	Issued	15/607,521	May 28, 2017	10,489,077	Nov 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENTIAL SIGNAL MISMATCH COMPENSATION	US	Issued	15/596,524	May 16, 2017	10,033,524	Jul 24, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MISMATCH COMPENSATION AT DIFFERENTIAL SIGNAL RECEIVER	US	Issued	15/596,617	May 16, 2017	10,541,897	Jan 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM HAVING AN ADAPTIVE WORKLOAD-BASED COMMAND PROCESSING	US	Issued	15/621,480	Jun 13, 2017	10,534,546	Jan 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	16/751,126	Jan 23, 2020	11,093,326	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	17/357,859	Jun 24, 2021	11,531,587	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	15/789,890	Oct 20, 2017	10,558,522	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	16/824,519	Mar 19, 2020	11,211,949	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	17/529,193	Nov 17, 2021	11,606,105	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MULTI-STAGE DECODING	US	Issued	15/846,020	Dec 18, 2017	10,637,511	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMMUNICATING SERVO INFORMATION BETWEEN SERVO CHA	US	Issued	15/585,779	May 3, 2017	9,792,938	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ATTENUATING MULTIPLE ACTUATOR COUPLING DISTURBANCE	US	Issued	15/585,933	May 3, 2017	9,934,803	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH CURRENT ASSISTED MAGNETIC RECORDING AND METHOD OF N	US	Issued	16/000,033	Jun 5, 2018	10,891,974	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH CURRENT ASSISTED MAGNETIC RECORDING AND METHOD OF N	US	Issued	16/000,103	Jun 5, 2018	10,896,690	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING AND METHOD OF MAKING TR	US	Issued	16/998,989	Aug 20, 2020	11,017,802	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING AND METHOD OF MAKING TR	US	Issued	16/252,315	Jan 18, 2019	11,017,801	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING	US	Issued	17/697,859	Mar 17, 2022	11,615,806	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING	US	Issued	17/141,068	Jan 4, 2021	11,373,675	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING COMPRISING AN ELECTRICAL	US	Issued	17/721,137	Apr 14, 2022	11,657,835	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING AND METHOD OF MAKING T	US	Issued	16/252,419	Jan 18, 2019	10,891,975	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK MANAGEMENT FOR DATA STREAMS	US	Issued	15/633,831	Jun 27, 2017	10,338,841	Jul 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Clock Generator	US	Issued	15/692,877	Aug 31, 2017	10,254,783	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PHYSICAL SECURE ERASE OF SOLID STATE DRIVES	US	Issued	16/392,252	Apr 23, 2019	10,839,914	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PHYSICAL SECURE ERASE OF SOLID STATE DRIVES	US	Issued	15/605,102	May 25, 2017	10,297,324	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems, Methods, and Devices for Encoding and Decoding Data Using Multi-Layer Inte	US	Issued	15/671,141	Aug 7, 2017	10,256,843	Apr 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Improving Open Block Data Reliability	US	Issued	16/045,339	Jul 25, 2018	10,613,943	Apr 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	On-Chip Copy with Data Folding in Three-Dimensional Non-Volatile Memory Array	US	Issued	16/010,234	Jun 15, 2018	10,632,585	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing phys of a data storage target device background of the disclosure	US	Issued	16/746,623	Jan 17, 2020	10,922,160	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING PHYS OF A DATA STORAGE TARGET DEVICE	US	Issued	15/599,931	May 19, 2017	10,565,041	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING PHYS OF A DATA STORAGE TARGET DEVICE	US	Issued	16/564,654	Sep 9, 2019	10,785,154	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING PHYS OF A DATA STORAGE TARGET DEVICE	US	Issued	15/599,937	May 19, 2017	10,425,333	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, SYSTEMS AND DEVICES FOR TESTING CIRCUIT MODULES USING A MICROBA	US	Issued	15/621,567	Jun 13, 2017	10,379,139	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID DATA STORAGE ARRAY	US	Issued	15/675,018	Aug 11, 2017	10,572,407	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SECURE ACCESS BASED ON TAP INPUTS	US	Issued	15/649,553	Jul 13, 2017	11,087,011	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SECURE ACCESS BASED ON MOTIONS OF THE DATA STOR	US	Issued	15/649,562	Jul 13, 2017	11,288,353	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH IMPROVED CORROSIO	US	Issued	15/489,167	Apr 17, 2017	10,650,854	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH THERMAL BARRIER LA	US	Issued	15/583,392	May 1, 2017	9,824,710	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT TORQUE BASED MAGNETIC RECORDING	US	Issued	15/631,868	Jun 23, 2017	10,181,334	Jan 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT TORQUE BASED MAGNETIC RECORDING	US	Issued	15/631,878	Jun 23, 2017	10,014,012	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SPIN-ORBIT TORQUE OSCILLATOR IN MAGNETIC RECORDING	US	Issued	16/243,851	Jan 9, 2019	10,403,309	Sep 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SPIN-ORBIT TORQUE OSCILLATOR IN MAGNETIC RECORDING	US	Issued	15/631,887	Jun 23, 2017	10,210,888	Feb 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE DEVICE WITH ADAPTIVE DATA BUS INVERSION	US	Issued	15/617,411	Jun 8, 2017	10,621,116	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMMING DISTANCE BASED BINARY REPRESENTATIONS OF NUMBERS	US	Issued	15/614,914	Jun 6, 2017	9,912,352	Mar 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Reducing Vibration Transmission In A Dual Actuator Disk Drive Utilizing A Single Pivot S	US	Issued	15/616,136	Jun 7, 2017	10,332,555	Jun 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Techniques For Reducing Dynamic Coupling Of System Modes In A Dual Actuator Hard	US	Issued	15/616,804	Jun 7, 2017	10,186,286	Jan 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Split-Shaft Pivot For A Dual-Actuator Hard Disk Drive	US	Issued	15/616,845	Jun 7, 2017	10,186,287	Jan 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Split-Shaft Pivot With Interface Spacer For A Dual-Actuator Hard Disk Drive	US	Issued	15/629,100	Jun 21, 2017	10,276,194	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HANDLING THERMAL SHUTDOWN FOR MEMORY DEVICES	US	Issued	16/017,950	Jun 25, 2018	10,289,323	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HANDLING THERMAL SHUTDOWN FOR MEMORY DEVICES	US	Issued	15/611,958	Jun 2, 2017	10,013,194	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID LOGICAL TO PHYSICAL ADDRESS TRANSLATION FOR NON-VOLATILE STORAGE D	US	Issued	15/726,313	Oct 5, 2017	10,565,123	Feb 18, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	Redundant Network Routing with Proxy Servers	US	Issued	15/628,573	Jun 20, 2017	10,536,548	Jan 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Reducing Leak Rate In Adhesive-Based Hermetically-Sealed Data Storage Devices And	US	Issued	15/629,558	Jun 21, 2017	10,121,518	Nov 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive System for Optimization of Non-Volatile Storage Operational Parameters	US	Issued	15/633,307	Jun 26, 2017	10,891,052	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADAPTING TWO-DIMENSIONAL EQUALIZER BASED ON OFF-TR	US	Issued	15/595,174	May 15, 2017	9,825,787	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE GENERATING EXTENDED REDUNDANCY TO COMPENSATE FOR	US	Issued	15/595,215	May 15, 2017	9,881,643	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE DEVICE WITH OXIDE LAYER BENEATH THE SEED LAYER	US	Issued	16/572,551	Sep 16, 2019	10,997,992	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE DEVICE WITH OXIDE LAYER BENEATH THE SEED LAYER	US	Issued	15/596,198	May 16, 2017	10,446,175	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	QUEUE DEPTH MANAGEMENT FOR HOST SYSTEMS ACCESSING A PERIPHERAL COMPON	US	Issued	16/741,667	Jan 13, 2020	10,877,913	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANICAL SHOCK PROTECTION FOR ELECTRONIC DEVICE	US	Issued	15/635,687	Jun 28, 2017	10,579,567	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Low Write Overhead Consensus Protocol for Distributed Storage	US	Issued	15/594,447	May 12, 2017	10,281,957	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Low Write Overhead Consensus Protocol for Distributed Storage	US	Issued	15/626,061	Jun 16, 2017	10,481,803	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Update Efficient Consensus Protocols for Erasure Coded Data Stores	US	Issued	15/647,182	Jul 11, 2017	10,289,489	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	QUALITY OF SERVICE AWARE STORAGE CLASS MEMORY/NAND FLASH HYBRID SOLID ST	US	Issued	15/631,034	Jun 23, 2017	10,430,329	Oct 1, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS RANGE MAPPING FOR STORAGE DEVICES	US	Issued	16/153,561	Oct 5, 2018	10,452,558	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY RESIZING LOGICAL STORAGE BLOCKS	US	Issued	15/633,608	Jun 26, 2017	10,649,661	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-PLANE MEMORY MANAGEMENT	US	Issued	15/633,388	Jun 26, 2017	10,324,859	Jan 18, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Die-Based Data Retention Recycling	US	Issued	16/143,271	Sep 26, 2018	10,559,329	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data storage system and method based on data temperature	US	Issued	16/724,081	Dec 20, 2019	10,872,638	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Die-Based Data Retention Recycling	US	Issued	15/661,882	Jul 27, 2017	10,115,437	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MANAGEMENT TABLES RECOVERY	US	Issued	15/685,555	Aug 24, 2017	10,459,803	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	IDENTIFYING MEMORY BLOCK WRITE ENDURANCE USING MACHINE LEARNING	US	Issued	15/640,225	Jun 30, 2017	11,049,009	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC LABEL	US	Issued	15/634,968	Jun 27, 2017	10,438,105	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING MINIMUM STABLE FLY HEIGHT OF A HEAD OVER A	US	Issued	15/614,939	Jun 6, 2017	9,786,309	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH A MAIN POLE SKIN	US	Issued	17/868,586	Jul 19, 2022	11,682,418	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH A MAIN POLE SKIN	US	Issued	17/330,176	May 25, 2021	11,437,058	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH A MAIN POLE SKIN	US	Issued	16/912,572	Jun 25, 2020	11,049,512	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH A MAIN POLE SKIN	US	Issued	16/009,046	Jun 14, 2018	10,734,014	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PERIPHERAL COMPONENT INTERCONNECT EXPRESS (PCI-E) DEVICE ENUMERATION VIA	US	Issued	15/634,396	Jun 27, 2017	10,824,581	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Device Quality of Service by Host Memory Buffer Range	US	Issued	15/808,209	Nov 9, 2017	10,712,949	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED TO PERFORM OPERATIONS USING A WIRELESS IN	US	Issued	15/622,857	Jun 14, 2017	10,289,333	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Hidden Diagnostic Partition	US	Issued	15/717,494	Sep 27, 2017	10,552,264	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR USING HOST COMMAND DATA BUFFERS AS EXTENDED ME	US	Issued	16/147,366	Sep 28, 2018	10,489,082	Nov 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Using Host Command Data Buffers as Extended Memory Devi	US	Issued	15/630,438	Jun 22, 2017	10,114,586	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SCALING LARGE DRIVES USING ENHANCED DRAM ECC	US	Issued	15/633,848	Jun 27, 2017	10,459,786	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Programmable Adapter Between Slow Peripherals and Network On-Chip Interfaces	US	Issued	15/639,832	Jun 30, 2017	10,372,646	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SAVING PARTIAL MAP WHEN READ-MODIFY-WRITE FAILS DURI	US	Issued	15/604,717	May 25, 2017	10,186,290	Jan 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE GRADUALLY DECREASING LASER POWER AFTER WRITE OPERAT	US	Issued	15/616,569	Jun 7, 2017	9,922,676	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD WITH SPIN-TORQUE OSCILLATOR (STO) AND EXTE	US	Issued	15/607,604	May 29, 2017	10,410,658	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NON-MAGNETIC CONDUCTIVE STRUCTURE	US	Issued	17/229,560	Apr 13, 2021	11,276,422	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NON-MAGNETIC CONDUCTIVE STRUCTURE	US	Issued	16/015,163	Jun 21, 2018	10,997,988	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH SPIN-ORBIT TORQUE BASED STRUCT	US	Issued	15/631,932	Jun 23, 2017	10,157,632	Dec 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE POLICY MANAGEMENT FOR ENERGY-ASSISTED RECORDING	US	Issued	15/953,353	Apr 13, 2018	10,283,149	Mar 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Flush Optimization	US	Issued	15/611,510	Jun 1, 2017	10,289,552	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR READING DATA DURING CONTROL SYNC OPERATIONS	US	Issued	15/949,036	Apr 9, 2018	10,732,896	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and method for a storage controller having a persistent memory interface to	US	Issued	16/711,294	Dec 11, 2019	11,237,959	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System with a Controller Having a Persistent Memory Interface to Local Me	US	Issued	15/628,361	Jun 20, 2017	10,521,343	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Improved Generation and Storage of Data Protection	US	Issued	15/631,293	Jun 23, 2017	10,339,343	Jul 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, SYSTEMS AND DEVICES FOR RESTARTING DATA PROCESSING UNITS	US	Issued	15/661,431	Jul 27, 2017	10,521,306	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS, SYSTEMS AND DEVICES FOR RECOVERING FROM CORRUPTIONS IN DATA PR	US	Issued	15/828,104	Nov 30, 2017	10,528,426	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PERMEABILITY ELECTRICAL FEED-THROUGH	US	Issued	16/449,310	Jun 21, 2019	10,515,668	Dec 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Low Permeability Electrical Feed-Through	US	Issued	15/672,779	Aug 9, 2017	10,395,694	Aug 27, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED DISCONNECTED CIRCUITS IN MAGNETIC STORAGE MEDIA OF DATA STORAG	US	Issued	16/882,843	May 26, 2020	10,811,047	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED DISCONNECTED CIRCUITS IN MAGNETIC STORAGE MEDIA OF DATA STORAG	US	Issued	16/018,360	Jun 26, 2018	10,672,425	Jun 2, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS OF USING EMBEDDED DISCONNECTED CIRCUITS IN MAGNETIC STORAGE ME	US	Issued	16/018,915	Jun 26, 2018	10,777,225	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TRIE SEARCH ENGINE	US	Issued	16/004,782	Jun 11, 2018	11,126,624	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Supervised Learning With Closed Loop Feedback To Improve Input Output Consistency	US	Issued	17/107,597	Nov 30, 2020	11,640,243	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPERVISED LEARNING WITH CLOSED LOOP FEEDBACK TO IMPROVE IOCONSISTENCY O	US	Issued	15/947,665	Apr 6, 2018	10,877,667	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Container Flange Configurations with Increased Diffusion Length for Hermetic Seal	US	Issued	15/669,881	Aug 4, 2017	10,153,005	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Fast Execution of In-Capsule Commands	US	Issued	15/651,544	Jul 17, 2017	10,296,473	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Fast Lookup in a Table-Caching Database	US	Issued	15/688,095	Aug 28, 2017	10,289,557	May 14, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Executing File-Based Firmware Commands and Collect	US	Issued	15/695,686	Sep 5, 2017	10,474,391	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ADJACENT-CONDUCTORS DIFFERENTIAL-SIGNAL-COUPLING ATTENUATION	US	Issued	15/667,585	Aug 2, 2017	10,283,150	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING LASING THRESHOLD OF LASER BY MEASURING PRO	US	Issued	15/615,050	Jun 6, 2017	9,786,310	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Heat Assisted Magnetic Recording with an Anisotropic Heat Sink	US	Issued	15/813,332	Nov 15, 2017	10,090,014	Oct 2, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROMAGNETICALLY SHIELDED NEAR-FIELD TRANSDUCER THERMAL SENSOR FOR H	US	Issued	15/691,620	Aug 30, 2017	10,283,145	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PARAMETERIZED ITERATIVE MESSAGE PASSING DECODER	US	Issued	15/617,629	Jun 8, 2017	10,382,067	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE WITH ADAPTIVE REDUNDANCY	US	Issued	15/633,479	Jun 26, 2017	10,403,377	Sep 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR CACHE WRITE OVERLAP HANDLING	US	Issued	16/925,188	Jul 9, 2020	11,500,772	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR CACHE WRITE OVERLAP HANDLING	US	Issued	16/925,191	Jul 9, 2020	11,386,006	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR CACHE WRITE OVERLAP HANDLING	US	Issued	16/003,914	Jun 8, 2018	10,733,100	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DRIVE AND METHOD OF EXECUTING A COMPARE COMMAND	US	Issued	16/013,889	Jun 20, 2018	10,642,758	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method to Enhance Reliability in Connection with Arrangements Including	US	Issued	16/821,926	Mar 17, 2020	11,264,301	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method to Enhance Solder Joint Reliability	US	Issued	16/455,660	Jun 27, 2019	11,094,604	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method to Enhance Solder Joint Reliability	US	Issued	15/715,863	Sep 26, 2017	10,636,722	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE DEVICE SYSTEM WITH PAGE BASED REMAPPING	US	Issued	15/636,496	Jun 28, 2017	10,372,341	Sep 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAM TEMPERATURE AWARE DATA SCRUB	US	Issued	15/636,023	Jun 28, 2017	10,026,483	Jul 17, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	GROUP WRITE OPERATIONS FOR A DATA STORAGE DEVICE	US	Issued	15/659,208	Jul 25, 2017	10,643,707	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC CALIBRATION OF FREQUENCY AND POWER STORAGE INTERFACE	US	Issued	17/152,486	Jan 19, 2021	11,387,831	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC CALIBRATION OF FREQUENCY AND POWER STORAGE INTERFACE	US	Issued	15/964,027	Apr 26, 2018	10,924,113	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR MAXIMIZING FREQUENCY WHILE CHECKING DATA INTEGRITY ON A PHYS	US	Issued	15/679,468	Aug 17, 2017	10,466,920	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Switching Firmware	US	Issued	15/696,913	Sep 6, 2017	10,642,693	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC HOSTNAME ASSIGNMENT FOR MICROSERVERS	US	Issued	15/640,295	Jun 30, 2017	10,805,264	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BASEBOARD MANAGEMENT CONTROLLERS FOR SERVER CHASSIS	US	Issued	15/640,234	Jun 30, 2017	10,810,085	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERNAL POWER ANALYZER FOR DATA STORAGE DEVICE	US	Issued	15/666,877	Aug 2, 2017	10,732,864	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PROTECTION OF USER DATA IN DATA STORAGE DEVICES USING PREEMPTIVE HEALTH R	US	Issued	15/997,459	Jun 4, 2018	10,921,984	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL AND PHYSICAL ADDRESS FIELD SIZE REDUCTION BY ALIGNMENT-CONSTRAINED	US	Issued	15/684,206	Aug 23, 2017	10,423,349	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Direct Write and Mapping of Data in a Non-Volatile Memory	US	Issued	16/554,527	Aug 28, 2019	11,016,882	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Direct Write and Mapping of Data in a Non-Volatile Memory	US	Issued	17/235,816	Apr 20, 2021	11,636,033	Apr 25, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Direct Write and Mapping of Data in a Non-Volatile Memory	US	Issued	15/954,171	Apr 16, 2018	10,409,720	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMAND CLUSTERING FOR DATA STORAGE DEVICE	US	Issued	16/014,151	Jun 21, 2018	10,242,704	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR USING SPIN LAYER EFFECT	US	Issued	15/826,578	Nov 29, 2017	10,720,570	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE (STT) DEVICE WITH MULTILAYER SEED LAYERS FOR MAGNETIC	US	Issued	16/277,835	Feb 15, 2019	10,734,013	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Management of Garbage Collection and Overprovisioning for Host Stream St	US	Issued	15/783,739	Oct 13, 2017	10,452,536	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Predicting Future Access Requests by Inverting Historic Access Requests in an Object S	US	Issued	15/697,265	Sep 6, 2017	10,223,270	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Real-Time, Self-Learning Automated Object Classification and Storage Tier Assignment	US	Issued	15/697,304	Sep 6, 2017	10,318,176	Jun 11, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE WITH WEAR-ADJUSTED FAILURE PREDICTION	US	Issued	15/927,796	Mar 21, 2018	10,802,911	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE WITH FAILURE PREDICTION	US	Issued	15/679,025	Aug 16, 2017	10,346,232	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY EFFICIENT PERSISTENT KEY-VALUE STORE FOR NON-VOLATILE MEMORIES	US	Issued	15/996,266	Jun 1, 2018	10,649,969	May 12, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR VARIABLE SIZE LOGICAL PAGE MANAGEMENT BASED	US	Issued	15/782,829	Oct 12, 2017	10,915,475	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR DETECTION FOR TRAINING NON-VOLATILE MEMORIES	US	Issued	15/717,572	Sep 27, 2017	10,459,785	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REACTIVE POWER MANAGEMENT FOR NON-VOLATILE MEMORY CONTROLLERS	US	Issued	15/716,961	Sep 27, 2017	10,514,748	Dec 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Mechanically powered scanning platform for directed sensors	US	Issued	15/822,198	Nov 26, 2017	10,620,016	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANCY CODING STRIPE BASED ON COORDINATED INTERNAL ADDRESS SCHEME	US	Issued	15/722,666	Oct 2, 2017	10,474,528	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING-BASED WEAR LEVELING FOR NON-VOLATILE MEMORY	US	Issued	15/949,976	Apr 10, 2018	10,540,100	Jan 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR REDUCING MATRIX GENERATION	US	Issued	15/725,255	Oct 4, 2017	10,679,718	Jun 9, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANCY CODING STRIPE BASED ON INTERNAL ADDRESSES OF STORAGE DEVICES	US	Issued	15/722,685	Oct 2, 2017	10,379,948	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RAID STRIPE PHYSICAL PLACEMENT	US	Issued	15/811,658	Nov 13, 2017	10,628,300	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	READ COMMANDS SCHEDULING METHOD IN STORAGE DEVICE	US	Issued	16/138,280	Sep 21, 2018	10,712,972	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE OPERATIONS USING A DIE TRANSLATION TABLE	US	Issued	16/748,795	Jan 21, 2020	11,199,997	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE OPERATIONS USING A DIE TRANSLATION TABLE	US	Issued	15/721,272	Sep 29, 2017	10,564,891	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY ASSIGNING DATA LATCHES	US	Issued	15/787,694	Oct 18, 2017	10,481,816	Nov 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL CELL SOLID STATE DEVICE AND METHOD FOR TRANSFERRING DATA BETW	US	Issued	15/722,989	Oct 2, 2017	10,372,342	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR AUGMENTATION OF RESET RECOVERY OPERATION TIMING	US	Issued	16/047,958	Jul 27, 2018	10,459,501	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	A METHOD FOR FORMING A DUAL ACTUATOR PIVOT	US	Issued	10/600,882	Jun 20, 2003	7,469,463	Dec 30, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC TUNNEL JUNCTION SENSOR HAVING A LONGITUDINAL BIAS LAYER IN CONT	US	Issued	10/621,483	Jul 16, 2003	6,930,866	Aug 16, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD, SYSTEM, AND PROGRAM FOR EXECUTING INPUT/OUTPUT REQUESTS	US	Issued	10/463,012	Jun 16, 2003	7,225,293	May 29, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR IMPROVED READ-TO-WRITE TRANSITION TIME FOR A N	US	Issued	10/080,448	Feb 21, 2002	6,954,321	Oct 11, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL STAGE SUSPENSION WITH PZT ACTUATORS ARRANGED TO IMPROVE ACTUATION	US	Issued	10/265,554	Oct 7, 2002	7,023,667	Apr 4, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING MULTILAYER HEATER FOR THERMALLY ASSISTED WRITE HEAD	US	Issued	10/631,396	Jul 30, 2003	6,956,716	Oct 18, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR PLATING	US	Issued	11/560,719	Nov 16, 2006	8,221,598	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	PREAMPLIFIER CIRCUIT SUITABLE FOR USE IN MAGNETIC STORAGE DEVICES	US	Issued	10/284,811	Oct 31, 2002	6,822,817	Nov 23, 2004
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING THERMALLY ASSISTED RECORDING DEVICE AND METHOD OF	US	Issued	10/791,186	Mar 1, 2004	7,187,520	Mar 6, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD HAVING MEDIA HEATING DEVICE THAT IS ELECTRICALLY CONNECTED	US	Issued	10/675,065	Sep 29, 2003	6,940,693	Sep 6, 2005
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE WITH CONTROLLED PITCH STATIC ATTITUDE OF SLIDERS ON INTEGRATED LE	US	Issued	10/650,557	Aug 28, 2003	6,992,862	Jan 31, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	Method, system, and program for managing groups of objects when there are differ	US	Issued	10/410,072	Apr 7, 2003	8,214,377	Jul 3, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus, system, and method for autonomic control of grid system resources	US	Issued	10/735,938	Dec 15, 2003	8,332,483	Dec 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Space recovery with storage management coupled with a deduplicating storage system	US	Issued	13/116,995	May 26, 2011	8,176,104	May 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient transfer of deduplicated data	US	Issued	12/186,239	Aug 5, 2008	8,788,466	Jul 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Integrated Storage and Switching for Memory Systems	US	Issued	13/596,979	Aug 28, 2012	9,363,315	Jun 7, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CHASSIS WITH SEPARATE THERMAL CHAMBER FOR SOLID STATE MEMORY	US	Issued	13/597,110	Aug 28, 2012	8,929,066	Jan 6, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MOTHERBOARD WITH CARD GUIDE CUTOUTS	US	Issued	13/597,051	Aug 28, 2012	8,848,383	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL REGULATION FOR SOLID STATE MEMORY	US	Issued	13/774,926	Feb 22, 2013	9,317,083	Apr 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE MEMORY THERMAL REGULATION	US	Issued	15/087,548	Mar 31, 2016	10,146,279	Dec 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICALLY INTEGRATED STORAGE	US	Issued	15/452,606	Mar 7, 2017	10,037,158	Jul 31, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR USING FIELDS IN N-SPACE TRANSLATION OF STORAGE F	US	Issued	15/458,945	Mar 14, 2017	11,010,075	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR INSERTION AND DELETION IN MULTI-DIMENSIONAL TO	US	Issued	15/470,695	Mar 27, 2017	10,282,121	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR TRANSLATION FROM MULTI-DIMENSIONAL TO LINEAR	US	Issued	14/090,960	Nov 26, 2013	9,823,872	Nov 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR CLONING AND SNAPSHOTTING IN MULTI-DIMENSIONA	US	Issued	14/091,211	Nov 26, 2013	9,802,124	Oct 31, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR REFERENCING DENSE AND SPARSE INFORMATION IN M	US	Issued	14/091,053	Nov 26, 2013	10,101,937	Oct 16, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR INSERTION AND DELETION IN MULTI-DIMENSIONAL TO	US	Issued	14/091,176	Nov 26, 2013	9,606,729	Mar 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICALLY INTEGRATED STORAGE	US	Issued	14/208,401	Mar 13, 2014	9,586,142	Mar 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR USING FIELDS IN N-SPACE TRANSLATION OF STORAGE F	US	Issued	14/091,131	Nov 26, 2013	9,592,448	Apr 14, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH DENSITY SERVER STORAGE UNIT	US	Issued	14/212,941	Mar 14, 2014	9,301,402	Mar 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH DENSITY SERVER STORAGE UNIT	US	Issued	15/077,242	Mar 22, 2016	9,901,010	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH CAPACITY STORAGE UNIT	US	Issued	14/326,302	Jul 8, 2014	9,585,290	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPRESSOR RESOURCES FOR HIGH DENSITY STORAGE UNITS	US	Issued	14/108,671	Dec 17, 2013	9,778,885	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MASS STORAGE DEVICE AND METHOD OF OPERATING THE SAME TO BACK UP DATA ST	US	Issued	14/208,452	Mar 13, 2014	9,575,844	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MASS STORAGE DEVICE AND METHOD OF OPERATING THE SAME TO STORE PARITY DAT	US	Issued	14/210,009	Mar 13, 2014	9,547,554	Jan 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITABLE CLONE DATA STRUCTURE	US	Issued	14/066,349	Oct 29, 2013	9,250,828	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITABLE CLONE DATA STRUCTURE	US	Issued	15/012,260	Feb 1, 2016	9,542,111	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITABLE CLONE DATA STRUCTURE	US	Issued	15/012,294	Feb 1, 2016	9,547,451	Jan 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR ROUTING INFORMATION IN A NON-VOLATILE MEMOR	US	Issued	14/078,302	Nov 12, 2013	9,229,855	Jan 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR ROUTING INFORMATION IN A NON-VOLATILE MEMOR	US	Issued	14/961,184	Dec 7, 2015	9,507,529	Nov 29, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR ACCESSING A NON-VOLATILE MEMORY BLADE USING M	US	Issued	14/078,308	Nov 12, 2013	9,336,134	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR ACCESSING A NON-VOLATILE MEMORY BLADE USING M	US	Issued	15/149,706	May 9, 2016	9,645,940	May 9, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PACKAGING HIGH DENSITY SSDS	US	Issued	14/086,032	Nov 21, 2013	9,304,557	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PACKAGING HIGH DENSITY SSDS	US	Issued	15/087,386	Mar 31, 2016	9,891,675	Feb 13, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR SECURING HIGH DENSITY SSDS	US	Issued	14/086,057	Nov 21, 2013	9,600,038	Mar 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS TRANSLATION FOR A NON-VOLATILE MEMORY STORAGE DEVICE	US	Issued	14/460,216	Aug 14, 2014	9,626,288	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS TRANSLATION FOR A NON-VOLATILE MEMORY STORAGE DEVICE	US	Issued	15/489,632	Apr 17, 2017	10,380,014	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADDRESS TRANSLATION FOR STORAGE DEVICE	US	Issued	16/452,463	Jun 25, 2019	11,086,774	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DESTRUCTIVE PURGE OF MEMORY DEVICE	US	Issued	10/912,114	Aug 6, 2004	7,020,019	Mar 28, 2006
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DESTRUCTIVE PURGE OF MEMORY DEVICE	US	Issued	11/332,197	Jan 17, 2006	7,180,777	Feb 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF EFFICIENT DATA MANAGEMENT WITH FLASH STORAGE SYSTEM	US	Issued	10/863,210	Jun 9, 2004	7,194,596	May 20, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DETECTING AND REDUCING DATA CORRUPTION IN A STOR	US	Issued	11/352,654	Feb 13, 2006	7,743,277	Jun 22, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	REGISTERED DUAL IN-LINE MEMORY MODULE HAVING AN EXTENDED REGISTER FEATU	US	Issued	11/259,539	Oct 25, 2005	8,065,475	Nov 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MANAGING SECURITY OF A MEMORY DEVICE	US	Issued	11/436,845	May 18, 2006	8,245,000	Aug 14, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE MEMORY DEVICES AND METHODS OF MANAGING SECURE MEMORY DEVICES	US	Issued	13/555,050	Jul 20, 2012	8,677,092	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING SECURITY IN SOLID-STATE DEVICES	US	Issued	13/555,052	Jul 20, 2012	8,850,150	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE RECOVERABLE PURGE FOR FLASH STORAGE DEVICE	US	Issued	11/582,783	Oct 17, 2006	7,450,436	Nov 11, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED ERASE FOR FLASH STORAGE DEVICE	US	Issued	12/286,763	Oct 1, 2008	8,000,153	Aug 16, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANT PURGE FOR FLASH STORAGE DEVICE	US	Issued	12/384,908	Apr 11, 2009	7,903,474	Mar 8, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	VERIFIED PURGE FOR FLASH STORAGE DEVICE	US	Issued	12/384,932	Apr 11, 2009	7,929,354	Apr 19, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED DATA ACCESS IN A STORAGE DEVICE	US	Issued	11/582,462	Oct 18, 2006	7,594,067	Sep 22, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH MEMORY ALLOCATION FOR IMPROVED PERFORMANCE AND ENDURANCE	US	Issued	12/141,002	Jun 17, 2008	7,711,892	May 4, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE SECTOR WRITE OPERATION IN FLASH MEMORY	US	Issued	12/141,004	Jun 17, 2008	7,814,265	Oct 12, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH MEMORY ALLOCATION FOR IMPROVED PERFORMANCE AND ENDURANCE	US	Issued	12/542,626	Aug 17, 2009	7,962,687	Jun 14, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL DATA STORAGE SYSTEM	US	Issued	11/358,043	Feb 22, 2006	7,376,034	May 20, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL DATA STORAGE SYSTEM	US	Issued	12/122,637	May 16, 2008	7,619,941	Nov 17, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL DATA STORAGE SYSTEM	US	Issued	12/574,235	Oct 6, 2009	7,894,288	Feb 22, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR SECURE DATA STORAGE	US	Issued	11/520,014	Sep 13, 2006	8,464,073	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED ADDRESSING IN SOLID-STATE STORAGE	US	Issued	11/978,176	Oct 26, 2007	7,765,339	Jul 27, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL DATA TRANSFER IN SOLID-STATE STORAGE	US	Issued	11/978,177	Oct 26, 2007	7,958,280	Jun 7, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-CHANNEL SOLID-STATE STORAGE SYSTEM	US	Issued	11/978,215	Oct 26, 2007	7,822,887	Oct 26, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SLC-MLC COMBINATION FLASH STORAGE DEVICE	US	Issued	12/492,113	Jun 25, 2009	8,825,941	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED INPUT/OUTPUT PERFORMANCE IN SOLID STATE DEVICES	US	Issued	14/720,697	May 22, 2015	9,411,522	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITIZED ERASURE OF DATA BLOCKS IN A FLASH STORAGE DEVICE	US	Issued	12/343,378	Dec 23, 2008	8,843,691	Sep 23, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPPORTING VARIABLE SECTOR SIZES IN FLASH STORAGE DEVICES	US	Issued	12/492,103	Jun 25, 2009	8,572,308	Oct 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	TABLE JOURNALING IN FLASH STORAGE DEVICES	US	Issued	12/492,104	Jun 25, 2009	9,311,006	Apr 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANT DATA DISTRIBUTION IN A FLASH STORAGE DEVICE	US	Issued	12/492,107	Jun 25, 2009	8,347,138	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED INPUT/OUTPUT PERFORMANCE IN SOLID STATE DEVICES	US	Issued	12/492,109	Jun 25, 2009	9,043,531	May 26, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED MLC SOLID STATE DEVICE	US	Issued	12/492,112	Jun 25, 2009	8,762,622	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH READ DISTURB MITIGATION	US	Issued	12/779,001	May 12, 2010	8,719,652	May 6, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH READ CACHE	US	Issued	12/779,003	May 12, 2010	8,806,144	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH READ DISTURB MITIGATION	US	Issued	14/257,978	Apr 21, 2014	9,098,416	Aug 4, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR READ CACHING IN FLASH STORAGE	US	Issued	14/457,077	Aug 11, 2014	9,223,702	Dec 29, 2015

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM WITH COMPRESSION/DECOMPRESSION	US	Issued	12/842,919	Jul 23, 2010	8,370,544	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM WITH PRIMARY AND SECONDARY COMPRESSION ENGINES	US	Issued	13/754,837	Jan 30, 2013	8,677,035	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE STORAGE DEVICE WITH REMOVABLE POWER BACKUP	US	Issued	12/842,930	Jul 23, 2010	8,514,565	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE STORAGE DEVICE WITH MULTI-LEVEL ADDRESSING	US	Issued	12/842,950	Jul 23, 2010	8,566,511	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLEAVED FLASH STORAGE SYSTEM AND METHOD	US	Issued	12/508,538	Jul 23, 2009	8,144,515	Mar 27, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERLEAVED FLASH STORAGE SYSTEM AND METHOD	US	Issued	13/289,966	Nov 4, 2011	8,437,190	May 7, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR ACCESSING AND STORING INTERLEAVED DATA	US	Issued	13/873,183	Apr 29, 2013	8,681,552	Mar 25, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE SYSTEM AND METHOD FOR ACCESSING A BOOT PROGRAM	US	Issued	12/508,528	Jul 23, 2009	8,275,981	Sep 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMING A DIRECT MEMORY ACCESS AT A PREDETERM	US	Issued	12/508,531	Jul 23, 2009	9,342,445	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DIRECT MEMORY ACCESS IN A FLASH STORAGE	US	Issued	15/156,267	May 16, 2016	9,990,315	Jun 5, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DIRECT MEMORY ACCESS IN A FLASH STORAGE	US	Issued	15/971,971	May 4, 2018	10,409,747	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DIRECT MEMORY ACCESS IN A FLASH STORAGE	US	Issued	16/554,519	Aug 28, 2019	10,733,122	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage System and Method for Multiple Communication Protocols and Direct M	US	Issued	16/911,312	Jun 24, 2020	11,016,917	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage System and Method for Multiple Communication Protocols and Memory	US	Issued	17/244,799	Apr 29, 2021	11,630,791	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF MAINTAINING DATA INTEGRITY IN A FLASH STORAGE DEVICE	US	Issued	12/511,990	Jul 29, 2009	8,228,753	Jul 24, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH DATA INTEGRITY PROTECTION	US	Issued	13/530,026	Jun 21, 2012	9,087,599	Jul 21, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH POWER MONITORING	US	Issued	14/788,658	Jun 30, 2015	10,181,355	Jan 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH DATA INTEGRITY PROTECTION	US	Issued	16/216,904	Dec 11, 2018	10,438,669	Oct 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF RECOVERING DATA IN A FLASH STORAGE SYSTEM	US	Issued	13/532,718	Jun 25, 2012	9,377,960	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH STORAGE DEVICE WITH FLEXIBLE DATA FORMAT	US	Issued	12/511,991	Jul 29, 2009	8,510,497	Aug 13, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR STORING DATA USING A FLEXIBLE DATA FORMAT	US	Issued	13/719,184	Dec 18, 2012	8,473,672	Jun 25, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD OF WEAR-LEVELING IN FLASH STORAGE	US	Issued	12/511,994	Jul 29, 2009	8,266,481	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN SOLID-STATE DEVICE	US	Issued	13/597,158	Aug 28, 2012	8,453,021	May 28, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS OF USING DYNAMIC DATA FOR WEAR LEVELING IN SOLID-STA	US	Issued	13/853,989	Mar 29, 2013	8,713,381	Apr 29, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STAGED-BACKUP FLASH BACKED DRAM MODULE	US	Issued	12/369,027	Feb 11, 2009	7,830,732	Nov 9, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH BACKED DRAM MODULE STORING PARAMETER INFORMATION OF THE DRAM M	US	Issued	12/369,046	Feb 11, 2009	9,977,831	Mar 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS, SYSTEMS AND METHODS FOR OPERATING FLASH BACKED DRAM MODULE	US	Issued	14/624,255	Feb 17, 2015	9,520,191	Dec 13, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH BACKED DRAM MODULE WITH STATE OF HEALTH AND/OR STATUS INFORMATIO	US	Issued	12/369,052	Feb 11, 2009	8,566,639	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH BACKED DRAM MODULE INCLUDING LOGIC FOR ISOLATING THE DRAM	US	Issued	12/369,079	Feb 11, 2009	8,169,839	May 1, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH BACKED DRAM MODULE WITH A SELECTABLE NUMBER OF FLASH CHIPS	US	Issued	12/369,040	Feb 11, 2009	7,990,797	Aug 2, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH BACKED DRAM MODULE WITH A SELECTABLE NUMBER OF FLASH CHIPS	US	Issued	12/369,076	Feb 11, 2009	7,983,107	Jul 19, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	TRELLIS-CODED MODULATION IN A MULTI-LEVEL CELL FLASH MEMORY DEVICE	US	Issued	13/118,137	May 27, 2011	8,656,263	Feb 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING AN OPERATING CONDITION OF A MEMO	US	Issued	13/044,464	Mar 9, 2011	8,819,503	Aug 26, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DETERMINING DATA DEPENDENT NOISE CALCULATION FOR	US	Issued	13/176,727	Jul 5, 2011	8,605,501	Dec 10, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR MULTI-MODE OPERATION OF A FLASH MEMORY DEVIC	US	Issued	13/177,482	Jul 6, 2011	8,656,256	Feb 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING AN OPERATING CONDITION OF A MEMO	US	Issued	13/177,518	Jul 6, 2011	8,737,141	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING AN OPERATING CONDITION OF A MEMO	US	Issued	14/252,746	Apr 14, 2014	9,389,938	Jul 12, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING AN OPERATING CONDITION OF A MEMO	US	Issued	15/207,414	Jul 11, 2016	10,613,781	Apr 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING A READ LEVEL OF A MEMORY CELL BASE	US	Issued	13/076,340	Mar 30, 2011	8,737,136	May 27, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR DETERMINING A READ LEVEL OF A FLASH MEMORY AF	US	Issued	13/179,466	Jul 8, 2011	8,644,099	Feb 4, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC LOG-LIKELIHOOD RATIO FOR MLC FLASH CHANNEL	US	Issued	13/253,029	Oct 4, 2011	8,848,438	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC LOG-LIKELIHOOD RATIO FOR FLASH CHANNEL	US	Issued	14/724,770	May 28, 2015	9,305,640	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR OBJECT LEVEL DE-DUPLICATION FOR SOLID STATE DEVI	US	Issued	13/303,870	Nov 23, 2011	10,162,553	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND SYSTEMS FOR OBJECT LEVEL DE-DUPLICATION FOR SOLID STATE DEVI	US	Issued	16/191,210	Nov 14, 2018	11,036,417	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods and Systems for Object Level De-Duplication for Data Storage System	US	Issued	17/315,202	May 7, 2021	11,640,256	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ERASE-SUSPEND SYSTEM AND METHOD	US	Issued	13/365,232	Feb 2, 2012	8,364,888	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW DENSITY PARITY CHECK CODE DECODING SYSTEM AND METHOD	US	Issued	13/343,684	Jan 4, 2012	8,566,667	Oct 22, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED MEMORY MULTI-CHANNEL PARALLEL ENCODER SYSTEM	US	Issued	13/526,446	Jun 18, 2012	8,347,200	Jan 1, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR REDUCING MEMORY IN A MULTI-CHANNEL PARALLEL ENCC	US	Issued	13/728,944	Dec 27, 2012	8,484,547	Jul 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMAL PROGRAMMING LEVELS FOR LDPC	US	Issued	13/553,707	Jul 19, 2012	8,484,519	Jul 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH SPEED HARD LDPC DECODER	US	Issued	13/525,009	Jun 15, 2012	8,527,849	Sep 3, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC LDPC CODE RATE SOLUTION	US	Issued	13/678,416	Nov 15, 2012	8,762,798	Jun 24, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED GARBAGE COLLECTION ALGORITHM TO IMPROVE SOLID STATE DRIVE RELIA	US	Issued	13/664,335	Oct 30, 2012	9,081,663	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED GARBAGE COLLECTION ALGORITHM TO IMPROVE SOLID STATE DRIVE RELIA	US	Issued	14/798,400	Jul 13, 2015	9,977,736	May 22, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WORD-LINE INTER-CELL INTERFERENCE DETECTOR IN FLASH SYSTEM	US	Issued	13/725,689	Dec 21, 2012	8,493,791	Jul 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	INTER-CELL INTERFERENCE ALGORITHMS FOR SOFT DECODING OF LDPC CODES	US	Issued	13/725,943	Dec 21, 2012	9,117,529	Aug 25, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	ISOLATION DEVICES FOR HIGH PERFORMANCE SOLID STATE DRIVES	US	Issued	13/407,095	Feb 28, 2012	8,271,723	Sep 18, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICE WITH LOAD ISOLATION	US	Issued	13/475,668	May 18, 2012	8,402,206	Mar 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR PROVIDING LOAD ISOLATION IN A SOLID-STATE DEVICE	US	Issued	13/762,524	Feb 8, 2013	8,578,085	Nov 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR OPTIMIZING DATA MOVEMENT IN SOLID STATE DEVICES	US	Issued	13/482,865	May 29, 2012	8,612,719	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING A NUMBER OF CLOSE OPERATIONS ON OPEN BLOCKS IN A FLASH MEMORY	US	Issued	13/611,577	Sep 12, 2012	8,635,399	Jan 21, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO CACHE HYPERVISOR DATA	US	Issued	13/662,183	Oct 26, 2012	9,069,587	Jun 30, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CACHING VIRTUAL MACHINE DATA	US	Issued	14/722,873	May 27, 2015	10,248,566	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSMISSION ERROR DETECTOR FOR FLASH MEMORY CONTROLLER	US	Issued	13/420,970	Mar 15, 2012	9,543,035	Jan 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR HASH KEY MEMORY FOOTPRINT REDUCTION	US	Issued	13/677,791	Nov 15, 2012	8,806,174	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM WITH REDUCED HASH KEY MEMORY	US	Issued	14/456,581	Aug 11, 2014	9,122,620	Sep 1, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR HASH KEY MEMORY REDUCTION	US	Issued	14/841,635	Aug 31, 2015	9,378,214	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LAYER INPUT/OUTPUT PAD RING FOR SOLID STATE DEVICE CONTROLLER	US	Issued	13/714,590	Dec 14, 2012	8,994,133	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LAYER PAD RING FOR INTEGRATED CIRCUIT	US	Issued	14/657,780	Mar 13, 2015	9,379,073	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING ALGORITHM FOR IMPROVED FLASH MEMORY ENDURANCE AND RETE	US	Issued	13/741,119	Jan 14, 2013	9,082,489	Jul 14, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING ALGORITHM FOR IMPROVED FLASH MEMORY ENDURANCE AND RETE	US	Issued	14/794,741	Jul 8, 2015	9,514,823	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED COMPLEXITY NON-BINARY LDPC DECODING ALGORITHM	US	Issued	13/764,649	Feb 11, 2013	8,954,820	Feb 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED COMPLEXITY NON-BINARY LDPC DECODING ALGORITHM	US	Issued	14/607,039	Jan 27, 2015	9,319,069	Apr 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCED COMPLEXITY NON-BINARY LDPC DECODING ALGORITHM	US	Issued	15/132,143	Apr 18, 2016	10,298,261	May 21, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING OPERATING PARAMETERS FOR MEMORY CELLS BASED ON WORDLINE ADD	US	Issued	13/775,070	Feb 22, 2013	9,047,955	Jun 2, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING BIAS INFORMATION FOR OFFSETTING OPERATING VARIATIONS IN MEM	US	Issued	13/776,590	Feb 25, 2013	9,195,586	Nov 24, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SETTING OPERATING PARAMETERS FOR MEMORY CELLS BASED ON WORDLINE ADDRES	US	Issued	14/724,773	May 28, 2015	9,224,456	Dec 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING BIAS INFORMATION FOR OFFSETTING OPERATING VARIATIONS IN MEM	US	Issued	14/948,229	Nov 20, 2015	9,377,962	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER ARBITRATION FOR STORAGE DEVICES	US	Issued	13/842,101	Mar 15, 2013	9,223,373	Dec 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR SCANNING FLASH MEMORIES	US	Issued	13/843,218	Mar 15, 2013	9,378,132	Jun 28, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT INFORMATION MODULE	US	Issued	13/843,225	Mar 15, 2013	9,136,011	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT INFORMATION MODULE	US	Issued	14/853,941	Sep 14, 2015	9,881,670	Jan 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT INFORMATION MODULE	US	Issued	15/882,937	Jan 29, 2018	10,510,405	Dec 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	READ LEVEL ADJUSTMENT USING SOFT INFORMATION	US	Issued	13/899,447	May 21, 2013	9,135,106	Sep 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTO CALIBRATION OF STORAGE MEMORY CONTROLLER	US	Issued	13/420,849	Mar 15, 2012	8,379,457	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR AUTO-CALIBRATION OF A STORAGE MEMORY CONTROL	US	Issued	13/752,823	Jan 29, 2013	8,767,471	Jul 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MANAGING CACHE CONFIGURATION	US	Issued	13/631,463	Sep 28, 2012	8,560,775	Oct 15, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MANAGING KEY-VALUE STORES	US	Issued	13/662,200	Oct 26, 2012	8,612,402	Dec 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MANAGING FAILURE OF A SOLID STATE DEVICE IN A CACHING STORAGE	US	Issued	13/689,074	Nov 29, 2012	9,218,257	Dec 22, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MANAGING FAILURE OF A SOLID STATE DEVICE IN A CACHING STORAGE	US	Issued	14/976,518	Dec 21, 2015	10,452,473	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WORD-LINE INTER-CELL INTERFERENCE DETECTOR IN FLASH SYSTEM	US	Issued	14/313,971	Jun 24, 2014	9,343,170	May 17, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Convolution-encoded data storage on a redundant array of independent devices	US	Issued	12/173,732	Jul 15, 2008	8,316,259	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable cache data retention system	US	Issued	11/205,808	Aug 17, 2005	7,376,792	May 20, 2008
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable cache data retention system	US	Issued	12/101,970	Apr 12, 2008	7,769,953	Aug 3, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	Method, an apparatus and a system for managing a snapshot storage pool	US	Issued	11/485,775	Jul 13, 2006	8,069,191	Nov 29, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing snapshot storage pools	US	Issued	13/250,517	Sep 30, 2011	8,301,670	Oct 30, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing snapshot storage pools	US	Issued	13/626,208	Sep 25, 2012	8,805,902	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Transferring storage resources between snapshot storage pools and volume storage p	US	Issued	14/706,295	May 7, 2015	9,361,034	Jun 7, 2016

WESTERN DIGITAL TECHNOLOGIES, INC.	Methods for managing ownership of redundant data and systems thereof	US	Issued	12/893,987	Sep 29, 2010	8,539,154	Sep 17, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods for managing ownership of redundant data and systems thereof	US	Issued	13/959,630	Aug 5, 2013	8,694,729	Apr 8, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Restoring deduplicated data objects from sequential backup devices	US	Issued	12/972,307	Dec 17, 2010	8,316,057	Nov 20, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	Restoring deduplicated data objects from sequential backup devices	US	Issued	13/479,003	May 23, 2012	8,892,603	Nov 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Populating strides of tracks to demote from a first cache to a second cache	US	Issued	13/113,931	May 23, 2011	8,825,944	Sep 2, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Populating strides of tracks to demote from a first cache to a second cache	US	Issued	13/465,717	May 7, 2012	8,850,106	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Representing directory structure in content-addressable storage systems	US	Issued	14/086,197	Nov 21, 2013	9,183,212	Nov 10, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	REUSABLE CONTENT ADDRESSABLE STORES AS BUILDING BLOCKS FOR CREATING LARGE	US	Issued	13/358,742	Jan 26, 2012	8,631,209	Jan 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	GARBAGE COLLECTION OF CHUNKS	US	Issued	13/760,945	Feb 6, 2013	9,176,871	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	CHUNK-LEVEL CLIENT SIDE ENCRYPTION IN HIERARCHICAL CONTENT ADDRESSABLE STO	US	Issued	14/962,816	Dec 8, 2015	9,411,749	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	CHUNK-LEVEL CLIENT SIDE ENCRYPTION IN HIERARCHICAL CONTENT ADDRESSABLE STO	US	Issued	13/947,409	Jul 22, 2013	9,207,866	Dec 8, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	Content-aware filter options for media object collections	US	Issued	15/364,919	Nov 30, 2016	9,904,682	Feb 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Content-aware filter options for media object collections	US	Issued	15/899,334	Feb 19, 2018	11,227,006	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NAVIGATING THROUGH MEDIA OBJECT COLLECTION	US	Issued	14/078,738	Nov 13, 2013	9,779,098	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAINTAINING AND USING A CACHE OF CHILD-TO-PARENT MAPPINGS IN A CONTENT-A	US	Issued	14/205,982	Mar 12, 2014	9,659,023	May 23, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA CONTENT MANAGEMENT DEVICE	US	Issued	15/853,785	Dec 23, 2017	11,089,101	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Sharing Groups for Capturing Digital Media	US	Issued	16/389,999	Apr 22, 2019	10,860,184	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Sharing Groups for Capturing Digital Media	US	Issued	14/819,658	Aug 6, 2015	10,416,850	Sep 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage of data reference blocks and deltas in different storage devices	US	Issued	12/762,993	Apr 19, 2010	9,176,883	Nov 3, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-CACHE SIMILARITY-BASED DELTA COMPRESSION FOR USE IN A DATA STORAGE SYS	US	Issued	13/366,846	Feb 6, 2012	9,582,222	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING SIGNATURE COMPUTATION AND SAMPLING FOR FAST ADAPTIVE SIMILAR	US	Issued	13/615,422	Sep 13, 2012	9,413,527	Aug 9, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE OF DATA REFERENCE BLOCKS AND DELTAS IN DIFFERENT STORAGE DEVICES	US	Issued	14/882,741	Oct 14, 2015	10,108,348	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITING TO ASYMMETRIC MEMORY	US	Issued	13/053,371	Mar 22, 2011	8,266,407	Sep 11, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATING DATA FROM SYMMETRIC AND ASYMMETRIC MEMORY	US	Issued	13/443,121	Apr 18, 2012	8,555,024	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SEAMLESS APPLICATION ACCESS TO HYBRID MAIN MEMORY	US	Issued	13/525,960	Jun 18, 2012	8,782,373	Jul 15, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	HANDLING WRITES TO A MEMORY INCLUDING ASYMMETRIC AND SYMMETRIC COMPO	US	Issued	13/608,937	Sep 10, 2012	8,639,910	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MEMORY MIGRATION IN HYBRID MAIN MEMORY	US	Issued	14/047,603	Oct 7, 2013	9,262,333	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATING DATA FROM SYMMETRIC AND ASYMMETRIC MEMORY	US	Issued	14/047,627	Oct 7, 2013	9,223,719	Dec 29, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SEAMLESS APPLICATION ACCESS TO HYBRID MAIN MEMORY	US	Issued	14/330,930	Jul 14, 2014	9,262,334	Feb 16, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MEMORY MIGRATION IN HYBRID MAIN MEMORY	US	Issued	14/990,314	Jan 7, 2016	9,672,158	Jun 6, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SEAMLESS APPLICATION ACCESS TO HYBRID MAIN MEMORY	US	Issued	14/989,386	Jan 6, 2016	9,836,409	Dec 5, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MEMORY MIGRATION IN HYBRID MAIN MEMORY	US	Issued	11/935,224	Nov 5, 2007	7,774,556	Aug 10, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MEMORY MIGRATION IN HYBRID MAIN MEMORY	US	Issued	12/853,135	Aug 9, 2010	8,156,288	Apr 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATING DATA FROM SYMMETRIC AND ASYMMETRIC MEMORY	US	Issued	12/899,709	Oct 7, 2010	8,156,302	Apr 10, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SEAMLESS APPLICATION ACCESS TO HYBRID MAIN MEMORY	US	Issued	13/048,012	Mar 15, 2011	8,205,061	Jun 19, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC MEMORY MIGRATION IN HYBRID MAIN MEMORY	US	Issued	13/443,086	Apr 10, 2012	8,555,002	Oct 8, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND APPARATUS WITH A MEMORY CONTROLLER CONFIGURED TO CONTROL A	US	Issued	12/831,233	Jul 6, 2010	8,370,547	Feb 5, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CHANNEL CONNECTED NON-VOLATILE MEMORY	US	Issued	14/475,398	Sep 2, 2014	9,626,290	Apr 18, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Programmable heterogeneous memory controllers for main memory with different me	US	Issued	11/864,860	Sep 28, 2007	8,074,022	Dec 6, 2011
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSLATING MEMORY MODULES FOR MAIN MEMORY	US	Issued	13/311,534	Dec 5, 2011	8,463,993	Jun 11, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS OF COMMUNICATING TO DIFFERENT TYPES OF MEMORY MODULES IN A ME	US	Issued	14/016,202	Sep 2, 2013	9,767,867	Sep 19, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND APPARATUS FOR MAIN MEMORY WITH NON-VOLATILE TYPE MEMORY M	US	Issued	11/848,013	Aug 30, 2007	7,761,624	Jul 20, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS WITH A MEMORY CONTROLLER CONFIGURED TO CONTROL ACCESS TO RA	US	Issued	15/489,282	Apr 17, 2017	10,191,842	Jan 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MAIN MEMORY WITH NON-VOLATILE TYPE MEMORY MODULES, AND R	US	Issued	11/848,040	Aug 30, 2007	7,761,625	Jul 20, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND APPARATUS FOR MAIN MEMORY	US	Issued	12/831,206	Jul 6, 2010	8,364,867	Jan 29, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR MAIN MEMORY WITH NON-VOLATILE TYPE MEMORY MODULES	US	Issued	12/832,409	Jul 8, 2010	8,380,898	Feb 19, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	READ WRITEABLE RANDOMLY ACCESSIBLE NON-VOLATILE MEMORY MODULES	US	Issued	14/499,211	Sep 28, 2014	9,984,012	May 29, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS OF DUAL INLINE MEMORY MODULES FOR FLASH MEMORY	US	Issued	11/876,479	Oct 22, 2007	8,189,328	May 29, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS OF FLASH DUAL INLINE MEMORY MODULES WITH FLASH MEMORY	US	Issued	13/457,170	Apr 26, 2012	8,881,389	Nov 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-CHIP PACKAGED FLASH MEMORY/SUPPORT APPLICATION SPECIFIC INTEGRATED	US	Issued	14/016,235	Sep 3, 2013	9,318,156	Apr 19, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH DUAL INLINE MEMORY MODULES WITH MULTIPLEXING SUPPORT CIRCUITS	US	Issued	14/016,250	Sep 3, 2013	9,336,835	May 10, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	FRONT/BACK CONTROL OF INTEGRATED CIRCUITS FOR FLASH DUAL INLINE MEMORY M	US	Issued	15/133,217	Apr 19, 2016	9,905,303	Feb 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING MEMORY SYSTEMS CONTAINING COMPONENTS WITH ASYMMETRIC CHAR	US	Issued	13/441,663	Apr 6, 2012	8,407,439	Mar 26, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING MEMORY SYSTEMS CONTAINING COMPONENTS WITH ASYMMETRIC CHAR	US	Issued	13/850,100	Mar 25, 2013	9,514,038	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING MEMORY SYSTEMS CONTAINING COMPONENTS WITH ASYMMETRIC CHAR	US	Issued	13/493,766	Jun 11, 2012	8,639,901	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributing Metadata Across Multiple Different Disruption Regions Within an Asymme	US	Issued	12/335,499	Dec 15, 2008	9,727,452	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	USING NON-VOLATILE MEMORY RESOURCES TO ENABLE A VIRTUAL BUFFER POOL FOR	US	Issued	12/505,386	Jul 17, 2009	8,176,233	May 8, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	USING NON-VOLATILE MEMORY RESOURCES TO ENABLE A VIRTUAL BUFFER POOL FOR	US	Issued	13/465,790	May 7, 2012	8,478,931	Jul 2, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	USING NON-VOLATILE MEMORY RESOURCES TO ENABLE A VIRTUAL BUFFER POOL FOR	US	Issued	13/932,534	Jul 1, 2013	9,436,597	Sep 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY MODULES FOR TWO-DIMENSIONAL MAIN MEMORY	US	Issued	12/369,725	Feb 11, 2009	8,806,116	Aug 12, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems for two-dimensional main memory including memory modules with read-writ	US	Issued	12/369,728	Feb 11, 2009	8,856,464	Oct 7, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR TWO-DIMENSIONAL MAIN MEMORY	US	Issued	12/369,733	Feb 11, 2009	9,251,899	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods for accessing memory in a two-dimensional main memory having a plurality of	US	Issued	14/016,218	Sep 2, 2013	9,251,061	Feb 2, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-CHIP PACKAGED INTEGRATED CIRCUIT WITH FLASH MEMORY AND SLAVE MEMO	US	Issued	14/016,224	Sep 3, 2013	9,093,150	Jul 28, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY MODULES WITH MULTI-CHIP PACKAGED INTEGRATED CIRCUITS HAVING FLAS	US	Issued	14/810,346	Jul 27, 2015	9,536,609	Jan 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	RANDOM READ AND READ/WRITE BLOCK ACCESSIBLE MEMORY	US	Issued	12/490,914	Jun 24, 2009	8,417,873	Apr 9, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR A RANDOM READ AND READ/WRITE BLOCK ACCESSIBLE MEMORY	US	Issued	12/490,930	Jun 24, 2009	8,745,314	Jun 3, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	NETWORK COMPUTING SYSTEMS HAVING SHARED MEMORY CLOUDS WITH ADDRESSE	US	Issued	12/490,941	Jun 24, 2009	8,521,967	Aug 27, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS OF MANAGING POWER IN NETWORK COMPUTER SYSTEMS	US	Issued	13/952,567	Jul 26, 2013	9,513,695	Dec 6, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	NETWORK COMPUTER SYSTEMS WITH POWER MANAGEMENT	US	Issued	15/092,492	Apr 6, 2016	10,156,890	Dec 18, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR EARLY WRITE TERMINATION INTO NON-VOLATILE MEMORY WITH META	US	Issued	13/163,493	Jun 17, 2011	8,429,318	Apr 23, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR EARLY WRITE TERMINATION WITH NON-VOLATILE MEMORY	US	Issued	13/745,804	Jan 20, 2013	8,850,091	Sep 30, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR EARLY WRITE TERMINATION WITH NON-VOLATILE MEMORY	US	Issued	14/500,980	Sep 29, 2014	9,727,112	Aug 8, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY APPARATUS AND METHODS THEREOF FOR PREVENTING READ ERRORS ON W	US	Issued	14/177,216	Feb 10, 2014	9,582,417	Feb 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SHUTDOWNS AND DATA RECOVERY TO AVOID READ ERRORS WEAK PAGES IN A NON-V	US	Issued	14/177,219	Feb 10, 2014	9,921,896	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	READ AND WRITE PERFORMANCE WITH NON-VOLATILE MEMORY	US	Issued	14/613,345	Feb 3, 2015	9,213,637	Dec 15, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY SERVER WITH READ WRITEABLE NON-VOLATILE MEMORY	US	Issued	14/968,875	Dec 14, 2015	9,983,797	May 29, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	REPLACEABLE NON-VOLATILE MEMORY APPARATUS WITH A PLURALITY OF PLUGGABLE	US	Issued	13/163,544	Jun 17, 2011	8,706,932	Apr 22, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY APPARATUS FOR REPLACEABLE NON-VOLATILE MEMORY	US	Issued	13/163,561	Jun 17, 2011	8,639,863	Jan 28, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR UPGRADING, DIAGNOSING, AND MAINTAINING REPLACEABLE NON-VOL	US	Issued	13/163,571	Jun 17, 2011	8,650,343	Feb 11, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR DATA REDUNDANCY ACROSS REPLACEABLE NON-VOLATILE MEMORY ST	US	Issued	13/163,581	Jun 17, 2011	8,689,042	Apr 1, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS FOR SUSTAINED READ AND WRITE PERFORMANCE WITH NON-VOLATILE MEM	US	Issued	13/162,572	Jun 16, 2011	8,341,300	Dec 25, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY APPARATUS FOR EARLY WRITE TERMINATION AND POWER FAILURE	US	Issued	13/163,461	Jun 17, 2011	8,677,037	Mar 18, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR EARLY WRITE TERMINATION AND POWER FAILURE WITH NON-VOLATILE	US	Issued	13/163,481	Jun 17, 2011	8,516,172	Aug 20, 2013
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR DATA REDUNDANCY ACROSS THREE OR MORE STORAGE DEVICES	US	Issued	13/163,273	Jun 17, 2011	8,225,006	Jul 17, 2012
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO IMPROVE ENTERPRISE RELIABILITY THROUGH TRACKING I/O	US	Issued	13/841,026	Mar 15, 2013	9,842,660	Dec 12, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC RESTRIPIING IN NONVOLATILE MEMORY SYSTEMS	US	Issued	13/841,706	Mar 15, 2013	9,286,002	Jan 15, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC RESTRIPIING IN NONVOLATILE MEMORY SYSTEMS	US	Issued	15/067,284	Mar 11, 2016	9,811,285	Nov 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	SMALL BLOCK WRITE OPERATIONS IN NON-VOLATILE MEMORY SYSTEMS	US	Issued	13/842,940	Mar 15, 2013	8,996,796	Mar 31, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	SMALL BLOCK WRITE OPERATIONS IN NON-VOLATILE MEMORY SYSTEMS	US	Issued	14/667,804	Mar 15, 2015	9,304,908	Apr 5, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	SMALL BLOCK WRITE OPERATIONS IN NON-VOLATILE MEMORY SYSTEMS	US	Issued	15/076,742	Mar 22, 2016	9,898,196	Feb 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	13/838,699	Mar 15, 2013	10,073,626	Sep 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	13/927,740	Jun 26, 2013	9,323,663	Apr 26, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	13/927,871	Jun 26, 2013	9,164,801	Oct 20, 2015
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	14/852,844	Sep 14, 2015	9,477,595	Oct 25, 2016
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	15/077,282	Mar 22, 2016	9,588,698	Mar 7, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING THE WRITE PERFORMANCE OF AN ASYMMETRIC MEMORY SYSTEM	US	Issued	15/332,740	Oct 24, 2016	9,733,840	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING ASYMMETRIC MEMORY SYSTEM AS A CACHE DEVICE	US	Issued	14/808,380	Jul 24, 2015	10,049,055	Aug 14, 2018

WESTERN DIGITAL TECHNOLOGIES, INC.	SYNCHRONOUS MIRRORING IN NON-VOLATILE MEMORY SYSTEMS	US	Issued	14/851,120	Sep 11, 2015	9,734,027	Aug 15, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADAPTIVELY ESTIMATING SPINDLE MOTOR CURRENT	US	Issued	15/051,414	Feb 23, 2016	9,666,224	May 30, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/564,687	May 14, 2016	0811,391	Feb 27, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/629,700	Dec 14, 2017	D904,399	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A POLE AND A MAGNETIC SEPARA	US	Issued	15/199,793	Jun 30, 2016	9,576,598	Feb 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE FILTERING SENSOR SIGNAL TO OPTIMIZE SHOCK AND THERMAL	US	Issued	15/246,364	Aug 24, 2016	9,747,936	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR REDUCING CORROSION IN CAPPING LAYER OF MAGNET	US	Issued	15/198,364	Jun 30, 2016	9,940,956	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE STATE DETECTION ON POWER LOSS	US	Issued	15/184,936	Jun 16, 2016	9,923,562	Mar 20, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BOOSTING PRELASE BIAS WHILE OVER DATA SECTOR FOR HEAT	US	Issued	15/086,543	Mar 31, 2016	9,620,162	Apr 11, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ APPARATUS HAVING MULTIPLE READ SENSORS WITH REDUCED SENS	US	Issued	15/152,889	May 12, 2016	9,786,305	Oct 10, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PRELOADING OF DIRECTORY DATA IN DATA STORAGE DEVICES	US	Issued	15/098,853	Apr 14, 2016	10,346,044	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CONNECTION CABLE WITH VOLTAGE LEVEL INDICATOR	US	Issued	15/198,842	Jun 30, 2016	10,317,434	Jun 11, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITER HAVING POLE COUPLED WITH THE NPT	US	Issued	15/199,034	Jun 30, 2016	9,747,935	Aug 29, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	COLD STORAGE SERVER WITH HEAT DISSIPATION	US	Issued	15/875,983	Jan 19, 2018	10,383,257	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	COLD STORAGE SERVER WITH HEAT DISSIPATION	US	Issued	15/195,806	Jun 28, 2016	9,877,415	Jan 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH THERMAL GRADIENT HEATSINK FOR HEAT ASSISTED MAGNETIC RECORDING MECH	US	Issued	15/197,483	Jun 29, 2016	10,276,199	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A POLE HAVING AN ASPECT RATIO	US	Issued	15/652,629	Jul 18, 2017	10,115,416	Oct 30, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE APPARATUS HAVING A POLE HAVING AN ASPECT RATIO	US	Issued	15/097,182	Apr 12, 2016	9,721,591	Aug 21, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	FREE LAYER ONLY MAGNETIC READER THAT MAY HAVE A REDUCED SHIELD-TO-SHIELD	US	Issued	15/232,669	Aug 9, 2016	10,068,601	Sep 4, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	READ SENSOR HAVING AN INSULATING LAYER CAPABLE OF USE IN TWO-DIMENSIONAL	US	Issued	15/240,311	Aug 18, 2016	9,715,889	Jul 25, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITE APPARATUS HAVING AN INVERSE TAPER	US	Issued	15/631,299	Jun 23, 2017	9,978,410	May 22, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING WRITE APPARATUS HAVING AN INVERSE TAPER	US	Issued	15/216,639	Jul 21, 2016	9,697,854	Jul 4, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCODING AND INTERLEAVING CODEWORDS TO IMPROVE TRE	US	Issued	16/110,493	Aug 23, 2018	10,554,221	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCODING AND INTERLEAVING CODEWORDS TO IMPROVE TRE	US	Issued	15/154,165	May 13, 2016	10,063,257	Aug 28, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCODING AND INTERLEAVING CODEWORDS TO IMPROVE TRE	US	Issued	16/105,689	Aug 20, 2018	10,554,225	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCODING AND INTERLEAVING CODEWORDS TO IMPROVE TRE	US	Issued	15/157,289	May 17, 2016	10,056,920	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	VALIDATING FIRMWARE FOR DATA STORAGE DEVICES	US	Issued	15/394,700	Dec 29, 2016	10,346,071	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/564,690	May 14, 2016	0814,460	Apr 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Issued	29/629,706	Dec 14, 2017	D902,924	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SHOCK SENSOR RESONANCE DETECTION FOR NOTCH FILTER TUNING	US	Issued	15/354,867	Nov 17, 2016	9,832,050	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITER HAVING IMPROVED PERFORMANCE	US	Issued	15/245,850	Aug 24, 2016	9,779,765	Oct 3, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM WITH MULTIMEDIA ASSETS	US	Issued	15/282,837	Sep 30, 2016	10,649,655	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE LATENCY REDUCTION	US	Issued	15/256,522	Sep 3, 2016	10,528,265	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCLOSURE	US	Issued	15/252,501	Aug 31, 2016	10,261,553	Apr 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT TORQUE INDUCED MAGNETIZATION SWITCHING IN A MAGNETIC RECORDI	US	Issued	16/560,844	Sep 4, 2019	10,650,847	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	READ TAIL LATENCY REDUCTION	US	Issued	15/373,450	Dec 8, 2016	10,374,634	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	READ TAIL LATENCY REDUCTION	US	Issued	15/373,456	Dec 8, 2016	10,372,344	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Cap Layers For Heat-Assisted Magnetic Recording Media	US	Issued	15/389,432	Dec 22, 2016	9,886,977	Feb 6, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ANALOG-TO-DIGITAL CONVERSION CIRCUITRY WITH REAL-TIME ADJUSTED GAIN AND R	US	Issued	15/390,885	Dec 27, 2016	9,793,912	Oct 17, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	WORKLOAD BALANCING FOR MULTIPLE ACTUATORS	US	Issued	15/386,702	Dec 21, 2016	9,830,939	Nov 28, 2017
WESTERN DIGITAL TECHNOLOGIES, INC.	Timestamp Suppression	US	Issued	15/811,123	Nov 13, 2017	10,387,226	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTIVITY BASED DEVICE INITIATED STATE TRANSITIONS	US	Issued	15/800,148	Nov 1, 2017	10,489,072	Nov 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTOLIC NEURAL NETWORK ENGINE CAPABLE OF BACKPROPAGATION	US	Issued	15/981,664	May 16, 2018	11,494,620	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CONVOLUTION ENGINES FOR SYSTOLIC NEURAL NETWORK PROCESSOR	US	Issued	15/981,711	May 16, 2018	11,164,072	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE PERFORMANCE PARAMETERS FOR SSDS	US	Issued	16/827,585	Mar 23, 2020	11,010,074	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE PERFORMANCE PARAMETERS FOR SSDS	US	Issued	15/920,422	Mar 13, 2018	10,642,517	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data storage device and method for memory operation and iterative polling	US	Issued	16/724,078	Dec 20, 2019	11,068,169	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data storage device and method for memory operation and iterative polling	US	Issued	17/343,583	Jun 9, 2021	11,500,543	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Advanced Flash Scan Algorithm	US	Issued	15/959,773	Apr 23, 2018	10,528,269	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Code Rate Switching Mechanism for Data Storage System	US	Issued	16/826,063	Mar 20, 2020	11,190,218	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CODE RATE SWITCHING MECHANISM FOR FLASH MEMORY	US	Issued	15/868,868	Jan 11, 2018	10,644,727	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR ADJUSTING READ LEVELS IN A STORAGE DEVICE BASED ON	US	Issued	15/849,572	Dec 20, 2017	10,580,485	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE BASED MEMORY BLOCK USAGE	US	Issued	15/793,387	Oct 25, 2017	10,515,008	Dec 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC DATA BACKUP AND CHARGING OF MOBILE DEVICES	US	Issued	16/731,672	Dec 31, 2019	11,153,423	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY STATION FOR AUTOMATICALLY BACKING UP DATA AND CHARGING MOBILE D	US	Issued	15/801,250	Nov 1, 2017	10,554,796	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple-Stage Data Lifetime Management for Storage Devices	US	Issued	15/902,988	Feb 22, 2018	10,642,525	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR RECORDING MEDIA WITH CARBON GRAIN ISOLATION INITIATION LAYE	US	Issued	15/789,832	Oct 20, 2017	10,706,883	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FUNCTION TRACKING FOR SOURCE CODE FILES	US	Issued	15/785,073	Oct 16, 2017	10,528,342	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICE BASED ANTI-MALWARE	US	Issued	15/794,709	Oct 26, 2017	10,733,290	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STREAMED PROGRAM COMMANDS WITH PERIODIC GARBAGE COLLECTION	US	Issued	15/829,870	Dec 1, 2017	10,635,343	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ERASE FAIL BIT CRITERIA	US	Issued	15/793,092	Oct 25, 2017	10,482,986	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	COMBINED XOR BUFFER MEMORY FOR MULTIPLE OPEN BLOCKS OF NON-VOLATILE ME	US	Issued	15/787,700	Oct 18, 2017	10,496,472	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ADAPTIVE WEAR LEVELING	US	Issued	15/838,201	Dec 11, 2017	10,409,716	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH DYNAMIC WEAR LEVELING GROUP CONFIGURATION	US	Issued	15/851,092	Dec 21, 2017	11,056,206	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH REGIONAL AND INTER-REGION WEAR LEVELING	US	Issued	15/730,511	Oct 11, 2017	10,656,844	May 19, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN NON-VOLATILE STORAGE	US	Issued	15/797,672	Oct 30, 2017	10,228,878	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING REFRESH OPERATIONS FOR A MEMORY DEVICE	US	Issued	15/811,661	Nov 13, 2017	10,566,048	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD WITH PROTECTIVE MULT	US	Issued	15/678,907	Aug 16, 2017	10,083,713	Sep 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Qos Over NVMe Virtualization Platform Using Adaptive Comm	US	Issued	15/810,632	Nov 13, 2017	10,564,857	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONDITIONING WRITE ABORT BASED ON SECONDARY READ SIG	US	Issued	15/689,289	Aug 29, 2017	9,940,967	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Method of using TDMR hardware to reduce or eliminate the process of learning and s	US	Issued	15/690,858	Aug 30, 2017	9,972,349	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIFORM PERFORMANCE MONITOR FOR A DATA STORAGE DEVICE AND METHOD OF C	US	Issued	15/786,763	Oct 18, 2017	10,528,506	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING EXTENDED SERVO BURST FIELD OVER PART OF A	US	Issued	15/691,536	Aug 30, 2017	10,109,301	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	USING FILE SYSTEM EXTENDED ATTRIBUTES TO RECOVER DATABASES IN HIERARCHICAL	US	Issued	15/690,114	Aug 29, 2017	10,545,829	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING (MAMR) WRITE HEAD WITH COMPENS	US	Issued	16/276,466	Feb 14, 2019	10,636,441	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROWAVE-ASSISTED MAGNETIC RECORDING (MAMR) WRITE HEAD WITH COMPENS	US	Issued	16/835,198	Mar 30, 2020	10,923,145	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLATILITY MANAGEMENT FOR NON-VOLATILE MEMORY DEVICE	US	Issued	16/690,528	Nov 21, 2019	10,908,847	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLATILITY MANAGEMENT FOR NON-VOLATILE MEMORY DEVICE	US	Issued	15/833,837	Dec 6, 2017	10,606,513	Mar 31, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR ATTACHING PRINTED CIRCUIT BOARD TO PALLET	US	Issued	15/823,503	Nov 27, 2017	10,455,719	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RESTRICTING ACCESS TO A DATA STORAGE SYSTEM ON A LOCAL NETWORK	US	Issued	16/787,859	Feb 11, 2020	11,122,122	Sep 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CLOUD-BASED MANAGEMENT OF ACCESS TO A DATA STORAGE SYSTEM ON A LOCAL N	US	Issued	15/690,068	Aug 29, 2017	10,560,528	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FILE CONSISTENCY IN SHARED STORAGE USING PARTIAL-EDIT FILES	US	Issued	15/689,427	Aug 29, 2017	10,831,719	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOTE APPLICATION CONFIGURATION ON NETWORK-ATTACHED STORAGE	US	Issued	15/689,924	Aug 29, 2017	10,735,514	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED ERASE RETRY OF NON-VOLATILE STORAGE DEVICE	US	Issued	15/828,421	Nov 30, 2017	10,643,710	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ENCODER/DECODER	US	Issued	15/797,722	Oct 30, 2017	10,484,019	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage of Neural Networks	US	Issued	15/839,521	Dec 12, 2017	10,552,251	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH DYNAMIC WRITE ABORT DETECTION AND RECOVERY	US	Issued	15/730,454	Oct 11, 2017	10,452,471	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DEVICE WITH SECURE READ	US	Issued	15/676,708	Aug 7, 2017	10,521,617	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Flexible Management of Resources in an NVMe Virtualization	US	Issued	15/805,619	Nov 7, 2017	10,642,498	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BACKUP	US	Issued	15/914,336	Mar 7, 2018	10,521,148	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE LAYER IN SIDE GAP FOR IMPROVED FIELD AND CROSS TRACK FIELD GRAD	US	Issued	16/911,083	Jun 24, 2020	10,997,990	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE LAYER IN SIDE GAP FOR IMPROVED FIELD AND CROSS TRACK FIELD GRAD	US	Issued	16/276,480	Feb 14, 2019	10,706,877	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCATION-BASED AUTHENTICATION AND MONITORING FOR DATA STORAGE DEVICES	US	Issued	15/849,652	Dec 20, 2017	10,846,418	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED ERASURE CODING FOR DATA STORAGE AND TRANSMISSION	US	Issued	16/922,900	Jul 7, 2020	11,178,226	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED ERASURE CODING FOR DATA STORAGE AND TRANSMISSION	US	Issued	15/847,761	Dec 19, 2017	10,742,736	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH HEAT-SINK LAYER HAVI	US	Issued	15/694,276	Sep 1, 2017	10,109,309	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH BACKING UP OF PROGRAMMED DATA	US	Issued	15/798,009	Oct 30, 2017	10,153,046	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR WRITER WITH LOW RESISTANCE MAMR STACK	US	Issued	16/932,468	Jul 17, 2020	11,049,514	Jun 29, 2021

WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR WRITER WITH LOW RESISTANCE MAMR STACK	US	Issued	16/276,500	Feb 14, 2019	10,741,202	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC HYBRID SHINGLED MAGNETIC RECORDING	US	Issued	16/024,211	Jun 29, 2018	10,381,040	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLATILITY MANAGEMENT FOR MEMORY DEVICE	US	Issued	15/922,007	Mar 15, 2018	11,579,770	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Constraint Dynamic Resource Manager	US	Issued	15/847,389	Dec 19, 2017	11,030,007	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	COMBINED DATA AND CONTROL FOR MULTI-DIE FLASH	US	Issued	16/053,695	Aug 2, 2018	11,003,387	May 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	COMBINED CONTROL FOR MULTI-DIE FLASH	US	Issued	15/824,658	Nov 28, 2017	10,235,309	Mar 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD OF DETECTING POTENTIAL SECURITY VIOLATIONS OF DIRECT	US	Issued	16/913,825	Jun 26, 2020	11,354,454	Jun 7, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD OF DETECTING POTENTIAL SECURITY VIOLATIONS OF DIRECT	US	Issued	15/847,662	Dec 19, 2017	11,017,126	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT HOST ACCESS TO STORAGE DEVICE MEMORY SPACE	US	Issued	17/142,027	Jan 5, 2021	11,681,634	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT HOST ACCESS TO STORAGE DEVICE MEMORY SPACE	US	Issued	15/847,671	Dec 19, 2017	10,929,309	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Task Scheduling Through an Operating System Agnostic System Abstraction Layer from	US	Issued	15/807,568	Nov 8, 2017	10,620,999	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE PROTECTION UNIT	US	Issued	15/722,616	Oct 2, 2017	10,712,976	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM THAT RECLAIMS BAD BLOCKS	US	Issued	16/254,334	Jan 22, 2019	10,346,266	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM THAT RECLAIMS BAD BLOCKS	US	Issued	15/798,029	Oct 30, 2017	10,223,216	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY AND METHOD FOR POWER EFFICIENT READ OR VERIFY USING	US	Issued	15/838,863	Dec 12, 2017	10,460,814	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CLOCK RETIMING CIRCUIT	US	Issued	15/824,026	Nov 28, 2017	10,528,076	Jan 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC DISTRIBUTED POWER CONTROL CIRCUITS	US	Issued	15/832,528	Dec 5, 2017	10,228,746	Mar 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MEMORY COMPACTION	US	Issued	15/913,914	Mar 6, 2018	10,331,555	Jun 25, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Management of Intermediate Storage	US	Issued	15/816,204	Nov 17, 2017	10,795,827	Oct 6, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING TO A CORRECTABLE AMOUNT OF ERRORS	US	Issued	15/874,839	Jan 18, 2018	10,482,969	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL PROGRAM OPERATION OF MEMORY WORDLINE	US	Issued	15/851,277	Dec 21, 2017	10,580,495	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE POWER BALANCING FOR MEMORY DEVICE OPERATIONS	US	Issued	15/883,071	Jan 29, 2018	10,372,373	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Independent Shunting of Data and Servo Heads to Allow a Single Sensor Deposition on	US	Issued	15/817,593	Nov 20, 2017	10,199,057	Feb 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSORS WITH EFFECTIVELY SHAPED SIDE SHIELDS	US	Issued	16/506,835	Jul 9, 2019	10,839,845	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSORS WITH EFFECTIVELY SHAPED SIDE SHIELDS	US	Issued	15/870,779	Jan 12, 2018	10,381,032	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DYNAMICALLY GENERATING EXTENDED REDUNDANCY OVER IN	US	Issued	15/816,165	Nov 17, 2017	10,373,645	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING DIFFERENCE BETWEEN READ SIGNALS WHEN READ	US	Issued	15/728,749	Oct 10, 2017	10,199,054	Feb 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Utilization of Optimized Ordered Metadata Structure for Container-Based Large-Scale	US	Issued	15/944,760	Apr 3, 2018	10,719,497	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE WITH ADAPTIVE COMMAND PREDICTION	US	Issued	15/802,257	Nov 2, 2017	10,394,706	Aug 27, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM FOR IMPROVING DATA THROUGHPUT AND DECODE CAPABILIT	US	Issued	16/905,796	Jun 18, 2020	11,210,164	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM FOR IMPROVING DATA THROUGHPUT AND DECODE CAPABILIT	US	Issued	17/529,189	Nov 17, 2021	11,593,198	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEM FOR IMPROVING DATA THROUGHPUT AND DECODE CAPABILIT	US	Issued	15/980,627	May 15, 2018	10,725,857	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System Involving Degradation of Non-Volatile Memory Based on Write Co	US	Issued	16/928,737	Jul 14, 2020	11,538,539	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR A STORAGE (SSD) DRIVE-LEVEL FAILURE AND HEALTH PRED	US	Issued	15/979,348	May 14, 2018	10,726,930	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOSSLESS SYNCHRONIZATION SOFTWARE RESET	US	Issued	15/790,368	Oct 23, 2017	10,445,181	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING FLASH MEMORY READ OPERATIONS	US	Issued	15/851,706	Dec 21, 2017	10,459,844	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING HOST WRITE TRANSACTIONS USING A NON-VOLATILE MEMORY EXPRESS	US	Issued	17/318,259	May 12, 2021	11,550,477	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCESSING NON-VOLATILE MEMORY EXPRESS CONTROLLER MEMORY MANAGER	US	Issued	16/597,715	Oct 9, 2019	11,042,302	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Accessing Non-Volatile Memory Express Controller Memory Manager	US	Issued	15/846,787	Dec 19, 2017	10,466,906	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING LOGICAL BASED ADDRESSING FOR LATENCY REDUCTION	US	Issued	16/597,709	Oct 9, 2019	10,949,096	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD USING LOGICAL BASED ADDRESSING FOR LATENCY REDUCTION	US	Issued	15/845,005	Dec 18, 2017	10,466,911	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Arrangement Partitionable Memory And Method To Accomplish Partitio	US	Issued	15/833,338	Dec 6, 2017	10,838,644	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES AND CONNECTORS FOR SAME	US	Issued	16/282,068	Feb 21, 2019	10,847,909	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Processing Offload Using In-Storage Code Execution	US	Issued	16/739,064	Jan 9, 2020	11,275,615	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Processing Offload Using In-Storage Code Execution	US	Issued	15/832,728	Dec 5, 2017	10,565,014	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR TIME STAMP SYNCHRONIZATION	US	Issued	16/012,236	Jun 19, 2018	10,719,100	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Time Stamp Synchronization	US	Issued	15/820,147	Nov 21, 2017	10,727,965	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED USB CONNECTOR AND MEMORY DEVICE	US	Issued	15/852,525	Dec 22, 2017	10,485,125	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RAID ARRAY REBUILD ASSIST FROM EXTERNAL ARRAY COPY	US	Issued	15/843,486	Dec 15, 2017	10,649,867	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-ASSISTED MAGNETIC RECORDING WRITE HEAD WITH IMPROVED WRITE GAP	US	Issued	16/277,953	Feb 15, 2019	10,679,650	Jun 9, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD WITH SELECTED WRITE GAP CURRENT DIRECTION	US	Issued	16/277,947	Feb 15, 2019	10,699,734	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD WITH SELECTED WRITE GAP CURRENT DIRECTION	US	Issued	16/911,143	Jun 24, 2020	10,957,348	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VARIABLE LENGTH CLDPC ENCODER AND METHOD OF OPERATION IN AN AUTONOMOUS	US	Issued	15/817,442	Nov 20, 2017	10,372,539	Aug 6, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT BALANCING CIRCUIT FOR MULTIPLE SUPPLY VOLTAGE SYSTEMS	US	Issued	15/723,558	Oct 3, 2017	10,013,032	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	METAL-INSULATOR-METAL NEAR-FIELD TRANSDUCER FOR HEAT-ASSISTED MAGNETIC R	US	Issued	15/853,768	Dec 23, 2017	10,360,939	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ARCHITECTURE FOR METAL-INSULATOR-METAL NEAR-FIELD TRANSDUCER FOR HEAT-AS	US	Issued	15/853,770	Dec 23, 2017	10,249,336	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER GAS-BEARING SURFACE DESIGNS WITH LEADING-EDGE POCKETS	US	Issued	16/830,612	Mar 26, 2020	10,832,718	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Method of Making a High Density Slider Clamp Fixture	US	Issued	16/875,078	May 15, 2020	11,307,028	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	High Density Slider Clamp Fixture	US	Issued	15/852,068	Dec 22, 2017	10,655,959	May 19, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD FIRMWARE DOWNLOAD DUAL BOOT	US	Issued	16/136,139	Sep 19, 2018	10,761,834	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HARDWARE ASSISTED FIRMWARE DOWNLOAD SYNCING	US	Issued	16/057,564	Aug 7, 2018	10,922,070	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER SAFE OFFLINE DOWNLOAD	US	Issued	17/228,016	Apr 12, 2021	11,226,811	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER SAFE OFFLINE DOWNLOAD	US	Issued	16/057,571	Aug 7, 2018	10,990,380	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-FIELD ADAPTIVE DRIVE RECOVERY	US	Issued	16/136,152	Sep 19, 2018	10,761,937	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEBUG DATA RECOVERY AFTER PFI EVENT	US	Issued	16/049,767	Jul 30, 2018	10,831,657	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST BUS ADAPTOR WITH CONFIGURABLE INTERFACE	US	Issued	15/873,395	Jan 17, 2018	10,534,738	Jan 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Modularized Multi-Purpose Storage System	US	Issued	16/921,033	Jul 6, 2020	11,163,445	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Modularized Multi-Purpose Storage System	US	Issued	15/890,265	Feb 6, 2018	10,860,211	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Handling of Unaligned Sequential Writes	US	Issued	15/811,371	Nov 13, 2017	10,430,330	Oct 1, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TASK READINESS FOR QUEUED STORAGE TASKS	US	Issued	15/824,046	Nov 28, 2017	10,303,384	May 28, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE DIGITAL (SD) TO NVMe BUFFER MANAGER	US	Issued	15/841,807	Dec 14, 2017	10,846,017	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Divider With Captive Shock Mounts for Storage Enclosure	US	Issued	15/818,119	Nov 20, 2017	10,741,222	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ALTERNATELY SHAPED BACKPLANE FOR RECEIVING ELECTRICAL COMPONENTS	US	Issued	15/818,049	Nov 20, 2017	10,546,617	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	READ THRESHOLD ADJUSTMENT USING REFERENCE DATA	US	Issued	15/851,537	Dec 21, 2017	10,629,247	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH READ CALIBRATION	US	Issued	15/822,798	Nov 27, 2017	10,418,097	Sep 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SRAM BIT-FLIP PROTECTION WITH REDUCED OVERHEAD	US	Issued	15/899,948	Feb 20, 2018	10,409,676	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SEED SCRAMBLING	US	Issued	15/962,766	Apr 25, 2018	10,698,839	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEED GENERATION	US	Issued	15/839,668	Dec 12, 2017	10,635,400	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE-PORT MEMORY WITH OPPORTUNISTIC WRITES	US	Issued	15/824,038	Nov 28, 2017	10,553,285	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA AVAILABILITY DURING MEMORY INACCESSIBILITY	US	Issued	15/885,770	Jan 31, 2018	10,635,327	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITIZING ADAPTIVE RETRY THRESHOLD ADJUSTMENT	US	Issued	16/140,192	Sep 24, 2018	10,740,178	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY OF CROSS-DIE LOGICAL PAGES IN A SOLID STATE DEVICE	US	Issued	16/138,476	Sep 21, 2018	10,732,899	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTOLIC NEURAL NETWORK PROCESSOR WITH FEEDBACK CONTROL	US	Issued	15/981,719	May 16, 2018	11,164,073	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-CORE SYSTOLIC PROCESSOR SYSTEM FOR NEURAL NETWORK PROCESSING	US	Issued	15/981,735	May 16, 2018	11,164,074	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTOLIC NEURAL NETWORK ENGINE CAPABLE OF FORWARD PROPAGATION	US	Issued	15/981,624	May 16, 2018	11,551,064	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH CURRENT GUIDING LAYER	US	Issued	16/277,830	Feb 15, 2019	10,839,828	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Offloaded Disaggregated Storage Architecture	US	Issued	15/936,319	Mar 26, 2018	10,860,508	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage System Scale-Out with Local Address Remapping	US	Issued	15/938,359	Mar 28, 2018	11,054,991	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING BALANCED CURRENT DRIVE TO UNLOAD MULTIPLE	US	Issued	15/808,719	Nov 9, 2017	9,997,182	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING SMART BRAKING TO UNLOAD MULTIPLE VOICE CO	US	Issued	15/797,476	Oct 30, 2017	9,972,348	May 15, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING DELAYED BRAKING TO UNLOAD MULTIPLE VOICE CO	US	Issued	15/805,299	Nov 7, 2017	9,940,958	Apr 10, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR WRITE HEAD WITH THERMAL DISSIPATION CONDUCTIVE GUIDE	US	Issued	16/276,508	Feb 14, 2019	10,636,439	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR WRITE HEAD WITH THERMAL DISSIPATION CONDUCTIVE GUIDE	US	Issued	16/828,901	Mar 24, 2020	10,762,918	Sep 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Power Shaping And Peak Power Reduction By Data Transfer Throttling	US	Issued	17/179,107	Feb 18, 2021	11,468,955	Oct 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Power shaping and peak power reduction by data transfer throttling	US	Issued	16/452,468	Dec 15, 2019	10,964,401	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Power shaping and peak power reduction by data transfer throttling	US	Issued	15/838,502	Dec 25, 2017	10,366,766	Jul 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR IMPLEMENTING A LOGICAL TO PHYSICAL ADDRESS MA	US	Issued	15/893,392	Feb 9, 2018	10,572,391	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Modular and Scalable PCIe Controller Architecture	US	Issued	15/884,109	Jan 30, 2018	10,706,001	Jul 7, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR SELECTING POWER STATES IN STORAGE DEVICES	US	Issued	15/878,735	Jan 24, 2018	10,564,868	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING UPSAMPLING TO COMPENSATE FOR HIGH FREQU	US	Issued	15/817,624	Nov 20, 2017	9,997,185	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Parity Generation Offload Using Peer-to-Peer Data Transfers in Data Storage System	US	Issued	15/936,325	Mar 26, 2018	10,725,859	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Drive Rebuild with Parity Generation Offload Using Peer-to-Peer Data Tra	US	Issued	16/863,503	Apr 30, 2020	11,243,837	Feb 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Drive Rebuild with Parity Generation Offload Using Peer-to-Peer Data Tra	US	Issued	15/936,327	Mar 26, 2018	10,761,929	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System Fabric with Multichannel Compute Complex	US	Issued	16/054,980	Aug 3, 2018	10,592,144	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SEEKING MULTIPLE VOICE COIL MOTORS USING A LIMITED CUR	US	Issued	15/843,076	Dec 15, 2017	10,014,018	Jul 3, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCRYPTION DETECTION AND BACKUP MANAGEMENT	US	Issued	15/926,685	Mar 20, 2018	11,023,327	Jun 1, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LOG-BASED STORAGE FOR DIFFERENT DATA TYPES IN NON-VOLATILE MEMORY	US	Issued	15/933,354	Mar 22, 2018	10,649,657	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Program Verify Adaptation for Memory Devices	US	Issued	16/903,282	Jun 16, 2020	11,194,644	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Program Verify Adaptation for Non-Volatile Memory	US	Issued	17/504,440	Oct 18, 2021	11,550,648	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAM VERIFY ADAPTATION FOR FLASH MEMORY	US	Issued	15/951,097	Apr 11, 2018	10,705,900	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MULTI-MODE SENSING CIRCUITRY FOR MULTIPLE	US	Issued	15/825,342	Nov 29, 2017	10,056,098	Aug 21, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXURE AND ACTUATOR SYSTEM FOR MAGNETIC RECORDING DEVICE	US	Issued	15/908,338	Feb 28, 2018	10,468,057	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH RAPID OVERLAY ACCESS	US	Issued	15/876,785	Jan 22, 2018	10,558,576	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CHARACTERIZATION FOR CONTROL OF NON-VOLATILE MEMORY	US	Issued	15/913,898	Mar 6, 2018	10,592,141	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH HOST SIDE COMMAND INJECTION	US	Issued	15/912,944	Mar 3, 2018	10,642,536	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Layer Encoding for Distributed Container-Based Storage of Smaller Data Objects	US	Issued	15/944,751	Apr 3, 2018	10,817,193	Oct 27, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-PERPENDICULAR-TO-THE-PLANE (CPP) MAGNETORESISTIVE (MR) SENSOR WITH	US	Issued	15/820,229	Nov 21, 2017	10,249,329	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR-BEARING ARM INTERCONNECTION FOR MAGNETIC STORAGE DEVICE	US	Issued	15/888,449	Feb 5, 2018	10,460,754	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH FAST PROGRAM MODE FOR HIGH DEFINITION VIDEO RECORDING AND HIGH RES	US	Issued	15/890,118	Feb 6, 2018	10,747,659	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART DEVICE SECURITY COMPROMISED WARNING APPARATUS AND METHOD	US	Issued	15/860,622	Jan 2, 2018	11,086,989	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	REUSING A CELL BLOCK FOR HYBRID DUAL WRITE	US	Issued	15/885,760	Jan 31, 2018	11,043,271	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CELL BLOCK ALLOCATION FOR HYBRID DUAL WRITE	US	Issued	15/885,765	Jan 31, 2018	11,037,627	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL GROUPING FOR HYBRID DUAL WRITE	US	Issued	15/885,767	Jan 31, 2018	10,732,838	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TASK TAIL ABOARD FOR QUEUED STORAGE TASKS	US	Issued	15/878,114	Jan 23, 2018	10,635,350	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR PROGRAMMING FLASH BASED STORAGE USING SEGME	US	Issued	15/897,923	Feb 15, 2018	10,509,598	Dec 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PROBABILISTIC NEURON CIRCUITS	US	Issued	15/910,606	Mar 2, 2018	10,790,016	Sep 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH DEBUG NAMESPACE	US	Issued	15/901,054	Feb 21, 2018	10,580,512	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-DIE IMPEDANCE CALIBRATION	US	Issued	15/934,379	Mar 23, 2018	10,224,928	Mar 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTING ADDRESSES IN NON-VOLATILE STORAGE	US	Issued	15/901,432	Feb 21, 2018	10,579,538	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK REUSE FOR MEMORY OPERATIONS	US	Issued	15/959,852	Apr 23, 2018	10,698,621	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BOUNDARY WORD LINE VOLTAGE SHIFT	US	Issued	15/941,747	Mar 30, 2018	10,559,366	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT MEASUREMENT DELAY CALIBRATION METHOD AND APPARATUS	US	Issued	16/051,374	Jul 31, 2018	10,411,719	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	TIERED STORAGE DATA EVACUATION WITHIN SOLID STATE DEVICES	US	Issued	16/245,070	Jan 10, 2019	11,061,600	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSOR WITH PROCESSOR MEMORY PAIRS FOR IMPROVED PROCESS SWITCHING A	US	Issued	16/001,635	Jun 6, 2018	11,157,319	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR STACK SHAPE OPTIMIZATION FOR MAGNETIC RECORDING	US	Issued	17/107,637	Nov 30, 2020	11,437,060	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR STACK SHAPE OPTIMIZATION FOR MAGNETIC RECORDING	US	Issued	16/293,481	Mar 5, 2019	10,872,626	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR-BEARING SURFACE DESIGNS WITH SEGMENTED PARTICLE-TRAPPING STRUC	US	Issued	15/908,685	Feb 28, 2018	10,354,685	Jul 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR-BEARING SURFACE DESIGNS WITH SIDE PARTICLE-TRAPPING STRUCTURES	US	Issued	15/908,711	Feb 28, 2018	10,249,334	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD WITH WRITE POLE HAVING A TAPERED TRAILING	US	Issued	15/883,327	Jan 30, 2018	10,762,919	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ELIMINATION OF CROSSTALK EFFECTS IN NON-VOLATILE STORAGE	US	Issued	15/879,680	Jan 25, 2018	10,461,804	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Staging of Write Operations for Container-Based Storage for Sequential Media	US	Issued	15/961,877	Apr 25, 2018	10,216,424	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Reduced Storage of Metadata in a Distributed Encoded Storage System	US	Issued	15/961,871	Apr 24, 2018	10,749,958	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Read Operation Utilizing Reduced Storage of Metadata in a Distributed Encoded S	US	Issued	15/961,869	Apr 24, 2018	10,474,368	Nov 12, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPLETION ENTRY THROTTLING USING HOST MEMORY	US	Issued	16/915,981	Jun 29, 2020	11,669,267	Jun 6, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPLETION ENTRY THROTTLING USING DATA STORAGE CONTROLLER	US	Issued	15/893,430	Feb 9, 2018	10,884,658	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE AND METHOD FOR ADAPTIVE SLEEP MODE TRANSITIONS	US	Issued	15/918,019	Mar 12, 2018	10,732,871	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY OPTIMIZED POWER STATE DECLARATIONS FOR SOLID STATE DRIVES	US	Issued	16/452,460	Jun 25, 2019	10,983,713	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY OPTIMIZED POWER STATE DECLARATIONS FOR SOLID STATE DRIVES	US	Issued	15/913,581	Mar 6, 2018	10,359,959	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC PERFORMANCE TUNING FOR MEMORY ARRANGEMENTS	US	Issued	15/875,815	Jan 19, 2018	10,423,525	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA DESIGN WITH MULTIPLE NON-MAGNETIC EXCHANGE CONTROL LAYE	US	Issued	17/162,165	Jan 29, 2021	11,600,294	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC MEDIA DESIGN WITH MULTIPLE NON-MAGNETIC EXCHANGE CONTROL LAYE	US	Issued	15/959,120	Apr 20, 2018	10,923,147	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERY COMBINING HARD DECODING, SOFT DECODING AND ARTIFICIAL CODEWOR	US	Issued	15/922,793	Mar 15, 2018	10,552,259	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING OPTIONAL PAD INTERCONNECT	US	Issued	15/843,951	Dec 15, 2017	10,249,587	Apr 2, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE TRANSACTION LAYER PACKET FOR LATENCY BALANCING	US	Issued	16/141,577	Sep 25, 2018	10,740,000	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE TRANSACTION LAYER PACKET FOR LATENCY BALANCING	US	Issued	15/916,082	Mar 8, 2018	10,558,367	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE OPPORTUNISTICALLY REFRESHING DATA	US	Issued	15/878,096	Jan 23, 2018	10,379,760	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Failed Storage Device Rebuild Method	US	Issued	16/937,308	Jul 23, 2020	11,210,170	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Failed Storage Device Rebuild Method	US	Issued	15/913,910	Mar 6, 2018	10,740,181	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD HAVING YIG-HEAVY METAL-YIG IN WRITE GAP AN	US	Issued	16/278,695	Feb 18, 2019	10,734,015	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Determining Ecosystem Bottlenecks and Suggesting In	US	Issued	15/921,375	Mar 14, 2018	11,126,367	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE READ THRESHOLD ADJUSTMENT ACCORDING TO ENVIRONMEN	US	Issued	15/934,816	Mar 23, 2018	10,379,739	Aug 13, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Performing High-Speed Read and Write Operations	US	Issued	15/903,930	Feb 23, 2018	10,698,610	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Generating a Reverse Map During a Background Oper	US	Issued	15/906,914	Feb 27, 2018	10,929,285	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FAILURE PREDICTION BY CELL PROBING	US	Issued	15/985,588	May 21, 2018	10,410,732	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE SETS OF TRIM PARAMETERS	US	Issued	16/903,277	Jun 16, 2020	11,416,175	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE SETS OF TRIM PARAMETERS	US	Issued	15/986,744	May 22, 2018	10,705,758	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR CONFIGURING STORAGE TIERS WITHIN SSDS	US	Issued	15/965,432	Apr 27, 2018	10,802,733	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PARITY RELOCATION FOR REDUCING TEMPERATURE THROTTLING	US	Issued	15/955,432	Apr 17, 2018	10,564,861	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROLLING CACHED/NON-CACHED MEMORY ACCESS DECISIONS BASED ON MEMOR	US	Issued	16/028,200	Jul 5, 2018	10,642,746	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENDING AND RESUMING A READ OPERATION FOR A NON-VOLATILE MEMORY	US	Issued	15/948,560	Apr 9, 2018	10,922,013	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-TIER MEMORY MANAGEMENT	US	Issued	15/946,387	Apr 5, 2018	10,360,155	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED FLASH INTERFACE MODULE PROCESSING	US	Issued	15/976,456	May 10, 2018	10,635,352	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Failed Storage Device Rebuild Using Dynamically Selected Locations in Overprovisioned	US	Issued	15/963,829	Apr 26, 2018	10,860,446	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING AND DECODING OF HAMMING DISTANCE-BASED BINARY REPRESENTATION	US	Issued	16/909,815	Jun 23, 2020	11,251,812	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING AND DECODING OF HAMMING DISTANCE-BASED BINARY REPRESENTATION	US	Issued	15/933,697	Mar 23, 2018	10,727,872	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH MULTI-DIE MANAGEMENT	US	Issued	15/922,689	Mar 15, 2018	10,656,872	May 19, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXTENDING ERASURES FOR LDPC-TYPE DECODING	US	Issued	15/895,921	Feb 13, 2018	10,417,089	Sep 17, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Data Writes and Mapping of Data for Multiple Sub-Drives	US	Issued	16/586,865	Sep 27, 2019	11,068,392	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Data Writes and Mapping of Data for Multiple Sub-Drives	US	Issued	17/346,122	Jun 11, 2021	11,561,893	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method of Direct Write and Mapping of Data in a Non-Volatile Memory Ha	US	Issued	15/954,198	Apr 16, 2018	10,452,537	Oct 22, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING PERFORMANCE MARGIN TO BACK OFF FLY HEIGHT	US	Issued	15/889,419	Feb 6, 2018	9,997,186	Jun 12, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	NOISE INJECTION TRAINING FOR MEMORY-BASED LEARNING	US	Issued	16/022,116	Jun 28, 2018	11,403,529	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC HOST MEMORY ALLOCATION TO A MEMORY CONTROLLER	US	Issued	15/927,644	Mar 21, 2018	10,613,778	Apr 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDED CONTROLLER PRE-INITIALIZATION USING BOOT PARTITIONS IN SOLID STATE	US	Issued	15/970,408	May 3, 2018	10,649,674	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CRASH LOG STORAGE AND RETRIEVAL USING BOOT PARTITIONS IN SOLID STATE SYSTEM	US	Issued	15/970,435	May 3, 2018	10,705,902	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DRIVE USING TWO-LEVEL INDIRECT ARCHITECTURE	US	Issued	15/971,869	May 4, 2018	10,496,334	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITY ADDRESSES FOR STORAGE CACHE MANAGEMENT	US	Issued	15/982,805	May 17, 2018	10,776,268	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Improving Read Performance Using Multiple Copies of	US	Issued	15/994,524	May 31, 2018	10,713,157	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BUFFERING STORAGE DEVICE DATA IN A HOST MEMORY BUFFER	US	Issued	16/030,810	Jul 9, 2018	10,635,580	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURABLE NEURAL NETWORK ENGINE OF TENSOR ARRAYS AND MEMORY CELLS	US	Issued	16/233,876	Dec 27, 2018	11,494,862	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURABLE NEURAL NETWORK ENGINE FOR CONVOLUTIONAL FILTER SIZES	US	Issued	16/234,184	Dec 27, 2018	11,461,579	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTING ENHANCEMENT COEFFICIENTS FOR NEURAL NETWORK ENGINE	US	Issued	16/234,166	Dec 27, 2018	10,796,198	Oct 6, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE INTERLEAVING OF DATA TRANSFER REQUESTS	US	Issued	15/940,338	Mar 29, 2018	10,579,548	Mar 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BALANCED CACHING BETWEEN A CACHE AND A NON-VOLATILE MEMORY BASED ON RA	US	Issued	16/012,607	Jun 19, 2018	11,188,474	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH ADJUSTABLE SELECT GATES AS A FUNCTION OF	US	Issued	15/944,917	Apr 4, 2018	10,573,388	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM LEVEL DATA-LOSS PROTECTION USING STORAGE DEVICE LOCAL BUFFERS	US	Issued	16/377,023	Apr 5, 2019	10,896,089	Jan 19, 2021

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING RESISTANCE DELTA OF A SPIN TORQUE OSCILLATOR	US	Issued	16/295,889	Mar 7, 2019	10,566,014	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REVERSE BIASING HEAD ELEMENT TO COUNTER ELECTRO-MIGRA	US	Issued	16/777,658	Jan 30, 2020	10,825,474	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REVERSE BIASING HEAD ELEMENT TO COUNTER ELECTRO-MIGRA	US	Issued	16/360,902	Mar 21, 2019	10,566,018	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Failure Detection and Resource Allocation	US	Issued	15/966,724	Apr 30, 2018	10,354,736	Jul 16, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Machine Learning-based Read Channel Data Detection	US	Issued	17/375,987	Jul 14, 2021	11,348,037	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Machine Learning-Based Read Channel Data Detection	US	Issued	16/010,516	Jun 18, 2018	11,080,621	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH MULTILAYERED OVERCO	US	Issued	15/913,042	Mar 6, 2018	10,796,719	Oct 6, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and apparatus to manipulate customer data without using the host interface	US	Issued	15/959,875	Apr 23, 2018	10,768,816	Sep 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING LINE FUNCTIONALITY ACCORDING TO LINE QUALITY IN NON-VOLATILE S	US	Issued	15/933,209	Mar 22, 2018	10,643,732	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT SAS PHY CONNECTION MANAGEMENT	US	Issued	16/831,729	Mar 26, 2020	11,126,357	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT SAS PHY CONNECTION MANAGEMENT	US	Issued	15/947,669	Apr 6, 2018	10,642,519	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE CONTROL OF HOST QUEUE DEPTH FOR COMMAND SUBMISSION THROTTLIN	US	Issued	15/920,056	Mar 13, 2018	10,387,078	Aug 20, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY AND CONTROLLER MUTUAL SECURE CHANNEL ASSOCIATION	US	Issued	15/967,528	Apr 30, 2018	10,984,093	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA SHAPING TO REDUCE ERROR RATES IN SOLID STATE MEMORY DEVICES	US	Issued	15/900,531	Feb 20, 2018	10,949,119	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BIFURCATED MEMORY DIE MODULE SEMICONDUCTOR DEVICE	US	Issued	16/021,529	Jun 28, 2018	10,923,462	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR ADAPTIVE DATA RETENTION MANAGEMENT IN NON-V	US	Issued	16/035,521	Jul 13, 2018	10,839,886	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH MULTI-READ MODE	US	Issued	15/936,050	Mar 26, 2018	10,990,294	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION DECODING WITH REDUNDANCY DATA	US	Issued	16/021,300	Jun 28, 2018	10,901,840	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Device with Adaptive Descrambling	US	Issued	16/014,128	Jun 21, 2018	10,742,237	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION DECODING AUGMENTED WITH ERROR TRACKING	US	Issued	16/021,857	Jun 28, 2018	10,727,867	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE WITH ENHANCED ERROR CORRECTION	US	Issued	16/254,575	Jan 22, 2019	10,911,069	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED READ-AHEAD CAPABILITY FOR STORAGE DEVICES	US	Issued	17/017,626	Sep 10, 2020	11,449,428	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED READ-AHEAD CAPABILITY FOR STORAGE DEVICES	US	Issued	16/012,311	Jun 19, 2018	11,188,256	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RELAXED ERASE PARAMETERS FOR BLOCK ERASURES IN NON-VOLATILE STORAGE MEDI	US	Issued	16/020,742	Jun 27, 2018	10,636,493	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Round Robin system with interleaved weighted and priority arbiters to serve on-demar	US	Issued	15/975,543	May 9, 2018	10,725,697	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL RESET OF A MEMORY CONTROLLER	US	Issued	15/992,905	May 30, 2018	10,719,267	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING PROGRAMMABLE DEGLITCH WINDOW TO DETECT SATU	US	Issued	15/933,276	Mar 22, 2018	10,109,308	Oct 23, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING LOW DUTY CYCLE SQUARE WAVE TO DETECT HEAD	US	Issued	15/924,555	Mar 19, 2018	10,217,481	Feb 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE LEVEL OPTIMIZATION FOR NON-VOLATILE MEMORY	US	Issued	16/157,520	Oct 11, 2018	10,990,295	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-DIMENSIONAL QUASI-CYCLIC (QC) LOW-DENSITY PARITY-CHECK (LDPC) CODE CC	US	Issued	16/152,128	Oct 4, 2018	10,897,271	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-TRIMMING OF DATA STORED IN NON-VOLATILE MEMORY USING DATA STORAGE	US	Issued	16/051,366	Jul 31, 2018	10,635,346	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR HOST REGISTER ACCESS FOR DATA STORAGE CONTROL	US	Issued	16/100,148	Aug 9, 2018	10,896,139	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ANISOTROPY FIELD INDUCED SELF PINNED RECESSED ANTIFERROMAGNETIC READER	US	Issued	15/992,488	May 30, 2018	10,311,901	Jun 4, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REVERSED MODE SPIN TORQUE OSCILLATOR WITH SHAPED FIELD GENERATION LAYER	US	Issued	16/991,971	Aug 12, 2020	10,872,627	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	REVERSED MODE SPIN TORQUE OSCILLATOR WITH SHAPED FIELD GENERATION LAYER	US	Issued	16/368,550	Mar 28, 2019	10,762,917	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING PREAMP CLOCK USING SYSTEM CLOCK	US	Issued	15/942,481	Mar 31, 2018	10,459,479	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HIERARCHICAL CLOCK SCALING IN A DATA STORAGE CONTROLLER	US	Issued	15/984,253	May 18, 2018	10,838,636	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR DECOUPLING OF PHYSICAL LAYER	US	Issued	16/163,412	Oct 17, 2018	10,545,902	Jan 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR STORAGE DEVICE MANAGEMENT	US	Issued	16/101,169	Aug 10, 2018	10,564,898	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PLACEMENT OF HOST DATA BASED ON DATA CHARACTERISTICS	US	Issued	16/101,158	Aug 10, 2018	11,055,002	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE READ RETRY ORDER BASED ON DECODING SUCCESS TREND	US	Issued	16/824,584	Mar 19, 2020	11,017,867	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE READ RETRY ORDER BASED ON DECODING SUCCESS TREND	US	Issued	17/244,794	Apr 29, 2021	11,557,352	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTABLE READ RETRY ORDER BASED ON DECODING SUCCESS TREND	US	Issued	16/052,523	Aug 1, 2018	10,636,495	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIFIED TIER AND CACHE STRUCTURE	US	Issued	16/028,387	Jul 5, 2018	10,496,315	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Method for Maximizing Power Efficiency in Memory Interface Block	US	Issued	15/970,832	May 3, 2018	10,446,254	Oct 15, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REGENCY BASED VICTIM BLOCK SELECTION FOR GARBAGE COLLECTION IN A SOLID STAT	US	Issued	16/141,899	Sep 25, 2018	10,838,859	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICE WITH DISTRIBUTED BIT BUCKETS	US	Issued	16/057,608	Aug 7, 2018	10,719,461	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Rebuild Assist Using Failed Storage Device	US	Issued	16/054,972	Aug 3, 2018	10,831,603	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	USING FAILED STORAGE DEVICE IN PEER-TO-PEER STORAGE SYSTEM TO PERFORM STOR	US	Issued	16/054,892	Aug 3, 2018	10,824,526	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-ASSISTED MAGNETIC RECORDING WRITE HEAD WITH WIDE CONDUCTIVE ELE	US	Issued	17/010,698	Sep 2, 2020	10,943,616	Mar 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT-ASSISTED MAGNETIC RECORDING WRITE HEAD WITH WIDE CONDUCTIVE ELE	US	Issued	16/366,829	Mar 27, 2019	10,839,844	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR WORKLOAD BASED DYNAMIC CACHE CONTROL IN SSD	US	Issued	16/159,057	Oct 12, 2018	10,949,355	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PLATING BASED PRE-DEFINED SIDE SHIELD AND APPLICATION IN MAGNETIC HEAD	US	Issued	15/978,660	May 14, 2018	10,460,750	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PLATING BASED SIDE SHIELD DEFINE AND APPLICATION IN MAGNETIC HEAD	US	Issued	16/895,075	Jun 8, 2020	11,626,129	Apr 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MANUFACTURING A MAGNETIC RECORDING HEAD	US	Issued	15/978,584	May 14, 2018	10,714,125	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	System-Level Error Correction Coding Allocation Based On Device Population Data Inte	US	Issued	16/020,853	Jun 27, 2018	10,897,273	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE	US	Issued	29/662,081	Aug 31, 2018	09,255,526	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH COMMAND REPLAY	US	Issued	15/995,590	Jun 1, 2018	10,572,185	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL BLOCK ADDRESSING RANGECOLLISION CRAWLER	US	Issued	16/137,261	Sep 20, 2018	10,649,909	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR MITIGATING TEMPERATURE INCREASES IN A SOLID ST	US	Issued	16/057,643	Aug 7, 2018	11,169,583	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	REPORTING AVAILABLE PHYSICAL STORAGE SPACE OF NON-VOLATILE MEMORY ARRAY	US	Issued	16/042,960	Jul 23, 2018	10,795,604	Oct 6, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH RHODIUM OR RHODIUM	US	Issued	15/959,358	Apr 23, 2018	10,276,202	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Swage Pin Having Ribbed Taper For Helical Swage Process	US	Issued	16/012,661	Jun 19, 2018	10,981,210	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REGULATING BEAM POWER VOLTAGE DURING POWER FAILURE	US	Issued	15/956,990	Apr 19, 2018	10,242,698	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH HEAT-ASSISTED MAGNETIC STORAGE HEAD AND AS	US	Issued	15/996,092	Jun 1, 2018	10,468,071	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING SPINDLE MOTOR POSITION AT INCREASED RESOLU	US	Issued	15/965,947	Apr 29, 2018	10,242,706	Mar 26, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NODE WITH COMBINED OPTICAL AND ELECTRICAL SWITCHING	US	Issued	16/728,897	Dec 27, 2019	10,862,583	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NODE WITH COMBINED OPTICAL AND ELECTRICAL SWITCHING	US	Issued	16/024,723	Jun 29, 2018	10,560,765	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NODE CONFIGURATION IN OPTICAL NETWORK	US	Issued	16/024,734	Jun 29, 2018	10,284,291	May 7, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	REMOVAL DELAY FEATURE FOR REMOVABLY CONNECTED DEVICES	US	Issued	16/020,456	Jun 27, 2018	10,361,511	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER ADAPTER WITH PROTECTION CIRCUITRY	US	Issued	16/016,427	Jun 22, 2018	11,150,711	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Quality of Service Based Arbitrations Optimized for Enterprise Solid State Drives	US	Issued	16/903,054	Jun 16, 2020	11,392,320	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	QUALITY OF SERVICE BASED ARBITRATIONS OPTIMIZED FOR ENTERPRISE SOLID STATE D	US	Issued	16/931,309	Jul 16, 2020	11,385,835	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	QUALITY OF SERVICE BASED ARBITRATIONS OPTIMIZED FOR ENTERPRISE SOLID STATE D	US	Issued	16/026,965	Jul 3, 2018	10,732,897	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONCURRENTLY DISCONNECTING MULTIPLE VOICE COIL MOTO	US	Issued	15/954,080	Apr 16, 2018	10,152,994	Dec 11, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Ordered Parallel Replication	US	Issued	15/980,709	May 15, 2018	10,726,046	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH DYNAMIC ALLOCATION OF APPLICATIONS TO M	US	Issued	16/021,231	Jun 28, 2018	10,713,158	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CODING OUT AMBIGUITY IN THREE-DIMENSIONAL MAGNETIC R	US	Issued	15/990,468	May 25, 2018	10,276,208	Apr 30, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEAD HAVING A MONOLITHIC SIDE SHIELD AND LEADING SHIELD	US	Issued	16/109,489	Aug 22, 2018	10,468,054	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING WITH WEAR-BASED ATTACK DETECTION FOR NON-VOLATILE MEMORY	US	Issued	16/147,653	Sep 29, 2018	10,811,112	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Soft-Decision-Based Command Execution to Enhance R	US	Issued	15/994,551	May 31, 2018	10,725,901	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Reducing Vibration Of Data Storage Device In A Data Storage System	US	Issued	16/182,447	Nov 6, 2018	10,593,370	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	UNITARY MOLDED USB DEVICE	US	Issued	16/016,233	Jun 22, 2018	10,916,878	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED VOLTAGE AND TIMING MARGIN MEASUREMENT FOR NAND FLASH INTER	US	Issued	16/047,953	Jul 27, 2018	10,566,037	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTMENT OF STORAGE DEVICE PARAMETERS BASED ON WORKLOAD CHARACTERIS	US	Issued	16/138,193	Sep 21, 2018	11,209,998	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPHASIZING PARITY SECTOR PROCESSING OF UN-CONVERGED	US	Issued	15/983,016	May 17, 2018	10,592,334	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Dependent Allocation of Error Correction Resources	US	Issued	16/051,416	Jul 31, 2018	10,802,908	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH A TAPERED RETURN POLE	US	Issued	16/022,273	Jun 28, 2018	10,468,058	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING DATA DENSITY BASED ON AMPLITUDE-INVERTED	US	Issued	15/993,209	May 30, 2018	10,553,247	Feb 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTROL HEAD TO HEAD SPACING USING A PIEZOELECTRIC DEVICE	US	Issued	16/370,225	Mar 29, 2019	10,783,924	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Namespace Reservation in a Multi-Queue Single-Cont	US	Issued	16/021,813	Jun 28, 2018	10,558,376	Feb 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DYNAMIC ALLOCATION TO A HOST OF MEMORY DEVICE CC	US	Issued	16/023,767	Jun 29, 2018	10,564,872	Feb 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Secure Object Replication	US	Issued	16/006,816	Jun 12, 2018	11,256,815	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Central Support For Improved Structural Dynamics Of Actuators In A Multi-Actuator Ha	US	Issued	16/359,941	Mar 20, 2019	10,891,980	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PREDICTIVE READ OF RANDOM DATA	US	Issued	16/024,607	Jun 29, 2018	10,732,848	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods of protecting write pole from corrosion in HAMR Head	US	Issued	16/144,936	Sep 27, 2018	10,482,907	Nov 19, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	GROWN DEFECT DETECTION AND MITIGATION USING ECC IN MEMORY SYSTEMS	US	Issued	16/022,199	Jun 28, 2018	10,691,539	Jun 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	XOR RECOVERY SCHEMES UTILIZING EXTERNAL MEMORY	US	Issued	16/243,070	Jan 8, 2019	10,872,012	Dec 22, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Device Storage System with Distributed Read/Write Processing	US	Issued	16/024,736	Jun 30, 2018	10,409,511	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Device Storage System with Hosted Services on Peer Storage Devices	US	Issued	16/913,596	Jun 26, 2020	11,281,601	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Device Storage System with Hosted Services on Peer Storage Devices	US	Issued	16/024,738	Jun 30, 2018	10,725,941	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MULTI-LEVEL PARITY SECTORS FOR DATA RECOVER	US	Issued	16/244,426	Jan 10, 2019	10,606,699	Mar 31, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MULTI-LEVEL PARITY SECTORS FOR DATA RECOVER	US	Issued	16/815,416	Mar 11, 2020	11,055,171	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MEMORY EFFICIENT PROCESSING OF UN-CONVER	US	Issued	15/983,033	May 17, 2018	10,530,390	Jun 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING PROCESS FOR SEPARATING LOGIC AND MEMORY ARRAY	US	Issued	16/722,278	Dec 20, 2019	10,930,607	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MANUFACTURING PROCESS FOR SEPARATING LOGIC AND MEMORY ARRAY	US	Issued	16/021,616	Jun 28, 2018	10,522,489	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Logical and Physical Address Field Size Reduction by Alignment Constrained Writing Te	US	Issued	16/932,539	Jul 17, 2020	11,288,204	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL AND PHYSICAL ADDRESS FIELD SIZE REDUCTION BY ALIGNMENT-CONSTRAINED	US	Issued	16/109,504	Aug 22, 2018	10,725,931	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROSTATIC DISCHARGE PROTECTION CIRCUIT	US	Issued	16/189,778	Nov 13, 2018	11,222,889	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROSTATIC DISCHARGE PROTECTION CIRCUIT AND DESIGN	US	Issued	16/146,900	Sep 28, 2018	10,897,132	Nov 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Speculative pre-fetching of flash translation layer tables for use with solid state system	US	Issued	16/045,350	Jul 25, 2018	10,824,568	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR IMPROVED DATA RELOCATION BASED ON	US	Issued	16/143,242	Sep 26, 2018	11,086,529	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PREDICTION OF MULTIPLE READ COMMANDS DIRECTED TO	US	Issued	16/226,021	Dec 19, 2018	10,649,776	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PREDICTION OF READ COMMANDS TO NON-SEQUENTIAL D	US	Issued	16/024,617	Jun 29, 2018	10,642,502	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING THROUGH-PACKAGE DEBUG FEATURES	US	Issued	16/021,687	Jun 28, 2018	11,355,403	Jun 7, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODING DATA USING DECODERS AND NEURAL NETWORKS	US	Issued	16/141,806	Sep 25, 2018	10,804,938	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER GAS-BEARING SURFACE DESIGNS TO MITIGATE EFFECTS OF SMEAR IN HEAT-ASS	US	Issued	16/188,260	Nov 12, 2018	10,629,236	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER WITH MULTIPLE-CHANNEL AIR-BEARING SURFACE	US	Issued	16/156,626	Oct 10, 2018	10,468,059	Nov 5, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SWITCHING DISK SURFACES TO PERFORM SEEK USING SPIRAL T	US	Issued	16/002,357	Jun 7, 2018	10,269,385	Apr 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXTENDING SERVO BURST FIELD BY ALTERNATING SERVO FIELD	US	Issued	16/015,024	Jun 21, 2018	10,163,459	Dec 25, 2018
WESTERN DIGITAL TECHNOLOGIES, INC.	BANDWIDTH LIMITING IN SOLID STATE DRIVES	US	Issued	16/832,402	Mar 27, 2020	11,061,620	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BANDWIDTH LIMITING IN SOLID STATE DRIVES	US	Issued	16/189,963	Nov 13, 2018	10,635,355	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICE WITH FAST BOOT AFTER UNGRACEFUL SHUTDOWN	US	Issued	16/140,163	Sep 24, 2018	10,838,629	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EXPANDABLE MEMORY FOR USE WITH SOLID STATE SYSTEMS AND DEVICES	US	Issued	17/220,828	Apr 1, 2021	11,467,743	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	EXPANDABLE MEMORY FOR USE WITH SOLID STATE SYSTEMS AND DEVICES	US	Issued	16/136,174	Sep 19, 2018	10,983,715	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR FAST BOOT READ	US	Issued	16/147,161	Sep 28, 2018	10,802,734	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR OPTIMIZED SCHEDULING OF BACKGROU	US	Issued	16/245,173	Jan 10, 2019	11,442,635	Sep 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR IMPROVED RECOVERY AFTER A WRITE A	US	Issued	16/936,303	Jul 22, 2020	11,264,104	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR IMPROVED RECOVERY AFTER A WRITE A	US	Issued	16/134,868	Sep 18, 2018	10,741,256	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING PREDICTIVE OVERSAMPLING FOR SERVO CONTROL	US	Issued	16/015,606	Jun 22, 2018	10,176,835	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH DEADLOCK RECOVERY CAPABILITIES	US	Issued	16/167,254	Oct 22, 2018	10,891,179	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Power Management Modes for Multiple Memory Devices	US	Issued	16/937,455	Jul 23, 2020	11,619,984	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT POWER MANAGEMENT STAND-BY MODES FOR MULTIPLE DIES IN A STORAGE	US	Issued	16/140,448	Sep 24, 2018	10,739,839	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SCHEME TO REDUCE READ DISTURB FOR HIGH READ INTENSIVE BLOCKS IN NON-VOLAT	US	Issued	16/428,305	May 31, 2019	10,734,084	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	UPDATING MAPPING INFORMATION DURING SYNCHRONIZATION OF MEMORY DEVICE	US	Issued	16/449,797	Jun 24, 2019	10,802,744	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CUSTOMIZING CONFIGURATION OF STORAGE DEVICE(S) FOR OPERATIONAL ENVIRONM	US	Issued	16/136,972	Sep 20, 2018	10,732,869	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNEL MAGNETORESISTANCE READ HEAD INCLUDING SIDE SHIELDS CONTAINING NA	US	Issued	16/021,602	Jun 28, 2018	10,354,681	Jul 16, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	RAID Storage System with Logical Data Group Rebuild	US	Issued	16/054,217	Aug 3, 2018	11,132,256	Sep 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RAID Storage System with Logical Data Group Priority	US	Issued	16/053,750	Aug 2, 2018	10,825,477	Nov 3, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Tiered Storage System with Tier Configuration by Peer Storage Devices	US	Issued	16/054,863	Aug 3, 2018	10,956,058	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Tiered Storage System with Data Routing by Peer Storage Devices	US	Issued	16/055,021	Aug 3, 2018	10,628,074	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer Storage Devices Supporting Protection Information	US	Issued	16/055,016	Aug 3, 2018	10,878,111	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Persistent Version Control For Data Transfer Between Heterogeneous Data Stores	US	Issued	16/361,467	Mar 22, 2019	11,321,291	May 3, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Versioning Validation For Data Transfer Between Heterogeneous Data Stores	US	Issued	16/361,493	Mar 22, 2019	11,403,269	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA DRIVEN ICAD GRAPH GENERATION	US	Issued	16/452,466	Jun 25, 2019	10,862,512	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Content aware decoding method and system	US	Issued	16/931,302	Jul 16, 2020	11,251,814	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Content aware decoding method and system	US	Issued	16/931,305	Jul 16, 2020	11,258,465	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Content aware decoding method and system	US	Issued	16/137,256	Sep 20, 2018	10,735,031	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD TO IMPROVE INPUT OUTPUT COMMAND LATENCY BY DYNAMIC	US	Issued	16/157,076	Oct 10, 2018	10,831,656	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE	US	Issued	29/662,069	Aug 31, 2018	0924,871	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Sensing Scan for Cross-Temperature Mitigation	US	Issued	16/140,236	Sep 24, 2018	10,636,488	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ACCESS IN DATA STORAGE DEVICE INCLUDING STORAGE CLASS MEMORY	US	Issued	16/921,719	Jul 6, 2020	11,169,918	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ACCESS IN DATA STORAGE DEVICE INCLUDING STORAGE CLASS MEMORY	US	Issued	16/196,077	Nov 20, 2018	10,740,231	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NEURAL NETWORKS USING DATA PROCESSING UNITS	US	Issued	16/370,616	Mar 29, 2019	11,157,692	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EQUIPPED TO REDUCE PEAQ FAULTS IN HOST DEVICE	US	Issued	16/141,906	Sep 25, 2018	11,169,736	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL TESTING OF MAGNETIC RECORDING SLIDERS	US	Issued	16/370,516	Mar 29, 2019	10,643,669	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSFERRING COMPUTATIONAL OPERATIONS TO CONTROLLERS OF DATA STORAGE D	US	Issued	16/177,102	Oct 31, 2018	11,320,995	May 3, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH DEEP LEARNING NEURAL NETWORK	US	Issued	16/212,596	Dec 6, 2018	11,133,059	Sep 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SEED LAYER FOR SPIN TORQUE OSCILLATOR IN MICROWAVE ASSISTED MAGNETIC RECO	US	Issued	17/463,358	Aug 31, 2021	11,682,420	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SEED LAYER FOR SPIN TORQUE OSCILLATOR IN MICROWAVE ASSISTED MAGNETIC RECO	US	Issued	16/450,857	Jun 24, 2019	11,127,420	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	GIANT SPIN-SEEBECK EFFECT INDUCED MAGNON TRANSFER TORQUE-ASSISTED MAMR	US	Issued	16/451,744	Jun 25, 2019	10,885,933	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE TERMINAL MAGNETIC RECORDING HEAD	US	Issued	16/559,372	Sep 3, 2019	11,600,293	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH DUAL RETURN POLE AND TAPERED MAIN POLE	US	Issued	16/946,034	Jun 3, 2020	11,043,233	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH DUAL RETURN POLE	US	Issued	16/157,233	Oct 11, 2018	10,714,128	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH A CALLBACK RESPONSE	US	Issued	16/370,280	Mar 29, 2019	10,891,078	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING DATA STORAGE DEVICE OPERATION BY GROUPING LOGICAL BLOCK ADDR	US	Issued	16/450,618	Jun 24, 2019	11,340,810	May 24, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FILE SYSTEM METADATA DECODING FOR OPTIMIZING FLASH TRANSLATION LAYER OPE	US	Issued	16/452,320	Jun 25, 2019	11,249,664	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METADATA-BASED OPERATIONS FOR USE WITH SOLID STATE DEVICES	US	Issued	16/417,617	May 20, 2019	10,884,920	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer Storage System with Peer Operation State Indicator	US	Issued	16/054,918	Aug 3, 2018	10,747,455	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Systems with Peer Data Recovery	US	Issued	16/054,989	Aug 3, 2018	10,901,848	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Systems with Peer Data Scrub	US	Issued	16/054,940	Aug 3, 2018	10,649,843	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONED BLOCK COMMAND TO STREAM COMMAND TRANSLATOR	US	Issued	16/928,953	Jul 14, 2020	11,195,548	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONED BLOCK COMMAND TO STREAM COMMAND TRANSLATOR	US	Issued	17/455,839	Nov 19, 2021	11,615,805	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONED BLOCK COMMAND TO STREAM COMMAND TRANSLATOR	US	Issued	16/157,796	Oct 11, 2018	10,726,865	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED HANDLING OF MULTIPLE COPIES IN STORAGE MANAGEMENT	US	Issued	16/363,935	Mar 25, 2019	11,061,598	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Universal Serial Bus Voltage Reducing Adapter	US	Issued	17/229,565	Apr 13, 2021	11,403,252	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	UNIVERSAL SERIAL BUS VOLTAGE REDUCING ADAPTOR	US	Issued	16/137,277	Sep 20, 2018	11,010,326	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYMBOL-BASED VARIABLE NODE UPDATES FOR BINARY LDPC CODES	US	Issued	16/909,798	Jun 23, 2020	11,663,077	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SYMBOL-BASED VARIABLE NODE UPDATES FOR BINARY LDPC CODES	US	Issued	16/205,099	Nov 29, 2018	11,231,993	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WORKLOAD BASED DYNAMIC ERASE SUSPEND ADAPTATION	US	Issued	16/228,599	Dec 20, 2018	10,643,711	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Two-dimensional scalable versatile storage format for data storage devices	US	Issued	16/455,181	Jun 27, 2019	10,990,304	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR ENHANCING SSD ENDURANCE BY UTILIZING HOST DRAM	US	Issued	16/175,166	Oct 30, 2018	10,831,379	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASUREMENT, CALIBRATION AND TUNING OF MEMORY BUS DUTY CYCLE	US	Issued	16/820,552	Mar 16, 2020	11,128,286	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASUREMENT, CALIBRATION AND TUNING OF MEMORY BUS DUTY CYCLE	US	Issued	16/244,924	Jan 10, 2019	10,622,982	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH COMMAND RESPONSE PIGGYBACKING	US	Issued	16/143,963	Sep 27, 2018	10,901,655	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR SELF ADAPTIVE CHIP-ENABLE SETUP TIM	US	Issued	16/259,828	Jan 28, 2019	10,747,454	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-PHASED PROGRAMMING WITH BALANCED GRAY CODING	US	Issued	16/297,359	Mar 8, 2019	11,133,067	Sep 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL CELL PROGRAMMING USING OPTIMIZED MULTIPHASE MAPPING WITH B	US	Issued	16/912,588	Jun 25, 2020	11,107,522	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL CELL PROGRAMMING USING OPTIMIZED MULTIPHASE MAPPING WITH B	US	Issued	16/219,825	Dec 13, 2018	10,734,071	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STATE PROGRAMMING FOR MEMORY DEVICES	US	Issued	16/936,320	Jul 22, 2020	10,878,896	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STATE PROGRAMMING FOR MEMORY DEVICES	US	Issued	17/127,290	Dec 18, 2020	11,087,836	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STATE PROGRAMMING FOR MEMORY DEVICES	US	Issued	17/356,413	Dec 23, 2021	11,562,787	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STATE PROGRAMMING FOR MEMORY DEVICES	US	Issued	16/221,332	Dec 14, 2018	10,748,606	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DEVICE WITH IMPROVED SUSTAINED DATA WRITING SPEED	US	Issued	16/191,193	Nov 14, 2018	10,895,991	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADJUSTING SPINDLE MOTOR CURRENT BASED ON CONTINUOU	US	Issued	16/021,938	Jun 28, 2018	10,176,840	Jan 8, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONTROLLING DUAL STAGE ACTUATOR WITH TRIPLE STAGE SER	US	Issued	16/034,697	Jul 13, 2018	10,381,030	Aug 13, 2019

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC STORAGE DEVICE WITH IMPROVED TOP COVER GASKET AND ASSOCIATED N	US	Issued	16/203,406	Nov 28, 2018	10,622,027	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DECENTRALIZED DATA PROCESSING ARCHITECTURE	US	Issued	16/189,762	Nov 13, 2018	11,327,808	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and methods for heterogeneous address space allocation	US	Issued	16/274,060	Feb 12, 2019	11,061,728	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH REPLAY PROTECTED MEMORY BLOCK HAVING DUAL KE	US	Issued	16/267,040	Feb 4, 2019	11,088,845	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BOUNDED LATENCY AND COMMAND NON SERVICE METHODS AND APPARATUS	US	Issued	16/925,185	Jul 9, 2020	11,200,003	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BOUNDED LATENCY AND COMMAND NON SERVICE METHODS AND APPARATUS	US	Issued	16/169,863	Oct 24, 2018	10,732,900	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Vertically Translating Load/Unload Ramp Mechanism For Cold Storage Data Storage De	US	Issued	16/893,397	Jun 4, 2020	10,971,178	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Vertically Translating Load/Unload Ramp Mechanism For Cold Storage Data Storage De	US	Issued	16/516,195	Jul 18, 2019	10,706,879	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Vertically Translating Load/Unload Ramp Mechanism For Cold Storage Data Storage De	US	Issued	16/516,211	Jul 18, 2019	10,803,891	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BELT-DRIVEN ROTARY CAM ELEVATOR MECHANISM FOR REDUCED-HEAD DATA STORAGE	US	Issued	16/933,802	Jul 20, 2020	10,978,100	Apr 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-PIVOT HYBRID STEPPER MOTOR FOR BALL SCREW CAM ELEVATOR MECHANISM FOR	US	Issued	17/037,308	Sep 29, 2020	11,037,590	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AXIAL FLUX PERMANENT MAGNET MOTOR FOR BALL SCREW CAM ELEVATOR MECHAN	US	Issued	17/064,415	Oct 6, 2020	11,410,694	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	In-Pivot Stepper Motor For Ball Screw Cam Elevator Mechanism For Cold Storage Data	US	Issued	16/513,585	Jul 16, 2019	10,811,044	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP NON-VOLATILE MEMORY (NVM) SEARCH	US	Issued	16/232,639	Dec 26, 2018	11,158,369	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE WITH DIE-SKIPPING WIRE BONDS	US	Issued	16/143,102	Sep 26, 2018	11,362,063	Jun 14, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE PROCESSING FOR READ THRESHOLD VOLTAGE CALIBRATION	US	Issued	16/158,941	Oct 12, 2018	10,811,091	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ETHERNET IN DATA STORAGE DEVICE	US	Issued	17/347,234	Jun 14, 2021	11,659,034	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ETHERNET IN DATA STORAGE DEVICE	US	Issued	16/171,979	Oct 26, 2018	11,038,961	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS TO OPTIMALLY SELECT METABLOCKS	US	Issued	16/265,056	Feb 1, 2019	10,990,320	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Storage System Property Deviation	US	Issued	16/249,522	Jan 16, 2019	10,725,705	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PREDICTION OF RANDOM READ COMMANDS IN VIRTUALIZ	US	Issued	16/259,481	Jan 28, 2019	10,846,226	Nov 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CONFIGURING A STORAGE DEVICE BASED ON PREDICTIO	US	Issued	16/259,502	Jan 28, 2019	10,896,131	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RECONFIGURING NETWORK SETTINGS FOR OPERATING CONFIGURATION INSTALLATION	US	Issued	16/192,465	Nov 15, 2018	10,904,088	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR SCALING A HISTORICAL PATTERN MATCHING DATA STRUCT	US	Issued	16/288,784	Feb 28, 2019	10,719,445	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCING THE EFFECTIVENESS OF READ-SCAN PERFORMANCE AND RELIABILITY FOR	US	Issued	16/218,800	Dec 13, 2018	10,896,123	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR IMPROVING PERFORMANCE OF A STORAGE DEVICE USING	US	Issued	16/863,417	Apr 30, 2020	10,741,261	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR IMPROVING PERFORMANCE OF A STORAGE DEVICE USING	US	Issued	16/256,010	Jan 24, 2019	10,685,722	Jun 16, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHODS FOR MERGING POST-WRITE READ AND SELECT GATE MAIN	US	Issued	16/223,510	Dec 18, 2018	10,699,776	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE-FEEDBACK-BASED READ-LOOK-AHEAD MANAGEMENT SYSTEM AND METHOD	US	Issued	17/700,995	Mar 22, 2022	11,620,086	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive-Feedback-Based Read-Look-Ahead Management System and Method	US	Issued	16/223,850	Dec 18, 2018	11,294,595	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART MAPPING TABLE UPDATE POST BACKGROUND OPERATIONS	US	Issued	16/364,054	Mar 25, 2019	10,732,877	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FLASH TRANSLATION LAYER TABLE FOR UNALIGNED HOST WRITES	US	Issued	16/258,962	Jan 28, 2019	10,901,912	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE PAGE READ LEVEL TRACKING BY BIT ERROR RATE ANALYSIS	US	Issued	16/364,347	Mar 26, 2019	11,244,732	Feb 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CAM STORAGE SCHEMES AND CAM READ OPERATIONS FOR DETECTING MATCHING KE	US	Issued	17/036,889	Sep 29, 2020	11,367,485	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CAM STORAGE SCHEMES AND CAM READ OPERATIONS FOR DETECTING MATCHING KE	US	Issued	16/390,370	Apr 22, 2019	10,910,057	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS TO WAKE UP MEMORY ARRAY	US	Issued	16/289,649	Feb 28, 2019	10,998,073	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING NEURAL NETWORKS AND WEIGHTS FOR NEURAL NETWORKS	US	Issued	16/174,014	Oct 29, 2018	11,436,482	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEADS CONFIGURED TO REDIRECT CURRENT	US	Issued	16/995,656	Aug 17, 2020	10,861,485	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEADS CONFIGURED TO REDIRECT CURRENT	US	Issued	16/450,111	Jun 24, 2019	10,777,219	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	EXECUTABLE MEMORY CELLS	US	Issued	16/354,038	Mar 14, 2019	10,884,663	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EXECUTABLE MEMORY CELL	US	Issued	16/354,053	Mar 14, 2019	10,884,664	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC PERFORMANCE DENSITY TUNING FOR DATA STORAGE DEVICE	US	Issued	16/231,748	Dec 24, 2018	10,969,965	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED MEMORY DEVICE ARCHITECTURE FOR MACHINE LEARNING	US	Issued	17/143,001	Jan 6, 2021	11,372,577	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED MEMORY DEVICE ARCHITECTURE FOR MACHINE LEARNING	US	Issued	16/363,661	Mar 25, 2019	10,929,058	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PARAMETER TRACKING FOR NON-VOLATILE MEMORY TO AVOID OVER-PROGRAMMING	US	Issued	16/209,519	Dec 4, 2018	10,573,397	Feb 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING DEEP NEURAL NETWORK WEIGHTS IN NON-VOLATILE STORAGE SYSTEMS USIN	US	Issued	16/158,650	Oct 12, 2018	10,691,537	Jun 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEDICATED TERMINATION DIES FOR MEMORY SYSTEMS	US	Issued	16/146,238	Sep 28, 2018	10,637,533	Apr 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SERIES RESISTANCE IN TRANSMISSION LINES FOR DIE-TO-DIE COMMUNICATION	US	Issued	16/146,294	Sep 28, 2018	10,643,676	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HARDWARE-ASSISTED MULTI-TABLE DATABASE WITH SHARED MEMORY FOOTPRINT	US	Issued	16/455,661	Jun 27, 2019	11,086,852	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SUB BLOCK MODE READ SCRUB DESIGN FOR NON-VOLATILE MEMORY	US	Issued	16/415,923	May 17, 2019	10,734,079	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMANCE-BASED MULTIPLE NAMESPACE RESOURCE	US	Issued	16/148,748	Oct 1, 2018	10,866,740	Dec 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Metadata Operation Priority Processing	US	Issued	16/147,576	Sep 29, 2018	10,877,810	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR DEVICE INCLUDING A HIGH DAMPING FIELD GENERATION L	US	Issued	16/358,310	Mar 19, 2019	10,643,643	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST EMULATOR	US	Issued	16/449,799	Jun 24, 2019	11,119,954	Sep 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSISTOR THRESHOLD VOLTAGE MAINTENANCE IN 3D MEMORY	US	Issued	16/213,590	Dec 7, 2018	10,691,372	Jun 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC READ BASED ON READ STATISTICS	US	Issued	16/413,173	May 15, 2019	10,866,763	Dec 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH RAPID RECOVERY FROM UNGRACEFUL SHUTDO	US	Issued	16/249,479	Jan 16, 2019	11,086,737	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERALIZED LOW-DENSITY PARITY-CHECK CODES	US	Issued	16/367,140	Mar 27, 2019	10,715,178	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Incomplete Write Group Journal	US	Issued	16/937,067	Jul 23, 2020	11,232,032	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Incomplete Write Group Journal	US	Issued	16/236,815	Dec 31, 2018	10,733,098	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Stream Management in a Multi-Host Virtualized Storage	US	Issued	16/207,659	Dec 3, 2018	11,182,110	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTAINER KEY VALUE STORE FOR DATA STORAGE DEVICES	US	Issued	16/246,425	Jan 11, 2019	10,956,071	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROSTRICTIVE CONTROL FOR THE WIDTH OF A TAPE-HEAD-ARRAY	US	Issued	16/997,701	Aug 19, 2020	10,997,995	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROSTRICTIVE CONTROL FOR THE WIDTH OF A TAPE-HEAD-ARRAY	US	Issued	16/830,222	Mar 25, 2020	10,762,924	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Flexible Type Electrical Feed-Through Connector Assembly	US	Issued	16/231,493	Dec 22, 2018	10,594,100	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BALANCING THE BLOCK WEARING LEVELING FOR OPTIMUM SSD ENDURANCE	US	Issued	16/256,020	Jan 24, 2019	10,817,187	Oct 27, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Misalignment-Tolerant Flexible Type Electrical Feed-Through	US	Issued	16/231,499	Dec 22, 2018	10,424,345	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-PROGRAM READ TO COUNTER WORDLINE FAILURES	US	Issued	16/862,436	Apr 29, 2020	10,832,784	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-PROGRAM READ TO COUNTER WORDLINE FAILURES	US	Issued	16/133,552	Sep 17, 2018	10,679,708	Jun 9, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	USING INTERLEAVED WRITES TO SEPARATE DIE PLANES	US	Issued	16/440,233	Jun 13, 2019	10,949,123	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DIE LAYOUTS FOR FAILURE PROTECTION IN SSDS	US	Issued	16/287,948	Feb 27, 2019	10,770,431	Sep 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL MEDIA PACKAGING TARGETED FOR SSD USAGE	US	Issued	16/211,033	Dec 5, 2018	10,884,917	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus and Method for Regulating Available Storage of a Data Storage System	US	Issued	17/182,177	Feb 22, 2021	11,500,714	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Systems and Methods for Autonomously Adapting Data Storage System P	US	Issued	16/223,041	Dec 17, 2018	10,963,332	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING FOR MULTI-STATE PROGRAMMING OF MEMORY DEVICES	US	Issued	16/905,789	Jun 18, 2020	11,372,765	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING FOR MULTI-STATE PROGRAMMING OF MEMORY DEVICES	US	Issued	17/746,849	May 17, 2022	11,636,039	Apr 25, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAPPING FOR MULTI-STATE PROGRAMMING OF MEMORY DEVICES	US	Issued	16/221,378	Dec 14, 2018	10,705,966	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL TO PHYSICAL MAPPING MANAGEMENT USING LOW-LATENCY NON-VOLATILE	US	Issued	16/256,994	Jan 24, 2019	11,301,369	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Solid State Drive Cache Eviction Policy By An Unsupervised Reinforcement Learning Sc	US	Issued	17/228,010	Apr 12, 2021	11,586,546	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Solid State Drive Cache Eviction Policy By An Unsupervised Reinforcement Learning Sc	US	Issued	16/453,179	Jun 26, 2019	10,977,179	Apr 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Translucid Access to Storage Devices	US	Issued	16/450,171	Jun 24, 2019	11,288,370	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	THREAD-AWARE CONTROLLER	US	Issued	16/268,960	Feb 6, 2019	10,949,256	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDING THE ERROR CORRECTION CAPABILITY OF A DEVICE USING A NEURAL NETW	US	Issued	16/208,133	Dec 3, 2018	10,740,165	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTIVE LOW-POWER TERMINATION	US	Issued	16/146,697	Sep 28, 2018	10,461,965	Oct 29, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERING DATA FROM A FAULTY MEMORY BLOCK IN A MEMORY SYSTEM	US	Issued	16/221,682	Dec 17, 2018	10,755,798	Aug 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Rebuild Using Dynamic Peer Work Allocation	US	Issued	16/240,274	Jan 4, 2019	11,182,258	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTABLE LOGICAL TO PHYSICAL TABLES FOR MULTIPLE SECTOR PATTERN SUPPORT	US	Issued	16/450,838	Jun 24, 2019	10,922,242	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR WIRELESS CHARGING AND WIRED DATA TRANSFER	US	Issued	16/274,626	Feb 13, 2019	11,011,945	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SHIFTING ARCHITECTURE FOR DATA REUSE IN A NEURAL NETWORK	US	Issued	16/354,907	Mar 15, 2019	11,501,141	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING INTERLACED RECORDING FOR EFFICIENT COLD DAT	US	Issued	16/178,271	Nov 1, 2018	10,360,928	Jul 23, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURING A WRITE INHIBIT SHOCK THRESHOLD FOR MULT	US	Issued	16/169,102	Oct 24, 2018	10,347,278	Jul 9, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Low-Profile Ball Screw Cam Elevator Mechanism For Cold Storage Data Storage De	US	Issued	16/513,611	Jul 16, 2019	10,902,871	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR DATA STORAGE IN A MEMORY SYSTEM	US	Issued	16/585,101	Sep 27, 2019	11,106,575	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMANCE OF A READ IN A MEMORY SYSTEM	US	Issued	16/227,168	Dec 20, 2018	10,884,628	Jan 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH REDUCED PROGRAM TRANSFERS	US	Issued	16/223,716	Dec 18, 2018	10,896,724	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Duplicate Request Checking for File System Interfaces	US	Issued	16/175,948	Oct 31, 2018	11,093,446	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Intelligent Data Access Across Tiered Storage Systems	US	Issued	16/394,687	Apr 25, 2019	11,544,216	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Cache Coherence for File System Interfaces	US	Issued	16/193,505	Nov 16, 2018	10,795,817	Oct 6, 2020

WESTERN DIGITAL TECHNOLOGIES, INC.	KEY VALUE STORE USING CHANGE VALUES FOR DATA PROPERTIES	US	Issued	16/367,083	Mar 27, 2019	11,334,623	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	KEY VALUE STORE USING GENERATION MARKERS	US	Issued	16/367,080	Mar 27, 2019	11,080,239	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	KEY VALUE STORE USING PROGRESS VERIFICATION	US	Issued	16/452,254	Jun 25, 2019	11,507,277	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR CHAIN PREDICTION OF MULTIPLE READ COMMANDS	US	Issued	16/289,042	Feb 28, 2019	10,725,781	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR PERFORMING DISCRIMINATIVE PREDICTIVE READ	US	Issued	16/416,911	May 20, 2019	11,010,299	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SETTABLE REPLAY PROTECTED MEMORY BLOCK CHARACTERISTICS IN A LOGIC UNIT	US	Issued	16/357,774	Mar 19, 2019	10,725,687	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-DISRUPTIVE CROSS-PROTOCOL LIVE DATA MIGRATION	US	Issued	16/244,930	Jan 10, 2019	10,877,682	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	BURST MODE OPERATION CONDITIONING FOR A MEMORY DEVICE	US	Issued	16/295,969	Mar 7, 2019	10,916,306	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASURING A LOAD RESISTANCE COUPLED TO A TRANSMISSION LINE	US	Issued	16/186,207	Nov 9, 2018	11,029,348	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH VOLTAGE PROTECTION FOR HIGH-SPEED DATA INTERFACE	US	Issued	17/326,231	May 20, 2021	11,581,305	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH VOLTAGE PROTECTION FOR HIGH-SPEED DATA INTERFACE	US	Issued	16/256,945	Jan 24, 2019	11,043,488	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE WITH WRITE GAP CONDUCTIVE STRUCTURE AND DUAL INDEPENDENT	US	Issued	16/437,270	Jun 11, 2019	10,650,850	May 12, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR DETERMINING SLIDER-DISK CONTACT IN A MAGNETIC RECD	US	Issued	16/212,130	Dec 6, 2018	10,395,678	Aug 27, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH HEATER AND HEAT SINK F	US	Issued	16/926,429	Jul 10, 2020	10,796,717	Oct 6, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR MAGNETIC RECORDING WRITE HEAD WITH HEATER AND HEAT SINK F	US	Issued	16/206,079	Nov 30, 2018	10,789,975	Sep 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	FAILURE MODE STUDY BASED ERROR CORRECTION	US	Issued	16/289,738	Mar 1, 2019	11,106,518	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PREPARING A KEY BLOCK IN A MEMORY SYSTEM	US	Issued	16/244,252	Jan 10, 2019	11,030,096	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH DATA SHAPING MEMORY PARTITIONS	US	Issued	16/452,203	Jun 25, 2019	11,029,827	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SOCKETS FOR REMOVABLE DATA STORAGE DEVICES	US	Issued	16/450,947	Jun 24, 2019	10,881,027	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED NICKEL PLATING PROCESS	US	Issued	16/676,344	Nov 6, 2019	11,192,822	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST-TRUSTED MODULE IN DATA STORAGE DEVICE	US	Issued	16/368,092	Mar 28, 2019	11,188,239	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PRE-BIASING A SPIN TORQUE OSCILLATOR PRIOR TO A WRITE C	US	Issued	16/209,564	Dec 4, 2018	10,410,656	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY SYSTEM INCLUDING A PARTIAL DECODER AND EVENT DETECT	US	Issued	15/929,090	Jan 11, 2019	10,897,627	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL SURFACE MOUNT TYPE C USB CONNECTOR	US	Issued	16/290,116	Mar 1, 2019	10,733,136	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEALED ELECTRICAL FEED-THROUGH HAVING REDUCED LEAK RATE	US	Issued	16/414,641	May 16, 2019	10,629,244	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPER-SPARSE IMAGE COMPRESSION USING CROSS-BAR NON-VOLATILE MEMORY DEV	US	Issued	16/275,167	Feb 13, 2019	11,275,968	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE FORMATTING A DISK SURFACE WITH A WRITE FORMAT AND A	US	Issued	16/242,868	Jan 8, 2019	10,424,334	Sep 24, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE-CONTROLLED INTERLAYER EXCHANGE COUPLING MAGNETORESISTIVE MEMO	US	Issued	16/824,814	Mar 20, 2020	11,049,538	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Control Entity Quota Enforcement	US	Issued	16/441,555	Jun 14, 2019	11,157,205	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Control Entity Quota Usage Mapping	US	Issued	16/441,566	Jun 14, 2019	11,580,082	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Access Control Quota Status Check	US	Issued	16/441,573	Jun 14, 2019	11,204,717	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Transfer Command Latency Of A Host Device	US	Issued	16/290,705	Mar 1, 2019	10,642,764	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO UNLOCK A SECURE DIGITAL MEMORY DEVICE LOCKED IN A SECURE DIGITA	US	Issued	15/929,101	Feb 5, 2019	10,963,592	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH PREDICTOR ENGINE OF HOST TURNAROUND TIME	US	Issued	16/427,076	May 30, 2019	10,761,999	Sep 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED NEURAL NETWORK DATA ORGANIZATION	US	Issued	17/392,111	Aug 2, 2021	11,615,003	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED NEURAL NETWORK DATA ORGANIZATION	US	Issued	16/413,492	May 15, 2019	11,080,152	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Cache Commit Delay for Write Aggregation	US	Issued	16/223,662	Dec 18, 2018	11,347,647	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LEAKY MEMORY HOLE REPAIR AT FABRICATION JOINT	US	Issued	16/354,034	Mar 14, 2019	10,910,083	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TSV SEMICONDUCTOR DEVICE INCLUDING TWO-DIMENSIONAL SHIFT	US	Issued	16/287,737	Feb 27, 2019	10,811,392	Oct 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	3-DIMENSIONAL NAND FLASH LAYER VARIATION AWARE SSD RAID	US	Issued	16/287,251	Feb 27, 2019	11,106,534	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED STORAGE SYSTEM WITH OVERLAY NETWORK	US	Issued	16/289,549	Feb 28, 2019	11,153,169	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HARDWARE ACCELERATED DISCRETIZED NEURAL NETWORK	US	Issued	16/452,110	Jun 25, 2019	11,074,318	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CARD PAD LAYOUT SUPPORTING MULTIPLE COMMUNICATION PROTOCOLS	US	Issued	16/375,529	Apr 4, 2019	11,087,195	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING NOMINAL AND ADAPTIVE MULTI-ACTUATOR DECO	US	Issued	16/252,593	Jan 19, 2019	10,410,657	Sep 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNET FOR MOTOR OF MAGNETIC STORAGE DEVICE	US	Issued	16/553,881	Aug 28, 2019	10,916,269	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTILAYER FLEX CIRCUIT WITH NON-PLATED OUTER METAL LAYER	US	Issued	16/824,269	Mar 19, 2020	11,419,213	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK-SHAPED ARTICLE SHIPPING CONTAINER	US	Issued	16/295,981	Mar 7, 2019	11,031,046	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR FINDING A LAST GOOD PAGE IN NAND OPEN BLOCK	US	Issued	16/398,591	Apr 30, 2019	11,126,368	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST STORAGE CLASS MEMORY USING WRITE ONCE MEMORY CODING	US	Issued	16/397,993	Apr 29, 2019	10,838,661	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR LOCALIZED ANNEALING OF SLIDERS CONFIGURED FO	US	Issued	16/370,772	Mar 29, 2019	10,643,641	May 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONVERTING DISK SURFACE TO READ-ONLY	US	Issued	16/271,840	Feb 10, 2019	10,665,263	May 26, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE DEDUPLICATION BASED ON DATA STORAGE DEVICE CONTROLLER STATUS AN	US	Issued	16/367,900	Mar 28, 2019	10,789,003	Sep 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COUPLING/DECOUPLING ACTUATOR ARM TO/FROM AN ACTUA	US	Issued	16/950,117	Nov 17, 2020	10,991,389	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COUPLING/DECOUPLING ACTUATOR ARM TO/FROM AN ACTUA	US	Issued	16/750,329	Jan 23, 2020	10,872,629	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	RETENTION-AWARE DATA TIERING ALGORITHM FOR HYBRID STORAGE ARRAYS	US	Issued	16/293,393	Mar 5, 2019	11,204,705	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure firmware booting	US	Issued	16/365,346	Mar 26, 2019	11,232,210	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SORTING EXECUTION ORDER OF COMMANDS BASED ON A PRE	US	Issued	16/271,793	Feb 9, 2019	10,522,185	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE HEAD ASSEMBLY WITH TILT-PREVENTING STANDOFF FORMED ON FL	US	Issued	16/374,332	Apr 3, 2019	10,720,179	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CIRCUIT FOR HALTING A PROGRAM COUNTER WHILE FETCHING AN INSTRUC	US	Issued	16/412,968	May 15, 2019	11,550,577	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Piezoelectric-Based Locking Of Actuator Elevator Mechanism For Cold Storage Data St	US	Issued	16/731,740	Dec 31, 2019	10,930,307	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Early Host Command Fetching in a Low Queue Depth E	US	Issued	16/363,097	Mar 25, 2019	11,055,022	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR GENERATING RANDOM NOISE WITH A MAGNETIC DEVICE	US	Issued	16/284,613	Feb 25, 2019	10,719,298	Jul 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID STATE DRIVE LATENCY ESTIMATION INTERFACE FOR HOST PERFORMANCE TUNIN	US	Issued	16/359,662	Mar 20, 2019	11,074,011	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR-BEARING SURFACE DESIGNS WITH A CURVED TRAILING AIR FLOW DAM	US	Issued	16/946,031	Jun 3, 2020	10,891,981	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AIR-BEARING SURFACE DESIGNS WITH A CURVED TRAILING AIR FLOW DAM	US	Issued	16/369,710	Mar 29, 2019	10,714,135	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) READ/WRITE HEAD WITH REVERSED R	US	Issued	16/276,734	Feb 15, 2019	10,522,176	Dec 31, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	READ HEAD INCLUDING SEMICONDUCTOR SPACER AND LONG SPIN DIFFUSION LENGTH	US	Issued	16/293,142	Mar 5, 2019	10,755,733	Aug 25, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODING WITH DATA MAPPING METHODS AND SYSTEMS	US	Issued	16/407,671	May 9, 2019	10,879,940	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PORTABLE DATA STORAGE DEVICE	US	Issued	29/695,667	Jun 20, 2019	D917,473	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT-TORQUE MAGNETORESISTIVE MEMORY CELL WITH INTEGRATED SELECTOR	US	Issued	16/401,172	May 2, 2019	11,271,035	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURE STORAGE USING A REMOVABLE BRIDGE	US	Issued	16/365,080	Mar 26, 2019	11,216,209	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD ASSEMBLY WITH SUSPENSION SYSTEM FOR A TAPE EMBEDDED DRIVE	US	Issued	17/240,691	Apr 26, 2021	11,393,498	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAD ASSEMBLY WITH SUSPENSION SYSTEM FOR A TAPE EMBEDDED DRIVE	US	Issued	16/365,034	Mar 26, 2019	10,991,390	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR AVOIDING BACK TO BACK PROGRAM FAILURE	US	Issued	16/418,319	May 21, 2019	10,706,936	Jul 7, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURATION FOR ACCESSING DATA IN PHYSICAL REALMS	US	Issued	16/410,750	May 13, 2019	10,802,739	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE WITH DIE BUMPS ALIGNED WITH SUBSTRATE BALLS	US	Issued	16/442,983	Jul 17, 2019	11,508,683	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATICALLY ADAPT USER INTERFACE COLOR SCHEME FOR DIGITAL IMAGES AND V	US	Issued	16/453,362	Jun 26, 2019	10,964,288	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING POST-READ DISTURB IN A NONVOLATILE MEMORY DEVICE	US	Issued	16/415,457	May 17, 2019	10,726,891	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOCKET INTERCONNECTOR FOR HIGH PAD COUNT MEMORY CARDS	US	Issued	16/438,945	Jun 12, 2019	11,157,197	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SOCKET INTERCONNECTOR WITH COMPRESSIBLE BALL CONTACTS FOR HIGH PAD COU	US	Issued	16/434,365	Jun 7, 2019	11,023,394	Jun 1, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL PHASE CHANGE MEMORY CELLS AND METHOD OF MAKING THE SAME	US	Issued	16/453,372	Jun 26, 2019	10,991,879	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING AIR BEARING RESONANT FREQUENCY TO CALIBRA	US	Issued	16/396,883	Apr 29, 2019	10,783,913	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PUNCTURED BIT ESTIMATION AND BIT ERROR RATE ESTIMATION	US	Issued	16/357,522	Mar 19, 2019	10,979,072	Apr 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OFFLOADING FILE-INDEXING TO MEMORY CARD FIRMWARE	US	Issued	16/431,667	Jun 4, 2019	11,188,511	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	VIRTUAL PHYSICAL ERASE OF A MEMORY OF A DATA STORAGE DEVICE	US	Issued	16/414,450	May 16, 2019	11,288,007	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR WIRELESS CHARGING AND WIRELESS DATA TRANSFER	US	Issued	16/406,546	May 8, 2019	11,177,859	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System Handling for First Read Disturb	US	Issued	16/432,116	Jun 5, 2019	10,790,031	Sep 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC SWITCHING FOR IMPROVED POWER UTILIZATION	US	Issued	16/444,671	Jun 18, 2019	11,081,191	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE WITH ENHANCED ERROR CORRECTION VIA DATA REARRANGEMENT,	US	Issued	16/430,380	Jun 3, 2019	10,892,784	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION SCHEME IN FLASH MEMORY	US	Issued	16/455,857	Jun 28, 2019	10,936,415	Mar 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED SOLID-STATE DRIVE WRITE PERFORMANCE WITH BACKGROUND ERASE	US	Issued	16/412,859	May 15, 2019	10,658,045	May 19, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR WITH MULTILAYER SEED LAYER BETWEEN THE WRITE POLE	US	Issued	17/228,088	Apr 12, 2021	11,646,052	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TORQUE OSCILLATOR WITH MULTILAYER SEED LAYER BETWEEN THE WRITE POLE	US	Issued	16/792,060	Feb 14, 2020	10,997,993	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE (STT) DEVICE WITH TEMPLATE LAYER FOR HEUSLER ALLOY MA	US	Issued	16/803,952	Feb 27, 2020	10,867,625	Dec 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TRANSFER TORQUE DEVICE WITH OXIDE LAYER BENEATH THE SEED LAYER	US	Issued	16/803,960	Feb 27, 2020	10,839,833	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	AREAL DENSITY CAPABILITY IMPROVEMENT WITH A MAIN POLE SKIN	US	Issued	16/803,962	Feb 27, 2020	10,881,976	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING WRITE HEAD WITH SPIN-TORQUE OSCILLATOR (STO) AND EXTE	US	Issued	16/783,057	Feb 5, 2020	11,170,803	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH NON-MAGNETIC CONDUCTIVE STRUCTURE SURRO	US	Issued	16/811,816	Mar 6, 2020	11,049,513	Jun 29, 2021

WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT TORQUE INDUCED MAGNETIZATION SWITCHING IN A MAGNETIC RECORDING	US	Issued	16/803,958	Feb 27, 2020	11,205,446	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC WRITE HEAD WITH WRITE-FIELD ENHANCEMENT STRUCTURE INCLUDING A	US	Issued	16/857,423	Apr 24, 2020	11,011,190	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DEVICES AND METHODS USING A WRITE-FIELD ENHANCEMENT	US	Issued	16/833,650	Mar 29, 2020	10,957,346	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES WITH INTEGRATED SLIDER VOLTAGE POTENTIAL CONTROL	US	Issued	17/361,496	Jun 29, 2021	11,276,424	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES WITH INTEGRATED SLIDER VOLTAGE POTENTIAL CONTROL	US	Issued	16/833,942	Mar 30, 2020	11,087,784	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING A FAULTY MEMORY BLOCK	US	Issued	16/412,657	May 15, 2019	10,770,158	Sep 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENABLING HIGH SPEED COMMAND ADDRESS INTERFACE FOR RANDOM READ	US	Issued	16/431,511	Jun 4, 2019	10,997,097	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM COUNTERMEASURE FOR READ OPERATION DURING TLC PROGRAM SUSPEND	US	Issued	16/440,018	Jun 13, 2019	10,832,789	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR FREQUENCY- AND PHASE-BASED DETECTION OF MAGNET	US	Issued	16/819,636	Mar 16, 2020	11,579,217	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR MOLECULE DETECTION BASED ON THERMAL STABILITIES	US	Issued	16/727,064	Dec 26, 2019	11,609,208	Mar 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL SENSOR ARRAY FOR MOLECULE DETECTION AND RELATED DETECTION SCHEM	US	Issued	16/697,013	Nov 26, 2019	11,327,073	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetoresistive Sensor Array for Molecule Detection and Related Detection Schemes	US	Issued	16/659,383	Oct 21, 2019	11,112,468	Sep 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED OPTICAL DETECTION FOR NUCLEIC ACID SEQUENCING USING THERMALLY-D	US	Issued	16/569,823	Sep 13, 2019	11,208,682	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Execution Condition Embedded in a Command or a Request to Storage Device	US	Issued	16/438,381	Jun 11, 2019	11,275,527	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Flash Memory Polling	US	Issued	16/449,985	Jun 24, 2019	10,949,115	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL XOR PROTECTION	US	Issued	16/447,861	Jun 20, 2019	10,929,224	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TRANSMITTING DELTA SERVO CONTROL VALUE OVER SERIAL IN	US	Issued	16/359,747	Mar 20, 2019	10,504,553	Dec 10, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed batch processing of non-uniform data objects	US	Issued	16/447,443	Jun 20, 2019	11,010,103	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE WIRE DISTRIBUTION IN DISTRIBUTED SYSTEMS	US	Issued	16/447,542	Jun 20, 2019	10,996,993	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE USAGE OF IRREGULAR CODE SCHEMAS BASED ON SPECIFIC SYSTEM LEVEL TR	US	Issued	16/433,535	Jun 6, 2019	10,977,125	Apr 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR WIRELESS CHARGING AND WIRELESS DATA TRANSFER FO	US	Issued	16/406,612	May 8, 2019	11,532,950	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE CONTAINING OVONIC THRESHOLD SWITCH MATERIAL THERMAL ISOL	US	Issued	16/442,858	Jun 17, 2019	11,031,435	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Perpendicular Sot Mram	US	Issued	16/458,651	Jul 1, 2019	10,891,999	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL LOOP CUT PROCESS FOR A THREE-DIMENSIONAL MEMORY DEVICE USING	US	Issued	16/436,185	Jun 10, 2019	11,011,581	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL PHASE CHANGE MEMORY DEVICE INCLUDING VERTICALLY CONST	US	Issued	16/440,250	Jun 13, 2019	11,043,537	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING LATERALLY CONSTRICTED CURRENT	US	Issued	16/440,378	Jun 13, 2019	10,964,752	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE FOR CHARGING, DATA STORAGE, OR DATA TRANSFER	US	Issued	29/690,857	May 10, 2019	D917,472	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED CACHE WITH IN-NETWORK PREFETCH	US	Issued	16/548,116	Aug 22, 2019	11,656,992	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE HEADS HAVING CONDUCTING SIDE GAP FOR DIRECTING CURRENT	US	Issued	16/453,354	Jun 26, 2019	11,557,314	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN ORBITAL TORQUE VIA SPIN HALL EFFECT BASED ENERGY ASSISTED MAGNETIC REC	US	Issued	16/996,723	Aug 18, 2020	10,997,991	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN ORBITAL TORQUE VIA SPIN HALL EFFECT BASED ENERGY ASSISTED MAGNETIC REC	US	Issued	16/453,986	Jun 26, 2019	10,789,977	Sep 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN ORBITAL TORQUE BASED MICROWAVE ASSISTED MAGNETIC RECORDING WITH DU	US	Issued	17/107,611	Nov 30, 2020	11,170,804	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN ORBITAL TORQUE BASED MICROWAVE ASSISTED MAGNETIC RECORDING WITH DU	US	Issued	16/453,991	Jun 26, 2019	10,867,626	Dec 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENABLING FASTER AND REGULATED DEVICE INITIALIZATION TIMES	US	Issued	16/453,146	Jun 26, 2019	10,877,900	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Management of Zoned Storage Drives	US	Issued	16/452,522	Jun 25, 2019	11,204,886	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Memory Backlog Hinting for Variable Capacity	US	Issued	16/444,461	Jun 18, 2019	10,908,844	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BILAYER HOT SEED TO REDUCE GAP FIELD FOR MAGNETIC RECORDING HEADS	US	Issued	16/438,377	Jun 11, 2019	10,997,989	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Enabling Host-Driven Regional Performance in Memo	US	Issued	16/444,418	Jun 18, 2019	11,030,106	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Meta Object Replication	US	Issued	16/447,291	Jun 20, 2019	11,074,002	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Priority Meta Object Replication	US	Issued	16/447,321	Jun 20, 2019	11,079,960	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Object Storage System with Versioned Meta Objects	US	Issued	16/447,366	Jun 20, 2019	11,093,465	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Preventing Head-of-Line Blocking in a Completion Pat	US	Issued	16/410,116	May 13, 2019	10,740,243	Aug 11, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Hit-Rate-Score-Based Selective Prediction of Future Ra	US	Issued	16/454,850	Jun 27, 2019	10,976,964	Apr 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DATA WRITE MANAGEMENT	US	Issued	16/454,885	Jun 27, 2019	11,068,165	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR ADDRESS TABLE EVICTION MANAGEMENT	US	Issued	16/453,458	Jun 26, 2019	10,922,235	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Hot Spot Cooling For Data Storage System	US	Issued	16/417,572	May 20, 2019	11,429,163	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	GRANULAR REFRESH RATE CONTROL FOR MEMORY DEVICES BASED ON BIT POSITION	US	Issued	16/586,903	Sep 27, 2019	10,991,414	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Host and Method for Storage System Calibration	US	Issued	16/425,455	May 29, 2019	10,997,081	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Storage System Calibration	US	Issued	16/425,483	May 29, 2019	11,010,057	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC AND ADAPTIVE DATA READ REQUEST SCHEDULING	US	Issued	16/522,505	Jul 25, 2019	11,010,095	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC HOST BUFFER POINTER PATTERN DETECTION	US	Issued	16/512,312	Jul 15, 2019	11,199,992	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus for Obsolete Mapping Counting in NAND-based Storage Devices	US	Issued	16/538,619	Aug 12, 2019	11,199,983	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ROLLING XOR PROTECTION IN EFFICIENT PIPELINE	US	Issued	17/314,772	May 7, 2021	11,500,569	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ROLLING XOR PROTECTION IN EFFICIENT PIPELINE	US	Issued	16/526,866	Jul 30, 2019	11,029,874	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Delayed Write Failure Logging	US	Issued	16/452,128	Jun 25, 2019	11,294,807	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH FAST SLC OPERATION	US	Issued	16/450,817	Jun 24, 2019	11,164,634	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dummy host command generation for supporting higher Maximum Data Transfer Sizes	US	Issued	16/739,095	Jan 9, 2020	10,901,624	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OPEN CHANNEL VECTOR COMMAND EXECUTION	US	Issued	16/459,183	Jul 1, 2019	10,901,733	Jan 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR DELAYING FUNDAMENTAL RESET IN POWER LOSS PROTECTION (PLP) ENA	US	Issued	16/522,492	Jul 25, 2019	11,157,439	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PHY CALIBRATION FOR ACTIVE-IDLE POWER REDUCTION	US	Issued	16/459,194	Jul 1, 2019	11,137,819	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER TARGET CALIBRATION FOR CONTROLLING DRIVE-TO-DRIVE PERFORMANCE VAR	US	Issued	16/440,472	Jun 13, 2019	11,449,245	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED POWER AND THERMAL MANAGEMENT IN NON-VOLATILE MEMORY	US	Issued	16/457,277	Jun 28, 2019	11,079,822	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT POWER SAVING MODE FOR SOLID STATE DRIVE (SSD) SYSTEMS	US	Issued	16/446,927	Jun 20, 2019	11,397,460	Jul 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO SWITCH BETWEEN TRADITIONAL SSD AND OPEN-CHANNEL SSD WITHOUT	US	Issued	16/449,718	Jun 24, 2019	10,860,228	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	YIELD IMPROVEMENT THROUGH BLOCK BUDGET OPTIMIZATION BY USING A TRANSIEN	US	Issued	16/449,728	Jun 24, 2019	11,036,411	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STREAM NON-VOLATILE STORAGE SYSTEM	US	Issued	16/445,498	Jun 19, 2019	10,990,311	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT ERASE AND PROGRAMMING OF NONVOLATILE MEMORY	US	Issued	16/440,631	Jun 13, 2019	10,892,025	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES AND CONNECTORS FOR SAME	US	Issued	16/457,134	Jun 28, 2019	10,716,225	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING ELEVATOR ACTUATOR FOR DISK DRIVE	US	Issued	16/718,828	Dec 18, 2019	10,783,912	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING ELEVATOR ACTUATOR FOR DISK DRIVE	US	Issued	16/995,050	Aug 17, 2020	11,043,243	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING ELEVATOR ACTUATOR FOR DISK DRIVE	US	Issued	16/806,029	Mar 2, 2020	10,839,838	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING ELEVATOR ACTUATOR FOR DISK DRIVE	US	Issued	16/433,110	Jun 6, 2019	10,622,012	Apr 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Read Trim for Second Read Data Retention	US	Issued	16/443,011	Jun 17, 2019	10,996,862	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART VIDEO SURVEILLANCE SYSTEM USING A NEURAL NETWORK ENGINE	US	Issued	16/446,316	Jun 19, 2019	11,232,327	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PERPENDICULAR SPIN TRANSFER TORQUE MRAM MEMORY CELL WITH IN-STACK THERM	US	Issued	16/459,369	Jul 1, 2019	11,004,489	May 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED PERPENDICULAR SPIN TRANSFER TORQUE MRAM MEMORY CELL	US	Issued	16/459,389	Jul 1, 2019	10,777,248	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Reduction of Adjacent Rack Traffic in Multi-Rack Distributed Object Storage Systems	US	Issued	16/451,357	Jun 25, 2019	11,343,308	May 24, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ENABLING SECONDARY SCRATCHPAD CACHE WITH SOLID-STATE DEVICES FOR LOW COS	US	Issued	16/510,550	Jul 12, 2019	10,732,878	Aug 4, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MODULAR ADJUSTABLE COMPUTING RACK	US	Issued	16/457,187	Jun 28, 2019	11,064,627	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK DRIVE BIASING TWO WRITE ASSIST ELEMENTS USING THREE TERMINAL CONTROL	US	Issued	16/885,143	May 27, 2020	11,615,804	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CONTROLLER HAVING DATA AUGMENTATION COMPONENTS FOR USE WITH	US	Issued	16/718,148	Dec 17, 2019	11,520,521	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH ON-CHIP DATA AUGMENTATION COMPONENTS FO	US	Issued	16/447,619	Jun 20, 2019	11,501,109	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Parallel Storage Node Processing of Data Functions	US	Issued	16/451,739	Jun 25, 2019	11,055,018	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Node Processing of Data Functions Using Overlapping Symbols	US	Issued	16/451,801	Jun 25, 2019	11,314,593	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Serial Storage Node Processing of Data Functions	US	Issued	16/451,891	Jun 25, 2019	11,281,531	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Node Processing of Predefined Data Functions	US	Issued	16/451,976	Jun 25, 2019	10,990,324	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING IMPROVED AREAL DENSITY C	US	Issued	17/644,231	Dec 14, 2021	11,557,315	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY ASSISTED MAGNETIC RECORDING HEAD HAVING IMPROVED AREAL DENSITY C	US	Issued	16/906,480	Jun 19, 2020	11,227,627	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE ASSIST STACK TO REDUCE RESISTANCE AND IMPROVE RELIABILITY	US	Issued	16/917,487	Jun 30, 2020	11,417,356	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL PROCESSING OF FILTERED TRANSACTION LOGS	US	Issued	16/828,953	Mar 24, 2020	11,657,025	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH HYBRID COMMAND	US	Issued	16/405,818	May 7, 2019	11,137,914	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE ACCELERATOR FOR SPARSE TENSORS IN CONVOLUTIONAL NEURAL NETWORK	US	Issued	16/830,167	Mar 25, 2020	11,462,003	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTATIONAL RESOURCE ALLOCATION IN ENSEMBLE MACHINE LEARNING SYSTEMS	US	Issued	16/563,776	Sep 6, 2019	11,487,580	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WAFER TESTING SYSTEM INCLUDING A WAFER-FLATTENING MULTI-ZONE VACUUM CH	US	Issued	16/535,505	Aug 8, 2019	11,199,562	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SYMMETRICAL ACTUATOR HARD DISK DRIVE	US	Issued	16/457,964	Jun 29, 2019	10,699,730	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR MANAGING PHYSICAL-TO-LOGICAL ADDRESS INFORMATI	US	Issued	16/455,900	Jun 28, 2019	11,003,373	May 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LOG-BASED STORAGE FOR DIFFERENT DATA TYPES IN NON-VOLATILE MEMORY	US	Issued	16/457,298	Jun 28, 2019	10,990,316	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OPERATIONS IN PREDICTABLE LATENCY MODE	US	Issued	16/456,564	Jun 28, 2019	11,023,138	Jun 1, 2021

WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIDIMENSIONAL PSEUDORANDOM BINARY SEQUENCE ANALYSIS FOR A MEMORY	US	Issued	16/456,522	Jun 28, 2019	10,937,510	Mar 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Connection Load Distribution in Distributed Object Storage Systems	US	Issued	16/451,402	Jun 25, 2019	11,064,020	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Initial Data Placement in Hybrid Object Storage System	US	Issued	16/581,127	Sep 24, 2019	11,231,876	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH TAPERED MAIN POLE AND	US	Issued	17/869,991	Jul 21, 2022	11,651,791	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH TAPERED MAIN POLE AND	US	Issued	16/943,995	Jul 30, 2020	11,462,243	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DISABLING SWINGING OF SPINDLE MOTOR SPEED BASED ON P	US	Issued	16/444,976	Jun 18, 2019	10,665,255	May 26, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPUTING NOTCH FILTERS FOR MULTIPLE TEMPERATURES	US	Issued	16/454,376	Jun 27, 2019	10,629,234	Apr 21, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE GENERATING PES RRO AND DATA SECTOR SQUEEZE RRO FOR A	US	Issued	16/456,242	Jun 28, 2019	10,607,645	Mar 31, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING SUPPLY CURRENT LIMIT	US	Issued	16/451,368	Jun 25, 2019	11,126,248	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CARD SYSTEM WITH IMPROVED PASSWORD RESET METHOD	US	Issued	16/577,055	Sep 20, 2019	11,449,599	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-Sequential Zoned Namespaces	US	Issued	16/703,643	Dec 4, 2019	11,294,827	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Zone Formation for Zoned Namespaces	US	Issued	16/703,646	Dec 4, 2019	11,416,161	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Host-Assisted Data Recovery Assurance for Data Center Stora	US	Issued	16/739,098	Jan 9, 2020	11,531,590	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LIGHTWEIGHT PROXY FOR HANDLING SCSI COMMANDS IN AN ACTIVE ARRAY-STANDBY	US	Issued	16/538,112	Aug 12, 2019	11,269,802	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEFINING TRACK TRAJECTORY TO REDUCE AC TRACK SQUEEZE	US	Issued	16/874,899	May 15, 2020	11,049,518	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEFINING TRACK TRAJECTORY TO REDUCE AC TRACK SQUEEZE	US	Issued	16/456,381	Jun 28, 2019	10,699,745	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	METADATA COMPACTION IN A DISTRIBUTED STORAGE SYSTEM	US	Issued	16/828,948	Mar 24, 2020	11,232,070	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED OBJECT STORAGE SYSTEM WITH DYNAMIC SPREADING	US	Issued	16/828,945	Mar 24, 2020	11,157,186	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Search Time Optimization in Solid-State Devices	US	Issued	16/557,129	Aug 30, 2019	11,036,435	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING ABNORMALITY WITH A WRITE ASSIST ELEMENT BAS	US	Issued	16/518,918	Jul 22, 2019	10,699,736	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Devices Using Virtual Side Shields for Improved Areal Density Capa	US	Issued	16/564,704	Sep 9, 2019	10,832,710	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	USE OF ERROR CORRECTION-BASED METRIC FOR IDENTIFYING POORLY PERFORMING D	US	Issued	16/688,992	Nov 19, 2019	11,237,893	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	USE OF RECOVERY BEHAVIOR FOR PROGNOSTICATING AND IN-SITU REPAIR OF DATA ST	US	Issued	16/453,368	Jun 26, 2019	10,969,969	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BASE CONDUCTING LAYER BENEATH GRAPHITE LAYER OF CERAMIC CATHODE FOR USE	US	Issued	17/592,350	Feb 3, 2022	11,527,390	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BASE CONDUCTING LAYER BENEATH GRAPHITE LAYER OF CERAMIC CATHODE FOR USE	US	Issued	16/583,121	Sep 25, 2019	11,270,872	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH FILTERING OF DATA SAMPLES FOR A MONITOR	US	Issued	16/566,645	Sep 10, 2019	11,023,380	Jun 1, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Replication Configuration for Multiple Heterogeneous Data Stores	US	Issued	16/565,706	Sep 10, 2019	11,169,728	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor with Dual TMR Films and the Method of Making the Same	US	Issued	16/718,346	Dec 18, 2019	11,493,573	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	High Sensitivity TMR Magnetic Sensor	US	Issued	16/718,351	Dec 18, 2019	11,428,758	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TMR Sensor with Magnetic Tunnel Junctions with Shape Anisotropy	US	Issued	16/728,507	Dec 27, 2019	11,385,306	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor Array with Dual TMR Film	US	Issued	16/718,667	Dec 18, 2019	11,385,305	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CLASS MEMORY ACCESS	US	Issued	16/683,095	Nov 13, 2019	11,016,905	May 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Large Field Range TMR Sensor using Free Layer Exchange Pinning	US	Issued	16/729,080	Dec 27, 2019	11,209,505	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TMR Sensor with Magnetic Tunnel Junctions with a Free Layer Having an Intrinsic Anis	US	Issued	16/728,514	Dec 27, 2019	11,199,594	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor Array with One TMR Stack Having Two Free Layers	US	Issued	16/730,746	Dec 30, 2019	11,415,645	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Bottom leads chemical mechanical planarization for TMR magnetic sensors	US	Issued	16/730,771	Dec 30, 2019	11,201,280	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHODS FOR WRITING RANDOM ACCESS MEMORIES	US	Issued	17/319,991	May 13, 2021	11,393,517	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE EFFICIENCY IN MAGNETO-RESISTIVE RANDOM ACCESS MEMORIES	US	Issued	16/586,899	Sep 27, 2019	11,031,061	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Validation of Hints Prior to Garbage Collection	US	Issued	16/569,163	Sep 12, 2019	11,573,893	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Erasure Coded Data Shards Containing Multiple Data Objects	US	Issued	16/669,853	Oct 31, 2019	11,074,129	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Hierarchical Blacklisting of Storage System Components	US	Issued	16/684,147	Nov 14, 2019	11,334,279	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER REDUCTION IN DISTRIBUTED STORAGE SYSTEMS	US	Issued	16/667,670	Oct 29, 2019	11,599,283	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Request Throttling in Distributed Storage Systems	US	Issued	16/721,862	Dec 19, 2019	11,531,493	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT TRANSACTION LOG AND DATABASE PROCESSING	US	Issued	16/710,440	Dec 11, 2019	11,544,232	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TRANSFER TORQUE MAGNETORESISTIVE MEMORY DEVICE WITH A FREE LAYER ST	US	Issued	16/558,552	Sep 3, 2019	11,031,058	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FAULT TOLERANT DATA COHERENCE IN LARGE-SCALE DISTRIBUTED CACHE SYSTEMS	US	Issued	16/697,019	Nov 26, 2019	11,360,899	Jun 14, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	UNCORRECTABLE ERROR CORRECTION CODE (UECC) RECOVERY TIME IMPROVEMENT	US	Issued	16/585,503	Sep 27, 2019	11,036,582	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Extending Operating Temperature of Storage Device	US	Issued	16/912,398	Jun 25, 2020	11,107,518	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Extending Operating Temperature of Storage Device	US	Issued	16/601,236	Oct 14, 2019	11,062,756	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficiently Identifying Command Readiness Based on System State And Data Spread in	US	Issued	16/600,953	Oct 14, 2019	11,256,423	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Interleaved Host Reset and Next Re-Initialization Operations	US	Issued	17/094,686	Nov 10, 2020	11,422,828	Mar 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Interleaved Host Reset and Next Re-Initialization Operations	US	Issued	16/600,816	Oct 14, 2019	10,860,333	Dec 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Performance of Non Data Word Line Maintenance in Sub Block Mode	US	Issued	16/584,684	Sep 26, 2019	10,832,790	Nov 10, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING DYNAMIC TRACK TRAJECTORIES	US	Issued	16/532,717	Aug 6, 2019	10,748,568	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING DIGITAL VIDEOS USING CONTROLLERS OF DATA STORAGE DEVICES	US	Issued	17/345,676	Jun 11, 2021	11,503,285	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING DIGITAL VIDEOS USING CONTROLLERS OF DATA STORAGE DEVICES	US	Issued	16/670,112	Oct 31, 2019	11,064,194	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METADATA REDUCTION IN A DISTRIBUTED STORAGE SYSTEM	US	Issued	16/681,833	Nov 13, 2019	11,409,720	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed Data Blocks Using Storage Path Cost Values	US	Issued	16/684,314	Nov 14, 2019	11,314,431	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor Bias Point Adjustment Method	US	Issued	16/730,726	Dec 30, 2019	11,169,226	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Sorting-Based Method for Random Read Command Prediction in a	US	Issued	16/708,107	Dec 9, 2019	11,281,981	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Visualizing Sleep Mode Inner State Processing	US	Issued	16/667,565	Oct 29, 2019	11,086,389	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic sensor array with different RA TMR film	US	Issued	16/730,730	Dec 30, 2019	11,598,828	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH SELECTIVE INTERLEAVED CODING BASED ON BLOCK REL	US	Issued	16/586,895	Sep 27, 2019	10,871,910	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTITIONED NON-VOLATILE MEMORY EXPRESS PROTOCOL FOR CONTROLLER MEMOR	US	Issued	16/662,340	Oct 24, 2019	11,188,251	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Free Layer TMR Magnetic Field Sensor	US	Issued	16/730,777	Dec 30, 2019	11,169,227	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Wireless security protocol	US	Issued	16/925,343	Jul 10, 2020	11,582,607	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor with Serial Resistor for Asymmetric Sensing Field Range	US	Issued	16/730,784	Dec 30, 2019	11,169,228	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ANGLED AND ELONGATE LIFT TAB FOR MAGNETIC STORAGE DEVICE	US	Issued	16/716,115	Dec 16, 2019	10,950,263	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Embedded PHY (EPHY) IP Core for FPGA	US	Issued	16/805,244	Feb 28, 2020	11,675,008	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASURING PERFORMANCE METRICS FOR DATA STORAGE DEVICES	US	Issued	16/721,314	Dec 19, 2019	11,237,760	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Cross Storage Protocol Access Response for Object Data Stores	US	Issued	16/704,824	Dec 5, 2019	11,082,494	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ABORTING WRITE OPERATION BASED ON ACCUMULATED TRAC	US	Issued	16/655,630	Oct 17, 2019	10,748,567	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE WITH INCREASED ENDURANCE	US	Issued	16/791,560	Feb 14, 2020	11,061,768	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR QUEUING DEVICE MANAGEMENT CONFIGURATION REQU	US	Issued	16/825,762	Mar 20, 2020	11,294,832	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Video Frame Segregation to Optimize Storage	US	Issued	16/708,091	Dec 9, 2019	10,841,645	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Reducing Read-Retry Duration	US	Issued	16/708,006	Dec 9, 2019	11,086,804	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Selective Allocation of Redundant Data Blocks to Background Operations	US	Issued	16/683,968	Nov 14, 2019	11,182,107	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ITERATIVE DECODER PERFORMANCE PREDICTION USING MACHINE LEARNING	US	Issued	16/675,165	Nov 5, 2019	11,088,712	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CAPABLE OF OVERRIDING A SERVO COMMAND TO AVOID AN O	US	Issued	16/583,832	Sep 26, 2019	10,714,133	Jul 14, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	PATTERN TRACKING FOR EFFICIENTLY PREDICTING CONTROL PAGES	US	Issued	16/688,080	Nov 19, 2019	11,314,445	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Writer for Advanced Magnetic Recording	US	Issued	17/463,368	Aug 31, 2021	11,430,469	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Writer for Advanced Magnetic Recording	US	Issued	17/001,593	Aug 24, 2020	11,127,417	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Writer for Advanced Magnetic Recording	US	Issued	16/695,072	Nov 25, 2019	10,878,841	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Helical Coils Design and Process for Dual Writer Magnetic Recording	US	Issued	16/691,316	Nov 21, 2019	10,872,625	Dec 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT BIT READ MODE SELECTION FOR NON-VOLATILE MEMORY	US	Issued	16/723,192	Dec 20, 2019	11,029,889	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Skip Coding for Fractional Bit-Per-Cell NAND Memories	US	Issued	16/709,338	Dec 10, 2019	10,964,390	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DIFFERENT WORD LINE PROGRAMMING ORDERS IN NON-VOLATILE MEMORY FOR ERR	US	Issued	16/709,709	Dec 10, 2019	10,943,662	Mar 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ON-CHIP PRINCIPAL COMPONENT ANALYSIS FOR GENER	US	Issued	17/545,926	Dec 8, 2021	11,662,904	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ON-CHIP PRINCIPAL COMPONENT ANALYSIS FOR GENER	US	Issued	16/706,618	Dec 6, 2019	11,216,184	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Writer Designs with SOT and STT Assisted Recording	US	Issued	16/730,758	Dec 30, 2019	10,839,831	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR recording head with high damping trailing shield seed layer	US	Issued	16/924,074	Jul 8, 2020	10,891,977	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR recording head with high damping trailing shield seed layer	US	Issued	16/730,713	Dec 30, 2019	10,839,832	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRIC FIELD CONTROLLABLE SPIN FILTER TUNNEL JUNCTION MAGNETORESISTIVE M	US	Issued	16/686,860	Nov 18, 2019	11,069,741	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRIC FIELD CONTROLLABLE SPIN FILTER TUNNEL JUNCTION MAGNETORESISTIVE M	US	Issued	16/686,917	Nov 18, 2019	10,964,748	Mar 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A HIGH DIELECTRIC CONSTANT CAPR	US	Issued	16/692,903	Nov 22, 2019	10,991,407	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A REFERENCE LAYER SIDE DIELECTR	US	Issued	17/203,420	Mar 16, 2021	11,361,805	Jun 14, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A MAGNESIUM CONTAINING DUST	US	Issued	17/210,919	Mar 24, 2021	11,404,632	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A MAGNESIUM CONTAINING DUST	US	Issued	17/210,936	Mar 24, 2021	11,404,193	Aug 2, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A HIGH DIELECTRIC CONSTANT CAP	US	Issued	16/692,965	Nov 22, 2019	11,005,034	May 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A HIGH DIELECTRIC CONSTANT CAP	US	Issued	16/693,006	Nov 22, 2019	11,056,640	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DEBUG SYSTEMS FOR DETERMINISTIC VALIDATION OF DATA STORAGE DEVICES	US	Issued	16/731,787	Dec 31, 2019	11,422,921	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH ADAPTIVE COMMAND PROCESSING	US	Issued	16/698,704	Nov 27, 2019	11,262,947	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic sensor array with single TMR film plus laser annealing and characterization	US	Issued	17/448,166	Sep 20, 2021	11,495,252	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic sensor array with single TMR film plus laser annealing and characterization	US	Issued	16/879,601	May 20, 2020	11,170,806	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE RANDOM ACCESS MEMORY CONTAINING MULTILAYER SYNTHETIC	US	Issued	16/661,210	Oct 23, 2019	11,152,047	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Zoned Namespaces in Solid-State Drives	US	Issued	16/728,917	Dec 27, 2019	11,209,989	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK DRIVE WITH A CONTACT PAD FOR PROTECTION OF THE W	US	Issued	16/702,797	Dec 4, 2019	10,748,561	Aug 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH DYNAMIC STRIPE LENGTH MANAGER	US	Issued	16/723,513	Dec 20, 2019	11,042,432	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-LINE DATA OPERATIONS FOR STORAGE SYSTEMS	US	Issued	16/725,824	Dec 23, 2019	11,297,010	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	VALIDATING FIRMWARE FOR DATA STORAGE DEVICES	US	Issued	15/929,181	Dec 6, 2019	10,997,297	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Health Tracking for Differentiated Data Recovery Configurations	US	Issued	16/741,952	Jan 14, 2020	11,210,183	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Enabling a Direct Accessible Block in a Memory D	US	Issued	16/732,649	Jan 2, 2020	11,237,838	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Caching a Single Mapping Entry for a Random Read Co	US	Issued	16/708,054	Dec 9, 2019	11,086,786	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Barriers for Dependent Operations among Sharded Data Stores	US	Issued	16/702,340	Dec 3, 2019	11,409,711	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Replication State for Deleted Objects	US	Issued	16/701,947	Dec 3, 2019	11,221,785	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Dependent Delete Operations among Data Stores	US	Issued	16/702,346	Dec 3, 2019	11,567,899	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR HANDLING TEMPERATURE DEPENDENT FAILURES IN A	US	Issued	16/737,551	Jan 8, 2020	11,056,211	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RECOVERY FROM SUBMISSION QUEUE FETCHING ERRORS	US	Issued	16/712,730	Dec 12, 2019	11,599,481	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Sealed Electronic Component Rework Patch	US	Issued	16/752,638	Jan 25, 2020	10,803,908	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Content Aware Bit Flipping Decoder	US	Issued	16/744,061	Jan 15, 2020	11,057,059	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Predictive Latency Attributes	US	Issued	16/736,719	Jan 7, 2020	11,416,171	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and Device for Simultaneously Decoding Data in Parallel to Improve Quality of	US	Issued	16/744,059	Jan 15, 2020	11,487,544	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Access Control in CMB/PMR Virtualization Environment	US	Issued	16/776,198	Jan 29, 2020	11,409,466	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe SGL Bit Bucket Transfers	US	Issued	16/778,177	Jan 31, 2020	11,200,180	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Reduced Latency of Read-Modify-Write Operations	US	Issued	16/733,652	Jan 3, 2020	11,294,824	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Nand Dropped Command Detection And Recovery	US	Issued	16/786,889	Feb 10, 2020	11,150,841	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXECUTING ACCESS COMMANDS BASED ON LEAPFROG SORT	US	Issued	16/688,853	Nov 19, 2019	11,010,099	May 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADAPTOR WITH SECUREMENT MECHANISM	US	Issued	16/799,575	Feb 24, 2020	11,570,924	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Secure Host Controller Memory Buffer Access	US	Issued	16/731,590	Dec 31, 2019	11,650,937	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Host and Method for Interleaving Data in a Storage System for Enhanced Quality of Ser	US	Issued	16/720,455	Dec 19, 2019	11,150,839	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Interleaving Data for Enhanced Quality of Service	US	Issued	16/720,600	Dec 19, 2019	11,221,950	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for User-Defined Data Archiving	US	Issued	16/713,620	Dec 13, 2019	11,301,168	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BiSb Topological Insulator with Novel Buffer Layer that Promotes a BiSb (012) Orientat	US	Issued	17/100,199	Nov 20, 2020	11,694,713	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Spintronic Devices with Narrow Spin Polarization Layers	US	Issued	16/836,687	Mar 31, 2020	10,943,611	Mar 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD Operation in a Nonoptimal Memory Environment	US	Issued	16/915,709	Jun 29, 2020	11,334,251	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR Media To Assist Optically Transparent Build-Up On NFT To Improve Reliability	US	Issued	16/805,403	Feb 28, 2020	10,950,267	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	In-Situ NFT Pre-Treatment To Accumulate Optically Transparent Material on NFT To Im	US	Issued	17/172,371	Feb 10, 2021	11,244,703	Feb 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	In-situ NFT pre-treatment to accumulate optically transparent material on NFT to imp	US	Issued	16/805,414	Feb 28, 2020	10,950,266	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING PRINTED CIRCUIT BOARD INSTALLED ALONG ARC	US	Issued	16/691,902	Nov 22, 2019	10,726,864	Jul 28, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Load/Unload Ramp Mechanism For Reduced Cracking	US	Issued	16/794,079	Feb 18, 2020	10,943,614	Mar 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Combined QLC Programming Method	US	Issued	16/818,571	Mar 13, 2020	11,137,944	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual SLC/QLC Programming and Resource Releasing	US	Issued	16/781,885	Feb 4, 2020	11,205,473	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OBJECT DETECTION USING MULTIPLE NEURAL NETWORK CONFIGURATIONS	US	Issued	16/803,851	Feb 27, 2020	11,301,705	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TRAINING DATA SAMPLE SELECTION FOR USE WITH NON-VOLATILE MEMORY AND MA	US	Issued	16/784,077	Feb 6, 2020	11,216,696	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PAD INDICATION FOR DEVICE CAPABILITY	US	Issued	16/700,501	Dec 2, 2019	11,137,932	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ACCESSING MAGNETIC TAPE BY ACTUATING HEAD IN TWO DIM	US	Issued	16/716,796	Dec 17, 2019	11,107,494	Aug 31, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Cycle Borrowing Counter	US	Issued	16/814,631	Mar 10, 2020	11,184,007	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized Dual Thermal Fly-Height Design For Dual Writers For Advanced Magnetic Re	US	Issued	17/380,811	Jul 20, 2021	11,404,080	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized Dual Thermal Fly-Height Design For Dual Writers For Advanced Magnetic Re	US	Issued	16/831,728	Mar 26, 2020	11,087,789	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OFFSET SWAGE BASEPLATE FOR STACKED ASSEMBLY	US	Issued	16/801,921	Feb 26, 2020	11,232,811	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Unlocking a Data Storage Device	US	Issued	16/706,780	Dec 8, 2019	11,556,665	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-device unlocking of a data storage device	US	Issued	16/706,797	Dec 8, 2019	11,366,933	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Self-formatting data storage device	US	Issued	16/706,822	Dec 8, 2019	11,163,442	Nov 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-role unlocking of a data storage device	US	Issued	16/738,904	Jan 9, 2020	11,334,677	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Recovery key for unlocking a data storage device	US	Issued	16/738,956	Jan 9, 2020	11,606,206	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Remote grant of access to locked data storage device	US	Issued	16/739,015	Jan 9, 2020	11,469,885	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Enrolment of pre-authorized device	US	Issued	16/739,066	Jan 9, 2020	11,265,152	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure logging of data storage device events	US	Issued	16/739,051	Jan 9, 2020	11,088,832	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Ultra-low RA and high TMR magnetic sensor with radiation reflective lead	US	Issued	16/794,100	Feb 18, 2020	11,125,840	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION STANDOFF ARRANGEMENT FOR CONFINING ADHESIVE	US	Issued	16/778,433	Jan 31, 2020	11,081,130	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Maintaining Uniform Hot Count Distribution Using Sm	US	Issued	16/773,314	Jan 27, 2020	11,366,597	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR ADDRESS TABLE CACHE MANAGEMENT BASED ON CORREL	US	Issued	16/788,117	Feb 11, 2020	10,997,080	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Boundary Wordline Data Retention Handling	US	Issued	16/780,281	Feb 3, 2020	11,334,256	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SWAGE PLATE ASSEMBLY WITH SWAGE BOSS INSERT	US	Issued	16/824,514	Mar 19, 2020	11,227,630	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetoresistive Sensor with Improved Magnetic Properties and Magnetostriction Co	US	Issued	16/851,568	Apr 17, 2020	10,950,260	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TANGENTIAL AND LONGITUDINAL GUIDE RAMP FOR MAGNETIC STORAGE DEVICE	US	Issued	16/823,185	Mar 18, 2020	10,910,005	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSOR SYSTEM WITH LOW POWER SENSOR DEVICES AND HIGH POWER SENSOR DEVI	US	Issued	16/836,764	Mar 31, 2020	11,233,956	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING DEVICE CAPABLE OF PROVIDING NEGATIVE ELE	US	Issued	16/791,238	Feb 14, 2020	10,910,007	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Very Low Complexity SECDED codes	US	Issued	16/909,794	Jun 23, 2020	11,152,958	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING SINGLE-LAYER MULTI-LEVEL MAGNETIC RECORDING	US	Issued	16/743,827	Jan 15, 2020	10,803,896	Oct 13, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	VARIABLE READ SCAN FOR SOLID-STATE STORAGE DEVICE QUALITY OF SERVICE	US	Issued	16/798,650	Feb 24, 2020	11,385,984	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY ADJUST DATA TRANSFER SPEED FOR NON-VOLATILE MEMORY DIE INTER	US	Issued	16/798,590	Feb 24, 2020	10,971,215	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART ERASE VERIFY TEST TO DETECT SLOW-ERASING BLOCKS OF MEMORY CELLS	US	Issued	16/837,313	Apr 1, 2020	11,309,041	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HAVING MINIMUM WRITE SIZES OF DATA	US	Issued	16/858,332	Apr 24, 2020	11,294,598	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HAVING MINIMUM WRITE SIZES OF DATA	US	Issued	16/858,339	Apr 24, 2020	11,537,510	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ZNS Parity Swapping to DRAM	US	Issued	16/884,569	May 27, 2020	11,500,727	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Parity Swapping to DRAM	US	Issued	16/884,577	May 27, 2020	11,138,066	Aug 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA PARKING FOR SSDS WITH ZONES	US	Issued	16/858,345	Apr 24, 2020	11,409,459	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HIDING PARITY SWAPPING BEHAVIOR	US	Issued	17/349,438	Jun 16, 2021	11,520,660	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HIDING PARITY SWAPPING BEHAVIOR	US	Issued	16/858,356	Apr 24, 2020	11,055,176	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HIDING PARITY SWAPPING BEHAVIOR	US	Issued	16/858,358	Apr 24, 2020	11,194,494	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Weighting Of Read Commands to Zones In Storage Devices	US	Issued	16/847,352	Apr 13, 2020	11,210,027	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	WEIGHTED READ COMMANDS AND OPEN BLOCK TIMER FOR STORAGE DEVICES	US	Issued	16/858,390	Apr 24, 2020	11,226,761	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Moving Change Log Tables to Align to Zones	US	Issued	16/883,901	May 26, 2020	11,436,153	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MANAGING PEAK CURRENT FOR MULTIPLE ACTUATORS	US	Issued	16/781,194	Feb 4, 2020	10,839,839	Nov 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SORTING ACCESS COMMANDS BASED ON PEAK CURRENT FOR	US	Issued	16/781,216	Feb 4, 2020	10,930,310	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Elements of Amorphous Based Dual Free Layer Structures and Recording Dev	US	Issued	17/185,797	Feb 25, 2021	11,430,592	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE OPERATED AT DIFFERENT SPIN SPEEDS	US	Issued	16/777,191	Jan 30, 2020	10,910,011	Feb 2, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TWO-DIMENSIONAL MAGNETIC RECORDING (TDMR) READ HEAD STRUCTURE WITH DIF	US	Issued	16/792,010	Feb 14, 2020	10,777,222	Sep 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Modify Write Optimization for Video Performance	US	Issued	16/837,786	Apr 1, 2020	11,481,150	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage With Improved Suspend Resume Performance	US	Issued	16/805,570	Feb 28, 2020	11,126,369	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage With Improved Write Performance For Preferred User Data	US	Issued	16/802,638	Feb 27, 2020	10,923,178	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device With Improved Interface Transmitter Training	US	Issued	16/812,549	Mar 9, 2020	11,126,585	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Advanced CE encoding for Bus Multiplexer Grid for SSD	US	Issued	16/836,730	Mar 31, 2020	11,513,976	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Allocation of Sub Blocks	US	Issued	16/828,532	Mar 24, 2020	11,287,989	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Snapback Electrostatic Discharge Protection For Electronic Circuits	US	Issued	17/349,445	Jun 16, 2021	11,539,207	Dec 27, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	Snaphack Electrostatic Discharge Protection For Electronic Circuits	US	Issued	16/835,837	Mar 31, 2020	11,056,880	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Command Optimization Through Intelligent Threshold Detection	US	Issued	16/835,836	Mar 31, 2020	11,294,819	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Parallel Model Deployment for Artificial Intelligence Using a Primary Storage System	US	Issued	16/746,381	Jan 17, 2020	11,676,066	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic ZNS open zone active limit	US	Issued	16/835,191	Mar 30, 2020	11,435,914	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Boosting Reads of Chunks of Data	US	Issued	16/836,679	Mar 31, 2020	11,169,744	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Implementing an Encoder, Decoder, and/or Buffer Usi	US	Issued	17/582,642	Jan 24, 2022	11,567,777	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Implementing an Encoder, Decoder, and/or Buffer Usi	US	Issued	16/815,860	Mar 11, 2020	11,269,645	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT FOR DATA STORAGE DEVICES IMPLEMENTING NON-VOLATILE M	US	Issued	16/827,548	Mar 23, 2020	11,061,619	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PIEZOELECTRIC BASED MICROACTUATOR ARRANGEMENT FOR MITIGATING OUT-OF-PL	US	Issued	16/835,016	Mar 30, 2020	11,152,024	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Entropy Driven Endurance For Normalized Quality Of Service	US	Issued	16/823,714	Mar 19, 2020	11,082,168	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SEPARATE STORAGE AND CONTROL OF STATIC AND DYNAMIC NEURAL NETWORK DATA	US	Issued	16/834,515	Mar 30, 2020	11,507,843	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY ARRAY WITH WRITE FAILURE PROTECTION FOR MULTI-LEVEL	US	Issued	16/831,517	Mar 26, 2020	11,288,011	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD BEAM SIDE RAIL SHOCK CONTACT FEATURE	US	Issued	16/861,207	Apr 28, 2020	11,056,137	Jul 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Improved Playback Analysis	US	Issued	16/818,452	Mar 13, 2020	11,328,511	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Snapshot management in partitioned storage	US	Issued	16/817,264	Mar 12, 2020	11,640,371	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Background Interface Training Using Secondary Senses	US	Issued	16/904,255	Jun 17, 2020	11,127,438	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Advanced File Recovery Method For Flash Memory	US	Issued	16/837,889	Apr 1, 2020	11,392,436	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BiSb Topological Insulator with Seed Layer or Interlayer to Prevent Sb Diffusion and Pro	US	Issued	16/861,118	Apr 28, 2020	11,489,108	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Optimized Surveillance Search	US	Issued	16/781,717	Feb 4, 2020	11,562,018	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Automatic Data Phasing	US	Issued	16/781,688	Feb 4, 2020	11,526,435	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Zone-based device with control level selected by the host	US	Issued	16/859,940	Apr 27, 2020	11,194,489	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System for Accelerated Training of Bit Output Timings	US	Issued	16/859,494	Apr 27, 2020	11,347,581	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE DRIVE WITH HEAD-GIMBAL ASSEMBLY AND CONTACT PLATE	US	Issued	17/697,861	Mar 17, 2022	11,657,842	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE DRIVE WITH HEAD-GIMBAL ASSEMBLY AND CONTACT PLATE	US	Issued	17/230,654	Apr 14, 2021	11,315,593	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE DRIVE WITH HEAD-GIMBAL ASSEMBLY AND CONTACT PLATE	US	Issued	16/864,050	Apr 30, 2020	11,087,786	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Shielding Between Heads For Tape Drive	US	Issued	16/903,253	Jun 16, 2020	11,087,782	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Data Protection In Storage Devices	US	Issued	16/893,204	Jun 4, 2020	11,170,869	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTING TRANSMITTER TRAINING BEHAVIOR BASED UPON ASSUMED IDENTITY OF TR	US	Issued	16/848,700	Apr 14, 2020	11,288,225	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Zone-append command scheduling based on zone state	US	Issued	16/845,685	Apr 10, 2020	11,372,543	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Power allocation management for external storage	US	Issued	16/825,836	Mar 20, 2020	11,500,447	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BANK WRITING SERVO SECTORS FOR INTERLEAVED SERVO CON	US	Issued	16/798,682	Feb 24, 2020	10,783,911	Sep 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Host Memory Access	US	Issued	16/780,216	Feb 3, 2020	11,537,320	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Low complexity conversion to Montgomery Domain	US	Issued	16/911,342	Jun 24, 2020	11,468,797	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Low complexity conversion to Montgomery Domain	US	Issued	16/911,356	Jun 24, 2020	11,508,263	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Flow Control of Large Sequential Host Read Commands Based on a Queue Threshold	US	Issued	16/836,454	Mar 31, 2020	11,379,151	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PAGE MODIFICATION ENCODING AND CACHING	US	Issued	16/867,793	May 6, 2020	11,249,921	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Keeping Zones Open with Intermediate Padding	US	Issued	17/455,887	Nov 19, 2021	11,656,984	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Keeping Zones Open with Intermediate Padding	US	Issued	16/853,408	Apr 20, 2020	11,200,161	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Integrity Protection Of ZNS Needs	US	Issued	16/883,916	May 26, 2020	11,520,523	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Integrity Protection Of SSDs Utilizing Streams	US	Issued	16/883,918	May 26, 2020	11,561,717	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Rate Limit On The Transitions Of Zones To Open	US	Issued	17/465,391	Sep 2, 2021	11,640,266	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Rate Limit On The Transitions Of Zones To Open	US	Issued	16/885,073	May 27, 2020	11,126,378	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Rate Limit On The Transitions Of Streams To Open	US	Issued	16/885,076	May 27, 2020	11,194,521	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Condensing Logical to Physical Table Pointers in SSDs Utilizing Zoned Namespaces	US	Issued	16/861,068	Apr 28, 2020	11,200,162	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Two-dimensional magnetic recording reader with dual free layer magnetic tunnel junct	US	Issued	16/899,366	Jun 11, 2020	11,410,690	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC DEVICE INCLUDING MULTIFERROIC REGIONS AND METHODS OF FORMING I	US	Issued	16/781,225	Feb 4, 2020	11,222,920	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH FOGGY-FINE PROGRAM SEQUENCE FOR REDUCING NEIG	US	Issued	16/887,747	May 29, 2020	11,282,580	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING STAGGERED SERVO WEDGES TO INCREASE CAPACIT	US	Issued	16/808,656	Mar 4, 2020	10,867,629	Dec 15, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA SHAPING FOR INTEGRATED MEMORY ASSEMBLY	US	Issued	16/886,679	May 28, 2020	11,301,321	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP COPY FOR INTEGRATED MEMORY ASSEMBLY	US	Issued	16/886,685	May 28, 2020	11,170,870	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Solder bump height stabilization for micro and fine pitch electrode pads	US	Issued	16/872,222	May 11, 2020	11,062,731	Jul 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCELERATING BINARY NEURAL NETWORKS WITHIN LATCH STRUCTURE OF NON-VOLAT	US	Issued	16/908,576	Jun 22, 2020	11,544,547	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Mechanism to Improve Driver Capability With Fine Tuned Calibration Resistor	US	Issued	17/306,893	May 3, 2021	11,309,004	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Mechanism to Improve Driver Capability With Fine Tuned Calibration Resistor	US	Issued	16/858,223	Apr 24, 2020	11,024,353	Jun 1, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD ADDRESS TABLE CACHE MANAGEMENT BASED ON PROBABILITY DISTRIBUTION	US	Issued	16/860,720	Apr 28, 2020	11,294,813	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SPREAD SPECTRUM SPINDLE MOTOR CONTROL	US	Issued	16/801,375	Feb 26, 2020	11,081,988	Aug 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONTROLLING HEAD FLY HEIGHT BASED ON TEMPERATURE	US	Issued	16/817,138	Mar 12, 2020	10,878,844	Dec 29, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE EMBEDDED DRIVE WITH HDD COMPONENTS	US	Issued	16/858,265	Apr 24, 2020	11,081,132	Apr 3, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL DRIVE TAPE EMBEDDED SYSTEM	US	Issued	16/858,318	Apr 24, 2020	10,971,184	Apr 6, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Use of Surplus Erase Block Pairs in Super Block Formation	US	Issued	16/880,772	May 21, 2020	11,640,259	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Embedded Drive With Multiple Feedthrough Connections	US	Issued	17/448,168	Sep 20, 2021	11,495,270	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Embedded Drive With Multiple Feedthrough Connections	US	Issued	16/897,151	Jun 9, 2020	11,170,823	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Interface Connector For Tape Embedded Drive	US	Issued	16/907,003	Jun 19, 2020	10,998,008	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Embedded Drive With Tied Spindle Structure	US	Issued	16/910,512	Jun 24, 2020	10,997,998	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Head Positioning Assembly For Tape Embedded Drive	US	Issued	16/905,781	Jun 18, 2020	11,295,771	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TIERED READ REFERENCE CALIBRATION	US	Issued	16/885,775	May 28, 2020	10,991,444	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE FOLDING FOR INTEGRATED MEMORY ASSEMBLY	US	Issued	16/870,930	May 9, 2020	11,321,167	May 3, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMABLE PROCESSOR IN AN INTEGRATED MEMORY ASSEMBLY	US	Issued	16/885,801	May 28, 2020	11,188,268	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUNDANCY DATA IN INTEGRATED MEMORY ASSEMBLY	US	Issued	16/889,459	Jun 1, 2020	11,068,342	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Calibrating Non-Volatile Memory Read Thresholds	US	Issued	16/869,424	May 7, 2020	10,998,041	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Memory Controller and Method for Use Therewith	US	Issued	16/853,233	Apr 20, 2020	11,150,842	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual-Connector Storage System and Method for Simultaneously Providing Power and	US	Issued	16/836,424	Mar 31, 2020	11,169,584	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Multiprotocol Handling	US	Issued	16/852,091	Apr 17, 2020	11,544,107	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SYNDROME WEIGHT MINIMIZATION FOR DATA ALIGNME	US	Issued	16/864,257	May 1, 2020	11,449,236	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MIGRATING DATA FROM NON-ENERGY ASSIST DISK SURFACE TO	US	Issued	16/832,352	Mar 27, 2020	10,991,387	Apr 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT TREATMENT OF NFT ON HEAT-ASSISTED MAGNETIC RECORDING DEVICE	US	Issued	16/911,064	Jun 24, 2020	11,170,814	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING METAMAGNETIC RESISTANCE MEMORY DEVICE AND METHODS OF OPERA	US	Issued	16/853,407	Apr 20, 2020	11,200,934	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING METAMAGNETIC RESISTANCE MEMORY DEVICE AND METHODS OF OPERA	US	Issued	16/853,440	Apr 20, 2020	11,152,048	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	High-throughput out-of-order cipher text stealing	US	Issued	16/899,580	Jun 12, 2020	11,301,153	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Head Sensor With Balanced Shield Design	US	Issued	17/448,167	Sep 20, 2021	11,557,317	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Head Sensor With Balanced Shield Design	US	Issued	16/909,785	Jun 23, 2020	11,170,807	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR HAVING ONE OR MORE CHROMIUM INSERTION LAYERS FOR	US	Issued	16/883,911	May 26, 2020	10,950,258	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MMR HEAD WITH SYNTHETIC ANTIFERROMAGNETIC (SAF) COUPLED NOTCH	US	Issued	16/911,296	Jun 24, 2020	11,211,083	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	READ THRESHOLD CALIBRATION USING MULTIPLE DECODERS	US	Issued	16/889,501	Jun 1, 2020	11,502,702	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS OF HIGH MOMENT FREE LAYERS FOR MAGNETIC TUNNEL J	US	Issued	16/867,380	May 5, 2020	11,283,006	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	VCSEL Array For HAMR	US	Issued	17/684,133	Mar 1, 2022	11,651,786	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	VCSEL Array For HAMR	US	Issued	17/684,139	Mar 1, 2022	11,651,787	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	VCSEL Array For HAMR	US	Issued	17/354,457	Jun 22, 2021	11,398,246	Jul 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	VCSEL Array For HAMR	US	Issued	16/908,270	Jun 22, 2020	11,302,352	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Device Parameter Monitoring for Load Balancing	US	Issued	16/855,549	Apr 22, 2020	11,210,001	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Scrambling Using Different Scrambling Seeds for Defect Reduction and Improved Progr	US	Issued	16/880,845	May 21, 2020	11,250,913	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Erase Operation Reattempt To Recover Misidentified Bad Blocks Resulting From Conse	US	Issued	16/885,147	May 27, 2020	11,152,071	Oct 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	System To Identify Aggressor Blocks Causing Back To Back Erase Failure	US	Issued	16/885,160	May 27, 2020	11,467,744	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Attribute Mapping in Multiprotocol Devices	US	Issued	16/895,853	Jun 8, 2020	11,347,420	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Ramp Rate Control For Peak and Average Current Reduction of Open Blocks	US	Issued	16/888,485	May 29, 2020	11,335,413	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Stage Voltage Control For Peak and Average Current Reduction of Open Blocks	US	Issued	16/888,571	May 29, 2020	11,189,337	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Pre-Charge Ramp Rate Control For Peak Current Based On Data Latch Count	US	Issued	16/888,009	May 29, 2020	11,250,892	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Pre-Charge Timing Control For Peak Current Based On Data Latch Count	US	Issued	16/888,095	May 29, 2020	11,328,754	May 10, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ERASE VOLTAGE BASED ON TEMPERATURE	US	Issued	16/891,702	Jun 3, 2020	11,315,637	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Controlled Die Asymmetry During MLC Operations For Optimal System Pipeline	US	Issued	16/896,029	Jun 8, 2020	11,281,405	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Electrostatic Discharge Circuit Using Booster Cell	US	Issued	16/896,615	Jun 9, 2020	11,418,024	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Power Management In A Data Storage Device	US	Issued	17/354,005	Jun 22, 2021	11,543,996	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Power Management in a Data Storage Device	US	Issued	16/879,595	May 20, 2020	11,137,823	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Shaped and Optimized Power Cycles	US	Issued	17/465,423	Sep 2, 2021	11,537,193	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Shaped and Optimized Power Cycles	US	Issued	16/883,897	May 26, 2020	11,126,254	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR CONFIGURING A DATA STORAGE DEVICE	US	Issued	16/898,119	Jun 10, 2020	11,500,559	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Effective Key Management For Data Encryption and Decryption	US	Issued	16/890,973	Jun 2, 2020	11,641,276	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	QLC Programming Method with Staging of Fine Data	US	Issued	17/644,228	Dec 14, 2021	11,631,457	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	QLC Programming Method with Staging of Fine Data	US	Issued	16/899,374	Jun 11, 2020	11,211,119	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Memory Allocated in a Host for Read Data as a H	US	Issued	16/866,070	May 4, 2020	11,507,309	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Media-Based Fast-Fail Configuration	US	Issued	16/889,416	Jun 1, 2020	11,575,959	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System, Host, and Method for Extended and Imaginary Logical-to-Physical Add	US	Issued	16/889,383	Jun 1, 2020	11,429,296	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE PACKAGE HAVING COVER PORTION WITH CURVED SURFACE	US	Issued	16/894,068	Jun 5, 2020	11,551,991	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	BUMPED PAD STRUCTURE	US	Issued	16/897,910	Jun 10, 2020	11,557,555	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING VERTICAL BOND PADS	US	Issued	16/872,613	May 12, 2020	11,222,865	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Sensor Bridge Using Dual Free Layer	US	Issued	16/912,500	Jun 20, 2021	11,275,130	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DIE MEMORY OPERATION SCHEDULING PLAN FOR POWER CONTROL IN AN INTEGRATE	US	Issued	16/891,348	Jun 3, 2020	11,256,591	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION STANDOFF ARRANGEMENT FOR CONFINING ADHESIVE	US	Issued	16/884,324	May 27, 2020	11,069,375	Jul 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BALL GRID ARRAY SUBSTRATE	US	Issued	16/893,016	Jun 4, 2020	11,195,786	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CAPACITOR DIE FOR STACKED INTEGRATED CIRCUITS	US	Issued	16/870,176	May 8, 2020	11,532,592	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED WITH MANUFACTURE PCB FOR CONCURRENT WR	US	Issued	16/861,543	Apr 29, 2020	10,950,265	Mar 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPRISING DUAL CHANNEL PREAMP CIRCUIT	US	Issued	16/861,565	Apr 29, 2020	10,896,695	Jan 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING BIAS FOR FINE ACTUATORS	US	Issued	16/851,510	Apr 17, 2020	10,891,979	Jan 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE STAGGERING ACCESS OPERATIONS TO FACILITATE CONCURREN	US	Issued	16/851,574	Apr 17, 2020	11,049,517	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING PROBLEMATIC VOLTAGE SIGNALS FROM CHARGE PUMPS	US	Issued	16/885,655	May 28, 2020	11,073,570	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Latency Reduction through Command and Polling Overhead Avoidance	US	Issued	16/899,923	Jun 12, 2020	11,354,041	Jun 7, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR WITH AN ANTIFERROMAGNETICALLY COUPLED ASSIST LAYER	US	Issued	16/887,563	May 29, 2020	11,171,605	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR WITH AN ANTIFERROMAGNETICALLY COUPLED ASSIST LAYER	US	Issued	16/887,715	May 29, 2020	11,239,016	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Fast Low-Density Parity Check (LDPC) Encoding	US	Issued	16/878,910	May 20, 2020	11,138,065	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CONTROLLER FOR RESOLVING STRING TO STRING SHORTS	US	Issued	17/873,882	Jul 26, 2022	11,573,731	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CONTROLLER FOR RESOLVING STRING TO STRING SHORTS	US	Issued	16/898,098	Jun 10, 2020	11,422,736	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONE ALLOCATION FOR DATA STORAGE DEVICE BASED ON ZONE RESET BEHAVIOR	US	Issued	16/897,499	Jun 10, 2020	11,221,802	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection of Compromised Storage Device Firmware	US	Issued	17/727,461	Apr 22, 2022	11,663,328	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection of Compromised Storage Device Firmware	US	Issued	16/901,633	Jun 15, 2020	11,386,203	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Mode handling in multi-protocol devices	US	Issued	16/905,387	Jun 18, 2020	11,294,579	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Balanced Quad-Level Cell (QLC) Coding with Margin fo	US	Issued	16/914,764	Jun 29, 2020	11,231,997	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Direct Quad-Level Cell (QLC) Programming	US	Issued	16/914,790	Jun 29, 2020	11,269,725	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH VOLTAGE-ASSISTED MAGNETIC RECORDING (VAMR) FOR	US	Issued	16/867,373	May 5, 2020	11,087,791	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	NEURAL NETWORK DATA UPDATES USING IN-PLACE BIT-ADDRESSABLE WRITES WITHIN	US	Issued	16/896,134	Jun 8, 2020	11,507,835	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT-BASED SPIN TORQUE OSCILLATORS FOR OSCILLATORY NEURAL NETWORKS	US	Issued	17/172,175	Feb 10, 2021	11,393,516	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIBODY CHAMBERED ACOUSTIC ATTENUATOR FOR A DATA STORAGE SYSTEM	US	Issued	16/917,534	Jun 30, 2020	11,456,020	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Smart Folding	US	Issued	16/888,017	May 29, 2020	11,036,407	Jun 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Command Execution Ordering by Security Key	US	Issued	16/878,230	May 19, 2020	11,563,570	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods and Apparatus For Enhancing UBER Rate for Storage Devices	US	Issued	16/910,886	Jun 24, 2020	11,537,292	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NVM Endurance Group Controller Using Shared Resource Architecture	US	Issued	16/906,961	Jun 19, 2020	11,204,833	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING TAPE HAVING EMBEDDED SERVO SECTORS ON DATA TRACKS	US	Issued	17/350,882	Jun 17, 2021	11,289,123	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING EMBEDDED SERVO SECTORS FOR MAGNETIC TAPE	US	Issued	16/870,612	May 8, 2020	11,138,996	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING MULTI-TIER CODING FOR MAGNETIC TAPE	US	Issued	16/870,658	May 8, 2020	11,049,520	Jun 29, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTING HOST ACCESS RATES FOR VARIABLE BIT RATE DATA STREAMS USING A DAT	US	Issued	16/896,142	Jun 8, 2020	11,681,464	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Power Endurance Modes for Data Center Solid-State Drives	US	Issued	16/917,206	Jun 30, 2020	11,379,031	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHODS FOR MAGNETIC MEMORY DEVICES WITH MAGNETIC ASSIS	US	Issued	17/172,190	Feb 10, 2021	11,283,008	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BASE APPARATUS AND METHODS FOR HEAD ASSEMBLIES OF MAGNETIC STORAGE DEV	US	Issued	16/883,894	May 26, 2020	11,189,307	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LEVEL READ AFTER HEATING EVENT IN NON-VOLATILE STORAGE	US	Issued	16/901,524	Jun 15, 2020	11,043,266	Jun 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM FOR DISK-TO-DISK ACCESS FOR REDUCED-HEAD DATA STORAGE DEVICE	US	Issued	16/900,764	Jun 12, 2020	11,031,037	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ELIMINATING LEAD SCREW HYSTERESIS FOR VERTICALLY TRANSLATING LOAD/UNLOAD	US	Issued	16/912,514	Jun 25, 2020	10,916,271	Feb 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Operation-Deterministic Write Operations For Data Recovery And Integrity Checks	US	Issued	16/916,019	Jun 29, 2020	11,620,234	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Context Metadata Message for Optimized Two-Chip Performance	US	Issued	16/911,787	Jun 25, 2020	11,442,852	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Sense Bin Balancing in NAND Flash	US	Issued	16/917,291	Jun 30, 2020	11,295,819	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Object Monitoring	US	Issued	16/903,930	Jun 17, 2020	11,343,531	May 24, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA DESIGN WITH REDUCED LATTICE MISMATCH BETWEEN	US	Issued	16/912,577	Jun 25, 2020	11,380,358	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Machine Learning For Temperature Compensation	US	Issued	16/918,837	Jul 1, 2020	11,494,261	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH COMPOSITE SPACER FOR DISK STACK ASSEMBLY	US	Issued	16/915,962	Jun 29, 2020	11,227,634	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Function SD Card	US	Issued	16/904,808	Jun 18, 2020	11,360,923	Jun 14, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR MODE HOP OF A LASER	US	Issued	16/877,765	May 19, 2020	10,997,997	May 4, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL DEVICES FOR INDEPENDENT MOVEMENT CONTROL OF LENSES AND IMAGE SE	US	Issued	16/915,723	Jun 29, 2020	11,277,565	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL DEVICES FOR INDEPENDENT MOVEMENT CONTROL OF LENSES AND IMAGE SE	US	Issued	16/915,730	Jun 29, 2020	11,277,566	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL DEVICES FOR TILT IN CAMERA SYSTEMS	US	Issued	16/915,739	Jun 29, 2020	11,172,131	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL DEVICES FOR TILT IN CAMERA SYSTEMS	US	Issued	16/915,742	Jun 29, 2020	11,212,447	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DEVICES HAVING NEGATIVE POLARIZATION LAYER TO ENHANC	US	Issued	17/649,246	Jan 28, 2022	11,657,836	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DEVICES HAVING NEGATIVE POLARIZATION LAYER TO ENHANC	US	Issued	16/912,509	Jun 25, 2020	11,257,514	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID ERASE MODE FOR HIGH DATA RETENTION IN MEMORY DEVICE	US	Issued	16/906,497	Jun 19, 2020	11,127,467	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMAND SEQUENCE FOR HYBRID ERASE MODE FOR HIGH DATA RETENTION IN MEM	US	Issued	16/906,516	Jun 19, 2020	11,120,880	Sep 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY ARRAY CONTAINING CAPPED ALUMINUM ACCESS LINES AND METHOD OF M	US	Issued	16/907,523	Jun 22, 2020	11,424,292	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Write Abort Error Detection in Multi-Pass Programming	US	Issued	16/915,617	Jun 29, 2020	11,663,068	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	TRANSVERSE BIAS STRENGTH ENHANCEMENT IN DUAL FREE LAYER TUNNEL MAGNETO	US	Issued	16/907,031	Jun 19, 2020	11,170,809	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Synchronous Discovery Logs in a Fabric Storage System	US	Issued	16/906,404	Jun 19, 2020	11,675,499	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR FAILURE DETECTION AND RECOVERY FOR A DISTRIBUTED	US	Issued	16/916,730	Jun 30, 2020	11,675,706	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	FUNCTION PROCESSING USING STORAGE CONTROLLERS FOR LOAD SHARING	US	Issued	16/909,563	Jun 23, 2020	11,416,176	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Retention-Based Zone Determination	US	Issued	16/893,033	Jun 4, 2020	11,543,987	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Self-Data-Generating Storage System and Method for Use Therewith	US	Issued	16/899,276	Jun 11, 2020	11,284,125	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Proactive Device Timeout Information	US	Issued	16/891,683	Jun 3, 2020	11,409,468	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Crash Analysis	US	Issued	16/893,011	Jun 4, 2020	11,403,163	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Frame Trimming to Optimize Network Bandwidth	US	Issued	16/899,262	Jun 11, 2020	11,240,540	Feb 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer Storage Compute Sharing Using Memory Buffer	US	Issued	16/908,035	Jun 22, 2020	11,625,192	Apr 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Host-Assisted Variable Zone Speed Grade Modes	US	Issued	16/906,644	Jun 19, 2020	11,379,117	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable Performance Storage Devices	US	Issued	16/917,373	Jun 30, 2020	11,494,098	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	VIA-LESS PATTERNED GROUND STRUCTURE COMMON-MODE FILTER	US	Issued	16/946,615	Jun 29, 2020	11,160,162	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING HEAD WITH PROTECTIVE CAP	US	Issued	17/349,698	Jun 16, 2021	11,605,397	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING HEAD WITH PROTECTIVE CAP	US	Issued	16/920,093	Jul 2, 2020	11,074,929	Jul 27, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP PARITY BUFFER MANAGEMENT FOR STORAGE BLOCK COMBINING IN NON-VOL	US	Issued	16/908,147	Jun 22, 2020	11,138,071	Oct 5, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Double Bend VCM Yoke Structure	US	Issued	16/994,472	Aug 14, 2020	11,373,677	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Bismuth Antimony Alloys for Use as Topological Insulators	US	Issued	16/917,334	Jun 30, 2020	11,495,741	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING LAST PAGE WRITTEN IN MULTI-PLANE NON-VOLATILE MEMORY	US	Issued	16/919,593	Jul 2, 2020	11,231,883	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA-ASSISTED LDPC DECODING	US	Issued	16/913,044	Jun 26, 2020	11,159,176	Oct 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Host Memory Access	US	Issued	16/874,101	May 14, 2020	11,327,684	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ SENSORS AND RELATED METHODS HAVING A REAR HARD BIAS AND N	US	Issued	17/465,455	Sep 2, 2021	11,430,470	Aug 30, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC READ SENSORS AND RELATED METHODS HAVING A REAR HARD BIAS AND N	US	Issued	16/918,848	Jul 1, 2020	11,127,422	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DECODER FOR IRREGULAR ERROR CORRECTING CODES	US	Issued	16/917,870	Jun 30, 2020	11,190,219	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CAPACITY RECOVERY SOURCE SELECTION	US	Issued	16/910,973	Jun 24, 2020	11,663,136	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimizations for variable sector size in storage device namespaces	US	Issued	16/910,893	Jun 24, 2020	11,569,844	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Copy Through Controller	US	Issued	16/910,905	Jun 24, 2020	11,177,012	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Effective Rear Hard Bias For Dual Free Layer Read Heads	US	Issued	16/915,718	Jun 29, 2020	11,087,785	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Active Low-Power Termination	US	Issued	17/187,308	Feb 26, 2021	11,303,276	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Distributed Grouped Terminations for Multiple Memory Integrated Circuit Systems	US	Issued	16/916,945	Jun 30, 2020	11,456,022	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD COMPENSATION STRUCTURE FOR HIGH BANDWIDTH AND HI	US	Issued	16/916,784	Jun 30, 2020	11,302,645	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermal Region Tags and Thermal Region Outlier Detection	US	Issued	16/923,849	Jul 8, 2020	11,210,031	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING TRIANGLE-LIKE DITHER TO SPREAD TRACK SQUEEZ	US	Issued	16/894,665	Jun 5, 2020	10,923,146	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	USING OVER PROVISIONING SPACE FOR SELECTIVELY STORING BLOCK PARITY	US	Issued	17/184,422	Feb 24, 2021	11,354,190	Jun 7, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PHYSICAL DEFECT DETECTION IN AN INTEGRATED MEMORY ASSEMBLY	US	Issued	16/897,724	Jun 10, 2020	11,114,178	Sep 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	APPLICATION-BASED STORAGE DEVICE CONFIGURATION SETTINGS	US	Issued	16/915,397	Jun 29, 2020	11,379,128	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head Soft Error Rate Improvement With Compact Main Pole	US	Issued	16/917,521	Jun 30, 2020	11,087,783	Aug 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Host-Assisted Memory Block Color Coding for Faster M	US	Issued	16/890,270	Jun 2, 2020	11,429,663	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SELECTION BASED ON DATA IMPORTANCE	US	Issued	16/915,793	Jun 29, 2020	11,429,620	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Soft Mount Voice Coil Motor Assembly	US	Issued	16/915,698	Jun 29, 2020	11,295,769	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Enabling Partial Defragmentation Prior to Reading in B	US	Issued	16/899,992	Jun 12, 2020	11,262,928	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Content-Aware Storage System and Method for Use Therewith	US	Issued	16/892,966	Jun 4, 2020	11,204,722	Dec 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Segregating Outliers in a Virtualization System	US	Issued	16/890,246	Jun 2, 2020	11,194,482	Dec 7, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Storing Scalable Video	US	Issued	16/891,802	Jun 3, 2020	11,140,445	Oct 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Enabling a Software-Defined Dynamic Storage Respons	US	Issued	16/899,958	Jun 12, 2020	11,372,754	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED FUNCTION PROCESSING WITH ESTIMATE-BASED SCHEDULER	US	Issued	16/913,383	Jun 26, 2020	11,416,166	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDERS WITH LOW ASPECT RATIO	US	Issued	16/946,539	Jun 26, 2020	10,984,828	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Predictive caching in device for media seek in playback or scrolling	US	Issued	16/909,751	Jun 23, 2020	11,232,024	Jan 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SELF-CONFIGURING BASED ON CUSTOMER PREDICTION MODE	US	Issued	16/900,639	Jun 12, 2020	11,543,981	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT Differential Reader and Method of Making Same	US	Issued	17/395,291	Aug 5, 2021	11,615,809	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT Differential Reader and Method of Making Same	US	Issued	16/918,841	Jul 1, 2020	11,100,946	Aug 24, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual-Interface Storage System and Method for Use Therewith	US	Issued	16/910,869	Jun 24, 2020	11,281,399	Mar 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Proactive Storage Operation Management	US	Issued	16/917,470	Jun 30, 2020	11,681,466	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE HAVING INFRARED LIGHT-EMITTING DIODE FOR DATA TRANSMISS	US	Issued	17/173,017	Feb 10, 2021	11,455,225	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	COLOR CHANGING STORAGE DEVICE HOUSING	US	Issued	17/953,104	Sep 26, 2022	11,681,890	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	COLOR CHANGING STORAGE DEVICE HOUSING	US	Issued	16/908,642	Jun 22, 2020	11,481,593	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Removable Memory Card with Efficient Card Lock Mechanism and Pads Layout	US	Issued	16/899,972	Jun 12, 2020	11,653,463	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC TRANSCODING OF MEDIA DATA IN A DATA STORAGE DEVICE	US	Issued	16/917,458	Jun 30, 2020	11,184,650	Nov 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTENT-BASED DATA STORAGE	US	Issued	16/915,856	Jun 29, 2020	11,429,285	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE UPDATING REFRESH METRIC BASED ON QUALITY OF VICTIM DA	US	Issued	16/912,912	Jun 26, 2020	10,943,620	Mar 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient estimator of min-entropy	US	Issued	16/916,107	Jun 30, 2020	11,544,038	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH BURN-AFTER-READ MODE	US	Issued	16/909,018	Jun 23, 2020	11,366,602	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DYNAMICALLY RELOCATING DATA SECTORS BASED ON MAP-OU	US	Issued	16/935,763	Jul 22, 2020	11,531,582	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINEL CONTAINING MAGNETIC TUNNEL JUNCTION AND METHOD OF MAKING THE SA	US	Issued	17/192,354	Mar 4, 2021	11,443,790	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINEL CONTAINING MAGNETIC TUNNEL JUNCTION AND METHOD OF MAKING THE SA	US	Issued	16/944,758	Jul 31, 2020	11,176,981	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINEL CONTAINING MAGNETIC TUNNEL JUNCTION AND METHOD OF MAKING THE SA	US	Issued	16/944,826	Jul 31, 2020	11,217,289	Jan 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT BIT REFERENCE LEVEL CALIBRATION	US	Issued	17/171,617	Feb 9, 2021	11,289,172	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ADHESIVE LAYERED BACKFLOW PREVENTER	US	Issued	17/174,281	Feb 11, 2021	11,533,827	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	WEAR LEVELING IN NON-VOLATILE MEMORY	US	Issued	17/213,005	Mar 25, 2021	11,513,950	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage device feature extraction optimization	US	Issued	16/917,231	Jun 30, 2020	11,334,280	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Host-Managed Hardware Compression With Zoned Namespaces	US	Issued	17/184,170	Feb 24, 2021	11,481,115	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCAL DATA COMPACTION FOR INTEGRATED MEMORY ASSEMBLY	US	Issued	17/837,858	Jun 10, 2022	11,579,812	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCAL DATA COMPACTION FOR INTEGRATED MEMORY ASSEMBLY	US	Issued	17/177,310	Feb 17, 2021	11,392,327	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method to Reduce Baseline Shift for a SOT Differential Reader	US	Issued	17/029,826	Sep 23, 2020	11,222,656	Jan 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Level Dependent Error Correction Code Protection in Multi-Level Non-Volatile Memory	US	Issued	17/213,486	Mar 26, 2021	11,527,300	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT INFORMATION FOR PUNCTURED BIT ESTIMATION IN A DATA STORAGE DEVICE	US	Issued	17/171,746	Feb 9, 2021	11,455,208	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT Film Stack for Differential Reader	US	Issued	17/029,833	Sep 23, 2020	11,094,338	Aug 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ADDRESS MANAGEMENT IN NON-VOLATILE MEMORY	US	Issued	17/215,942	Mar 29, 2021	11,436,083	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	INSTANT AND PERMANENT SELF-DESTRUCTION METHOD IN 3D NAND FOR DATA SECUR	US	Issued	16/984,478	Aug 4, 2020	11,133,074	Sep 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIFERROIC-ASSISTED VOLTAGE CONTROLLED MAGNETIC ANISOTROPY MEMORY DE	US	Issued	17/004,534	Aug 27, 2020	11,276,446	Mar 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIFERROIC-ASSISTED VOLTAGE CONTROLLED MAGNETIC ANISOTROPY MEMORY DE	US	Issued	17/004,690	Aug 27, 2020	11,264,562	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STRAIGHT WIREBONDING OF SILICON DIES	US	Issued	17/171,576	Feb 9, 2021	11,456,272	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	READ INTEGRATION TIME CALIBRATION FOR NON-VOLATILE STORAGE	US	Issued	17/171,637	Feb 9, 2021	11,430,531	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Resource Utilization Tracking Within Storage Devices	US	Issued	17/181,523	Feb 22, 2021	11,500,539	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Identified Zones for Optimal Parity Sharing Zones	US	Issued	17/186,764	Feb 26, 2021	11,442,646	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Identification and Classification of Write Stream Priority	US	Issued	17/187,046	Feb 26, 2021	11,449,443	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Delaying Random Data Relocation for Reducing Write Amplification in Storage Devices	US	Issued	17/009,487	Sep 1, 2020	11,556,249	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR SEEK VIBRATION USING VIBRATION SENS	US	Issued	16/929,887	Jul 15, 2020	10,984,831	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD WITH IMPROVED CORRO	US	Issued	17/170,435	Feb 8, 2021	11,127,421	Sep 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Zoned Namespace Limitation Mitigation Using Sub Block Mode	US	Issued	17/180,625	Feb 19, 2021	11,455,244	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMAND MANAGEMENT USING ALLOCATED COMMAND IDENTIFIER POOLS	US	Issued	17/176,445	Feb 16, 2021	11,681,550	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for a Hybrid Quad-Level Cell (QLC) Write Scheme for Redu	US	Issued	17/181,709	Feb 22, 2021	11,437,104	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Device Interrupt Coalescing with Various Host Behaviors	US	Issued	17/184,538	Feb 24, 2021	11,579,804	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	High Throughput, Low Power, High Parity Architecture for Database SSD	US	Issued	17/181,907	Feb 22, 2021	11,537,534	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	QLC Data Programming	US	Issued	17/182,023	Feb 22, 2021	11,568,938	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL GASKET FOR MANUFACTURING OF HERMETICALLY-SEALED HARD DISK DRIVE	US	Issued	17/177,031	Feb 16, 2021	11,348,619	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Handling in Zoned Namespace Devices	US	Issued	17/180,631	Feb 19, 2021	11,513,723	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Elastic Buffer Based Asymmetric Pipeline FIFO Process	US	Issued	17/182,038	Feb 22, 2021	11,687,246	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEMODULATING DIGITAL DATA BASED ON NUMBER OF SERVO	US	Issued	17/175,998	Feb 15, 2021	11,295,773	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEMODULATING SERVO STRIPES USING MATCHED FILTER	US	Issued	17/387,563	Jul 28, 2021	11,488,625	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEMODULATING SERVO STRIPES USING MATCHED FILTER	US	Issued	17/387,609	Jul 28, 2021	11,488,626	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DEMODULATING SERVO STRIPES USING MATCHED FILTER	US	Issued	17/176,024	Feb 15, 2021	11,386,928	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Command Prioritization to Reduce Latencies of Zone Commands	US	Issued	17/180,642	Feb 19, 2021	11,455,124	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Time-Based Data Retrieval	US	Issued	17/176,818	Feb 16, 2021	11,650,757	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Time-Duration-Based Efficient Block Management and	US	Issued	17/176,852	Feb 16, 2021	11,494,101	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Hold Up Capacitance Health Measurement With Current Leakage Detection	US	Issued	17/180,651	Feb 19, 2021	11,506,696	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA INTEGRITY CHECK FOR WRITING DATA IN MEMORY	US	Issued	17/180,660	Feb 19, 2021	11,422,888	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Relocation Flow Using CoA Technology	US	Issued	17/182,032	Feb 22, 2021	11,537,326	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Delta Compression	US	Issued	17/183,148	Feb 23, 2021	11,429,522	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LDPC Encoding For Memory Cells With Arbitrary Number Of Levels	US	Issued	17/183,153	Feb 23, 2021	11,487,611	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Aggregation in ZNS Drive	US	Issued	17/184,154	Feb 24, 2021	11,599,304	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Vertical Junction To Provide Optimal Transverse Bias For Dual Free Layer Read Heads	US	Issued	17/184,541	Feb 24, 2021	11,532,324	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DEVICES HAVING CROSS-TRACK CURRENT FLOW TO FACILITATE	US	Issued	17/183,155	Feb 23, 2021	11,508,401	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Die Crack Detection in a CMOS Bonded Array	US	Issued	17/181,648	Feb 22, 2021	11,450,575	Sep 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Warpage Detection in a CMOS Bonded Array	US	Issued	17/181,675	Feb 22, 2021	11,682,595	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL DATA PORTS WITH SHARED DETECTION LINE	US	Issued	17/185,859	Feb 25, 2021	11,513,978	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING COUPLED BOND PADS HAVING DIFFERING NUM	US	Issued	17/174,657	Feb 12, 2021	11,462,497	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PERIODIC REDUCED WORD LINE BIAS WHICH INCREASES CHANNEL BOOSTING	US	Issued	17/008,926	Sep 1, 2020	11,309,031	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE READING DATA FROM MAGNETIC TAPE IN FORWARD AND REV	US	Issued	17/177,715	Feb 17, 2021	11,373,682	Jan 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Media Non-Contacting Magnetic Recording Head	US	Issued	17/184,549	Feb 24, 2021	11,495,254	Nov 8, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING WINDOWED DELTA-SIGMA ANALOG-TO-DIGITAL CONVE	US	Issued	17/178,307	Feb 18, 2021	11,373,678	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REDUCING WAKE LATENCY FOR MAGNETIC TAPE	US	Issued	17/178,344	Feb 18, 2021	11,514,938	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Detecting and Utilizing Wasted Space Using a File Syst	US	Issued	17/182,499	Feb 23, 2021	11,314,428	Apr 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MITIGATING EFFECT OF ERASE CELLS ON ADJACENT CELLS	US	Issued	17/211,599	Mar 24, 2021	11,662,941	Mar 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Read Threshold Calibration	US	Issued	17/211,602	Mar 24, 2021	11,557,350	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR HEAD/TAPE WEAR	US	Issued	17/178,376	Feb 18, 2021	11,386,925	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING LATERALLY OFFSET READ ELEMENT TO COMPENSATE FO	US	Issued	17/179,511	Feb 19, 2021	11,373,683	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient TLP Fragmentations In Extended LBA Environment	US	Issued	17/183,203	Feb 23, 2021	11,500,581	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Command Draining Using Host Memory Buffer	US	Issued	17/184,527	Feb 24, 2021	11,500,589	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED TAPE REEL LOCK MECHANISM FOR TAPE EMBEDDED STORAGE DRIVE	US	Issued	17/184,550	Feb 24, 2021	11,211,086	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RESTRICTION OF SUSPENSION DIMPLE CONTACT POINT	US	Issued	17/175,555	Feb 12, 2021	11,393,497	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Power Reduction During Open and Erased Block Reads of Memory Based on the Positi	US	Issued	17/173,805	Feb 11, 2021	11,521,688	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANTS AND METHODS TO DETERMINE DEWETTING THICKNESS THEREOF	US	Issued	17/227,097	Apr 9, 2021	11,414,617	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Overhead Reduction in Data Transfer Protocol for NAND Memory	US	Issued	17/175,099	Feb 12, 2021	11,487,446	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ALL BIT LINE SENSING FOR DETERMINING WORD LINE-TO-MEMORY HOLE SHORT CIRCU	US	Issued	17/098,831	Nov 16, 2020	11,309,035	Apr 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PEER STORAGE DEVICE MESSAGING OVER CONTROL BUS	US	Issued	17/176,461	Feb 16, 2021	11,531,498	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PEER STORAGE DEVICES SHARING HOST CONTROL DATA	US	Issued	17/176,492	Feb 16, 2021	11,544,205	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	INTELLIGENT MEMORY WEAR LEVELING	US	Issued	17/177,629	Feb 17, 2021	11,409,443	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED NON-VOLATILE MEMORY ASSEMBLY WITH ADDRESS TRANSLATION	US	Issued	17/177,323	Feb 17, 2021	11,650,932	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJACENT MEMORY CELL INTERFERENCE MITIGATION	US	Issued	17/171,644	Feb 9, 2021	11,393,540	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Performing Random Read	US	Issued	17/182,461	Feb 23, 2021	11,366,749	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION BASED ON PHYSICAL CHARACTERISTICS FOR MEMORY	US	Issued	17/187,695	Feb 26, 2021	11,601,141	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Content Aware Decoding Using Shared Data Statistics	US	Issued	17/211,605	Mar 24, 2021	11,528,038	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CHANNEL ENCODING CURRENT DATA USING REDUNDANCY BIT	US	Issued	17/179,542	Feb 19, 2021	11,411,584	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW LIGHT SURVEILLANCE SYSTEM WITH DUAL VIDEO STREAMS	US	Issued	17/176,591	Feb 16, 2021	11,509,832	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ELIMINATING PREAMBLE FROM SERVO SECTORS	US	Issued	17/179,753	Feb 19, 2021	11,417,362	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FIXED SIZE SOFT BIT LOSSY COMPRESSION IN FLASH MEMORY	US	Issued	17/177,940	Feb 17, 2021	11,456,754	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Prediction-Based Selective Flushing of Data to Memory	US	Issued	17/211,592	Mar 24, 2021	11,507,508	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Dual-Write Programming Method with Reverse Order for Seconda	US	Issued	17/182,485	Feb 23, 2021	11,442,666	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST-ASSISTED STORAGE DEVICE ERROR CORRECTION	US	Issued	17/176,765	Feb 16, 2021	11,340,986	May 24, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ASSISTED MULTIMEDIA CONTENT ENHANCEMENT	US	Issued	17/115,146	Dec 8, 2020	11,611,630	Mar 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Dual Fast Release and Slow Release Responses	US	Issued	17/179,987	Feb 19, 2021	11,494,125	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Token Provisioning for Faster Data Access	US	Issued	17/177,480	Feb 17, 2021	11,537,325	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Dynamic Selection of a Host Interface	US	Issued	17/178,447	Feb 18, 2021	11,442,665	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-FETCH OF DATA USING SEEK INTERVALS	US	Issued	17/187,060	Feb 26, 2021	11,375,286	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PACKET PROCESSING BY PROGRAMMABLE NETWORK INTERFACE	US	Issued	17/172,513	Feb 10, 2021	11,503,140	Nov 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	QUERY COMPILER FOR RECORD FILTERING	US	Issued	17/181,886	Feb 22, 2021	11,640,395	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Database Management Architecture	US	Issued	17/181,902	Feb 22, 2021	11,630,592	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR DEBUGGING INTEGRATED CIRCUIT SYSTEMS USING SCA	US	Issued	17/184,430	Feb 24, 2021	11,442,106	Sep 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE PERFORMANCE INDICATOR FOR STORAGE DEVICES	US	Issued	17/182,574	Feb 23, 2021	11,467,942	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM WITH ENCRYPTED DATA STORAGE DEVICE TELEMETRY DATA	US	Issued	17/182,698	Feb 23, 2021	11,616,767	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Voltage High Speed Receiver with Toggle Mode	US	Issued	17/185,120	Feb 25, 2021	11,424,716	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Decreasing Physical Secure Erase Times in Solid State Drives	US	Issued	17/185,325	Feb 25, 2021	11,543,992	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage With Improved Data Transfer	US	Issued	17/184,529	Feb 24, 2021	11,630,785	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Effective PCIe Utilization by PCIe TLP Coalescing	US	Issued	17/184,531	Feb 24, 2021	11,537,524	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Data Storage Usage Associated With Ungraceful Shutdown	US	Issued	17/184,533	Feb 24, 2021	11,416,058	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL-SPIRAL COMMON-MODE FILTER	US	Issued	17/180,779	Feb 20, 2021	11,659,630	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST VERIFICATION OF NON-VOLATILE DATA INTEGRITY	US	Issued	17/171,657	Feb 9, 2021	11,379,305	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Initialization Of Secure HMB	US	Issued	17/210,174	Mar 23, 2021	11,494,097	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NONVOLATILE MEMORY WITH ENCODING FOR FOGGY-FINE PROGRAMMING WITH SOF	US	Issued	17/171,599	Feb 9, 2021	11,650,756	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH MULTILAYERED UNDER	US	Issued	17/171,852	Feb 9, 2021	11,521,648	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Free Layer Reader Head With Magnetic Seed Layer Decoupled From Shield	US	Issued	17/149,491	Jan 14, 2021	11,170,808	Nov 9, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Recessed Tape Servo Head to Create an Equipoisental Tape Bearing Surface	US	Issued	17/183,166	Feb 23, 2021	11,227,628	Jan 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE COMPENSATING FOR TAPE DISTORTION	US	Issued	17/180,803	Feb 21, 2021	11,295,772	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE CONTAINING SELECTOR WITH CURRENT FOCUSING LAYER AND METH	US	Issued	17/075,980	Oct 21, 2020	11,271,040	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Overwrite Data Within Solid State Drives	US	Issued	17/187,275	Feb 26, 2021	11,422,734	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW PROFILE LUBRICANTS FOR DATA STORAGE DEVICES	US	Issued	17/193,954	Mar 5, 2021	11,572,520	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH TEMPERATURE LUBRICANTS FOR MAGNETIC MEDIA	US	Issued	17/193,920	Mar 5, 2021	11,572,519	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR POWER AND PERFORMANCE IMPROVEMENT THROUGH	US	Issued	17/182,099	Feb 22, 2021	11,513,691	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FALLOVER PORT FORWARDING BETWEEN PEER STORAGE NODES	US	Issued	17/182,784	Feb 23, 2021	11,665,046	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ALLOCATING DATA STORAGE BASED ON AGGREGATE DUPLICATE PERFORMANCE	US	Issued	17/182,759	Feb 23, 2021	11,561,707	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC ALLOCATION OF STORAGE RESOURCES BASED ON CONNECTION TYPE	US	Issued	17/182,816	Feb 23, 2021	11,520,715	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INTERLEAVE DRIVING SECONDARY ACTUATORS	US	Issued	17/180,806	Feb 21, 2021	11,423,931	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH HEAT SINK MATERIAL ADJ	US	Issued	17/172,244	Feb 10, 2021	11,328,747	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH OPTICALLY REFLECTIVE SH	US	Issued	17/177,292	Feb 17, 2021	11,250,879	Feb 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Enabling Endurance Re-Evaluation	US	Issued	17/180,006	Feb 19, 2021	11,550,487	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING AMPLIFIER FEEDBACK FOR IMPEDANCE MATCHING	US	Issued	17/180,998	Feb 22, 2021	11,361,786	Jan 14, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING SEMICONDUCTOR DIES OF DIFFERING SIZES AND	US	Issued	17/175,069	Feb 12, 2021	11,552,050	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Interrupt Coalescing Protection Logic	US	Issued	17/216,468	Mar 29, 2021	11,397,699	Jul 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Spintronic Device Having Negative Interface Spin Scattering	US	Issued	17/184,543	Feb 24, 2021	11,289,118	Mar 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	READ THRESHOLD CALIBRATION FOR NONVOLATILE MEMORY WITH ENCODED FOGGY-	US	Issued	17/171,612	Feb 9, 2021	11,495,296	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSSFLOW AIR DEFLECTOR FOR HIGH DENSITY INDEPENDENT AIRFLOW CONTROL	US	Issued	17/858,754	Jul 6, 2022	11,687,132	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSSFLOW AIR DEFLECTOR FOR HIGH DENSITY INDEPENDENT AIRFLOW CONTROL	US	Issued	17/177,163	Feb 16, 2021	11,402,884	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	AREA DENSITY CAPACITY IMPROVEMENT WITH NEGATIVE ANISOTROPIC MAGNETIC M	US	Issued	17/183,190	Feb 23, 2021	11,264,052	Mar 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER TRANSFER ARM	US	Issued	17/362,330	Jun 29, 2021	11,551,964	Jan 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DISAGGREGATION OF CONTROL PATH AND DATA PATH	US	Issued	17/175,170	Feb 12, 2021	11,573,718	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Real-Time Data Locking in Surveillance Storage	US	Issued	17/179,967	Feb 19, 2021	11,523,145	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE REWINDING TAPE SO AS TO REDUCE TAPE DISTORTION	US	Issued	17/181,044	Feb 22, 2021	11,430,480	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Overhead Reduction in Data Transfer Protocol for Data Storage Devices	US	Issued	17/176,813	Feb 16, 2021	11,586,384	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Load Based Dynamic Storage System for Configuration for Increased Performance	US	Issued	17/176,633	Feb 16, 2021	11,379,137	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Early Transition To Low Power Mode For Data Storage Devices	US	Issued	17/185,791	Feb 25, 2021	11,640,251	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PREDICTING FAILURE OF NEAR FIELD TRANSDUCER BASED ON S	US	Issued	17/176,282	Feb 16, 2021	11,257,525	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CARD OPERABLE WITH MULTIPLE HOST INTERFACES	US	Issued	17/179,953	Feb 19, 2021	11,461,260	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SURVEILLANCE VIDEO STREAMS WITH EMBEDDED OBJECT DATA	US	Issued	17/179,786	Feb 19, 2021	11,496,671	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Improving Word Line Data Retention for Memory Blocks	US	Issued	17/176,867	Feb 16, 2021	11,386,969	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Valley Searching in Solid State Drives	US	Issued	17/197,488	Mar 10, 2021	11,468,953	Oct 11, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL OVERLAY MEASUREMENT METHODS AND STRUCTURES FOR WAFER-TO-WA	US	Issued	17/194,636	Mar 8, 2021	11,569,139	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICAL OVERLAY MEASUREMENT METHODS AND STRUCTURES FOR WAFER-TO-WA	US	Issued	17/189,548	Mar 2, 2021	11,621,202	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head Having A Wrap-Around Shield Comprising A Laminated Film	US	Issued	17/179,173	Feb 18, 2021	11,302,350	Apr 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Program Verify Scheme For Performance Improvement	US	Issued	17/170,498	Feb 8, 2021	11,651,821	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Attention Masks in Neural Network Video Processing	US	Issued	17/197,908	Mar 10, 2021	11,568,543	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Enabling a Compare Command with Built-In Data	US	Issued	17/179,930	Feb 19, 2021	11,372,559	Jun 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PERFORMANCE PREDICTION BASED ON VALID FRAGMENT COU	US	Issued	17/182,829	Feb 23, 2021	11,507,502	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Wear Leveling Methods For Zoned Namespace Solid State Drive	US	Issued	17/178,760	Feb 18, 2021	11,537,293	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	RELINKING SCHEME IN SUB-BLOCK MODE	US	Issued	17/184,375	Feb 24, 2021	11,456,050	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Enabling Higher Lane Utilization in Run Time Via D	US	Issued	17/181,621	Feb 22, 2021	11,487,449	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ERASE TECHNIQUE FOR CHECKING INTEGRITY OF NON-DATA WORD LINES IN MEMORY	US	Issued	17/197,762	Mar 10, 2021	11,335,419	May 17, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF THERMAL THROTTLING IN DATA STORAGE DEVICES	US	Issued	17/203,533	Mar 16, 2021	11,508,416	Nov 22, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING WRITE POLE DEGRADATION FOR MAGNETIC WRITE	US	Issued	17/176,302	Feb 16, 2021	11,423,939	Aug 23, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MEASURING HAMR MEDIA DISTRIBUTIONS	US	Issued	17/176,354	Feb 16, 2021	11,276,432	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Subcodes and Convolutional-Based LDPC Interleaving	US	Issued	17/202,601	Mar 16, 2021	11,481,271	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SERVO FIELD DEPENDENT WRITE BOOST	US	Issued	17/182,365	Feb 23, 2021	11,200,912	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH HISTORY DEPENDENT WRITE BOOST	US	Issued	17/182,589	Feb 23, 2021	11,482,247	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EMPLOYING PARTIAL CODEWORD WRITES TO MAGNETIC MEDIA	US	Issued	17/175,762	Feb 15, 2021	11,200,911	Dec 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Use of Data Mask In DRAM Write	US	Issued	17/183,784	Feb 24, 2021	11,385,963	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SIMPLIFIED HIGH CAPACITY DIE AND BLOCK MANAGEMENT	US	Issued	17/199,135	Mar 11, 2021	11,561,713	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Material Having Both Negative Spin Polarization and Negative Anisotropy	US	Issued	17/210,073	Mar 23, 2021	11,683,993	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INDEPENDENTLY DRIVING OUTER AND INNER FINE ACTUATORS	US	Issued	17/396,359	Aug 6, 2021	11,482,254	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INDEPENDENTLY DRIVING OUTER AND INNER FINE ACTUATORS	US	Issued	17/175,976	Feb 15, 2021	11,482,246	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Application Identifier Handler Heads-Up for Fast	US	Issued	17/198,534	Mar 11, 2021	11,513,963	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Read and Write Buffers in a Memory	US	Issued	17/878,253	Aug 1, 2022	11,675,512	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using Read and Write Buffers in a Memory	US	Issued	17/183,703	Feb 24, 2021	11,435,920	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Idle Power Mitigation Circuit	US	Issued	17/205,094	Mar 18, 2021	11,640,252	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST MEMORY BUFFER ALLOCATION MANAGEMENT	US	Issued	17/222,565	Apr 5, 2021	11,403,011	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE DEVICE HAVING FAST BOOT CODE TRANSFER WITH LOW SPEED	US	Issued	17/340,027	Jun 6, 2021	11,556,424	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Switch Based BGA Extension	US	Issued	17/216,046	Mar 29, 2021	11,675,528	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Boosted Boot Procedure By Background Re-Arrangement Of Read Patterns	US	Issued	17/175,322	Feb 12, 2021	11,416,263	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	VERY LOW SIZED ZONE SUPPORT FOR STORAGE DEVICES	US	Issued	17/230,753	Apr 14, 2021	11,481,136	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	USER CONTROLLED DATA-IN FOR LOWER AND MIDDLE PAGE IN MLC-FINE QLC MEMORY	US	Issued	17/236,704	Apr 21, 2021	11,507,303	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TECHNIQUE FOR ADJUSTING READ TIMING PARAMETERS FOR READ ERROR HANDLING	US	Issued	17/213,997	Mar 26, 2021	11,367,491	Jun 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage With Improved Read Parallelism	US	Issued	17/191,195	Mar 3, 2021	11,645,009	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage That Controls Decode Performance By Changing Program PLC	US	Issued	17/192,142	Mar 4, 2021	11,531,499	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Revised Host Command Generation for Unaligned Access	US	Issued	17/195,399	Mar 8, 2021	11,513,736	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection of Data Discrepancy After XOR Recovery	US	Issued	17/241,846	Apr 27, 2021	11,537,466	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING HEAD WITH TRAILING SHIELD HAVING MULTIPLE THROAT HEIGHTS	US	Issued	17/324,679	May 19, 2021	11,657,837	Mar 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE SOFT-BIT COMPRESSION IN FLASH MEMORY	US	Issued	17/239,057	Apr 23, 2021	11,456,758	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE SYSTEM AND METHOD FOR DATA RECOVERY AFTER DETECTION OF AN UNCORRECTED	US	Issued	17/316,189	May 10, 2021	11,663,081	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Write On Merkle Tree For Secure HMB	US	Issued	17/236,730	Apr 21, 2021	11,526,300	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH OPTIMIZED READ	US	Issued	17/306,073	May 3, 2021	11,656,994	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE TRANSMITTING CONFIGURATION DATA TO A PREAMP CIRCUIT	US	Issued	17/214,870	Mar 28, 2021	11,295,764	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Modified Distribution of Memory Device States	US	Issued	17/319,756	May 13, 2021	11,462,279	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CIRCUIT TO REDUCE GATING OVERALL SYSTEM PERFORMANCE	US	Issued	17/338,595	Jun 3, 2021	11,380,417	Jul 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUSPENSION TAIL HAVING NARROWING TIP	US	Issued	17/239,174	Apr 23, 2021	11,430,474	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Utilizing Host Memory Buffers for Storage Device Recoveries	US	Issued	17/331,958	May 27, 2021	11,487,439	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Privacy Enforcing Memory System	US	Issued	17/234,051	Apr 19, 2021	11,593,520	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Cache Based Flow for a Simple Copy Command	US	Issued	17/237,949	Apr 22, 2021	11,556,268	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PRE-BIASING WRITE CURRENT FOR ENERGY ASSISTED MAGNETIC	US	Issued	17/241,990	Apr 27, 2021	11,694,712	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	GLASS SUBSTRATES FOR HEAT ASSISTED MAGNETIC RECORDING (HAMR) AND METHOD OF	US	Issued	17/321,032	May 14, 2021	11,270,724	Mar 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE OF TREE DATA STRUCTURES	US	Issued	17/332,974	May 27, 2021	11,687,592	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE OF TREE DATA STRUCTURES	US	Issued	17/332,986	May 27, 2021	11,636,153	Apr 25, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Substrate Bonding Pad Having a Multi-Surface Trace Interface	US	Issued	17/343,069	Jun 9, 2021	11,569,155	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WRITING TO DEFECTIVE DATA SECTOR FOR FLY HEIGHT CONTROL	US	Issued	17/242,013	Apr 27, 2021	11,404,079	Aug 2, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Preventing Accidental Updates and Deletions Using	US	Issued	17/234,387	Apr 19, 2021	11,592,995	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Automatic Defragmentation of Memory	US	Issued	17/215,898	Mar 29, 2021	11,520,695	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Processor Instructions for Iterative Decoding Operations	US	Issued	17/500,653	Oct 13, 2021	11,522,563	Dec 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BANDWIDTH ALLOCATION FOR STORAGE SYSTEM COMMANDS IN PEER-TO-PEER ENVIRONMENT	US	Issued	17/243,348	Apr 28, 2021	11,561,909	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Toggle Mode (TM) Coding With Circuit Bounded Array Memory	US	Issued	17/970,221	Oct 20, 2022	11,675,534	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Toggle Mode (TM) Coding With Circuit Bounded Array Memory	US	Issued	17/314,374	May 7, 2021	11,494,126	Nov 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Connection Virtualization for Data Storage Device Arrays	US	Issued	17/338,944	Jun 4, 2021	11,567,883	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Queue Limit Overflow for Data Storage Device Arrays	US	Issued	17/338,952	Jun 4, 2021	11,507,321	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADAPTING READ ELEMENT USAGE	US	Issued	17/326,868	May 21, 2021	11,430,468	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE USING PREDEFINED DATA SEGMENTS FOR LOGICAL ADDRESS MAPPING	US	Issued	17/317,018	May 11, 2021	11,599,305	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXECUTING JUST-IN-TIME REFRESH	US	Issued	17/204,277	Mar 17, 2021	11,276,431	Mar 15, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head Having Same-Gap Read-After-Write	US	Issued	17/232,704	Apr 16, 2021	11,514,929	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEET HEALTH MANAGEMENT DEVICE CLASSIFICATION FRAMEWORK	US	Issued	17/332,552	May 27, 2021	11,593,204	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH BIT RATE COMMUNICATION INTERFACE WITH COMMON MODE VOLTAGE ADJUSTMENT	US	Issued	17/362,060	Jun 29, 2021	11,567,888	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Initiated Cached Read to Recover Corrupted	US	Issued	17/313,793	May 6, 2021	11,650,758	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Low-Power, Fast-Response Machine Learning Autofocus Enhancements	US	Issued	17/849,462	Jun 24, 2022	11,641,520	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Low-Power, Fast-Response Machine Learning Autofocus Enhancements	US	Issued	17/360,373	Jun 28, 2021	11,394,865	Jul 19, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SEED LAYER FOR MAGNETIC RECORDING MEDIA	US	Issued	17/356,044	Jun 23, 2021	11,475,916	Oct 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH PLASMA-POLISHED PRE-SEED LAYER OR SUBSTRATE	US	Issued	17/353,456	Jun 21, 2021	11,508,405	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH OXIDIZED PRE-SEED LAYER	US	Issued	17/353,472	Jun 21, 2021	11,398,247	Jul 26, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Duplicating An ECC Sub-Block In Downstream ECC Super-Block	US	Issued	17/643,783	Dec 10, 2021	11,557,321	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DUPLICATING AN ECC SUB-BLOCK IN DOWNSTREAM ECC SUPER-BLOCK	US	Issued	17/316,981	May 11, 2021	11,211,094	Dec 28, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Video Processing In a Data Storage Device	US	Issued	17/349,515	Jun 16, 2021	11,601,656	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System with Dual Submission Queue Doorbell Registers and Method for Use In	US	Issued	17/225,385	Apr 8, 2021	11,461,052	Oct 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Management For Efficient Low Power Mode Handling In A Storage Device	US	Issued	17/339,547	Jun 4, 2021	11,604,592	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Dynamic Allocation of Control Blocks for Improving Ho	US	Issued	17/320,836	May 14, 2021	11,487,450	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Having Predictive Analytics	US	Issued	17/345,877	Jun 11, 2021	11,513,720	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEET HEALTH MANAGEMENT CORRECTIVE ACTION COMMUNICATION EXCHANGE	US	Issued	17/333,007	May 27, 2021	11,621,963	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tiered Storage System with Defragmentation Based on Weighted Flash Fragmentation	US	Issued	17/358,786	Jun 25, 2021	11,662,932	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL TIME DOMAIN CONTROL FOR DYNAMIC STAGGERING	US	Issued	17/351,455	Jun 18, 2021	11,508,450	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Enhanced Word Line Stripe Erase Abort Detection	US	Issued	17/357,053	Jun 24, 2021	11,557,348	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Method to Use Flat Relink Table in HMB	US	Issued	17/335,863	Jun 1, 2021	11,640,253	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SYNCHRONIZING FIRST CHANNEL BASED ON SYNC MARK DETECTION	US	Issued	17/330,675	May 26, 2021	11,386,927	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BiSx (012) Layers Having Increased Operating Temperatures For SOT And MRAM Devices	US	Issued	17/405,954	Aug 18, 2021	11,532,323	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF ACTUATOR DYNAMICS IN A MULTIPLE ACTUATOR HARD DISK DRIVE	US	Issued	17/741,955	May 11, 2022	11,664,047	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF ACTUATOR DYNAMICS IN A MULTIPLE ACTUATOR HARD DISK DRIVE	US	Issued	17/353,584	Jun 21, 2021	11,348,607	May 31, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Parity-Based Redundant Video Storage Among Networked Video Cameras	US	Issued	17/361,532	Jun 29, 2021	11,659,140	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Object Detection and Tagging Quality of Service	US	Issued	17/335,623	Jun 1, 2021	11,651,027	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Efficient Image Searching	US	Issued	17/340,372	Jun 7, 2021	11,573,706	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Reliable Watermarking	US	Issued	17/335,649	Jun 1, 2021	11,575,978	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Application-Defined Data Retrieval in Surveillance	US	Issued	17/336,603	Jun 2, 2021	11,546,612	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Read Scrub	US	Issued	17/332,727	May 27, 2021	11,513,890	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE WITH PROGRESSIVE WRITES	US	Issued	17/356,331	Jun 23, 2021	11,482,292	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TAPE SUPPORT SYSTEM WITH A LOAD-UNLOAD MECHANISM	US	Issued	17/351,666	Jun 18, 2021	11,417,360	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods for Fragmentation Management in Host Buffers	US	Issued	17/360,544	Jun 28, 2021	11,625,189	Apr 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Garbage Collection In Zoned Namespaces SSDs	US	Issued	17/869,951	Jul 21, 2022	11,640,260	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Fast Garbage Collection In Zoned Namespaces SSDs	US	Issued	17/350,903	Jun 17, 2021	11,543,993	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ADAPTIVE PROGRAM PULSE WIDTH FOR PROGRAMMING 3D NAND MEMORY	US	Issued	17/336,314	Jun 2, 2021	11,557,346	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORIES WITH END-TO-END DATA PROTECTION USING PHYSICAL LOCATION CHECK	US	Issued	17/357,759	Jun 24, 2021	11,429,485	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head Design Having A Null Shield For Same Gap Verify	US	Issued	17/359,046	Jun 25, 2021	11,682,421	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head Design Having Same Gap Verify Capabilities	US	Issued	17/355,590	Jun 23, 2021	11,646,053	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Soft Bias Shape Anisotropy Stabilization Read Head Design and Method of Making Same	US	Issued	17/359,098	Jun 25, 2021	11,514,932	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Soft Bias Side Shield Stabilized By Hard Bias For Read Head Design	US	Issued	17/359,132	Jun 25, 2021	11,514,930	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Head Having One Or More Antiferromagnetic Layers Above Soft Bias Side Shields	US	Issued	17/359,171	Jun 25, 2021	11,437,061	Sep 6, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	Read Head Having One Or More Antiferromagnetic Layers Below Soft Bias Side Shields,	US	Issued	17/359,199	Jun 25, 2021	11,514,936	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Dissimilar Write Prioritization in ZNS Devices	US	Issued	17/338,464	Jun 3, 2021	11,537,305	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE PRINTED CIRCUIT OFFSET FINGER STIFFENER	US	Issued	17/356,277	Jun 23, 2021	11,657,841	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PROCESSING PROBLEMATIC PATTERNS AS ERASURES	US	Issued	17/345,434	Jun 11, 2021	11,513,895	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Decision-Based Memory Read Threshold Calibration	US	Issued	17/352,953	Jun 21, 2021	11,488,684	Nov 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Latency On Indirect Admin Commands	US	Issued	17/349,598	Jun 16, 2021	11,561,735	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SOFT BIT REFERENCE LEVEL CALIBRATION USING DECODED DATA	US	Issued	17/342,183	Jun 8, 2021	11,538,534	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING FLY HEIGHT ACTUATOR FOR MULTIPLE HEADS DU	US	Issued	17/345,149	Jun 11, 2021	11,295,774	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DETECTING NFT CONTAMINATION BY MEASURING THERMAL G	US	Issued	17/357,030	Jun 24, 2021	11,430,482	Aug 30, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple Function Level Reset Management	US	Issued	17/348,519	Jun 15, 2021	11,640,335	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer-to-Peer Media Streaming from an Edge Data Storage Device to a Browser	US	Issued	17/362,255	Jun 29, 2021	11,621,986	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Dissimilar Write Prioritization in ZNS Devices	US	Issued	17/338,487	Jun 3, 2021	11,537,303	Dec 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Method To Enhance Magnetic Strength And Robustness Of Rear Hard Bias For Dual Fre	US	Issued	17/398,714	Aug 10, 2021	11,514,933	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC HEAD WITH ASSISTED MAGNETIC RECORDING	US	Issued	17/401,846	Aug 13, 2021	11,682,419	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SORTING ACCESS COMMANDS BASED ON CURRENT OR TARGET	US	Issued	17/346,699	Jun 14, 2021	11,295,781	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SEEKING MULTIPLE ACTUATORS TO IMPROVE PERFORMANCE	US	Issued	17/649,999	Feb 4, 2022	11,657,843	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SEEKING MULTIPLE ACTUATORS TO IMPROVE PERFORMANCE	US	Issued	17/346,732	Jun 14, 2021	11,257,517	Feb 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE PROTECTIVE FILM ON NEAR-FIELD TRANSDUCER OF HEAT-ASSISTED MAGNET	US	Issued	17/345,634	Jun 11, 2021	11,386,922	Jul 12, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head with Stable Magnetization of Shields	US	Issued	17/396,234	Aug 6, 2021	11,676,627	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTING LATENT DEFECTS IN A MEMORY DEVICE DURING AN ERASE OPERATION BAS	US	Issued	17/341,814	Jun 8, 2021	11,587,629	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and Apparatus to Control Bi-color LEDs on Enterprise and Datacenter Solid Sta	US	Issued	17/363,000	Jun 30, 2021	11,622,431	Apr 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ISOLATING PROBLEMATIC MEMORY PLANES TO AVOID NEIGHBOR PLAN DISTURB	US	Issued	17/382,424	Jul 22, 2021	11,657,883	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	FOGGY-FINE PROGRAMMING FOR MEMORY CELLS WITH REDUCED NUMBER OF PROG	US	Issued	17/395,018	Aug 5, 2021	11,587,621	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Compensating For Magnetic Tape Distortion When Shingle Writing	US	Issued	17/471,028	Sep 9, 2021	11,532,330	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING WRITE PARAMETER BY PRESSING ACTUATOR AGA	US	Issued	17/358,431	Jun 25, 2021	11,417,363	Aug 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Asymmetric Read Sense	US	Issued	17/412,158	Aug 25, 2021	11,656,789	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CALIBRATING FINE ACTUATOR BY RAMPING DISTURBANCE TO	US	Issued	17/358,810	Jun 25, 2021	11,295,765	Apr 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	HAMR HEAD WITH NEAR-FIELD TRANSDUCER (NFT) WITH TRAILING BEVEL	US	Issued	17/404,924	Aug 17, 2021	11,574,647	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Hybrid Dedicated and Dynamic Servo for Tape	US	Issued	17/522,646	Nov 9, 2021	11,688,420	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and Storage System with a Non-Volatile Bad Block Read Cache Using Partial Bi	US	Issued	17/397,245	Aug 9, 2021	11,626,183	Apr 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE SELF-SERVO WRITING BY COMPENSATING FOR CORRUPTED SPI	US	Issued	17/391,842	Aug 2, 2021	11,532,326	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	UPS out of order hint generation	US	Issued	17/396,243	Aug 6, 2021	11,614,896	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE EXECUTING RUNT WRITE COMMANDS AS FREE COMMANDS	US	Issued	17/387,638	Jul 28, 2021	11,656,797	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head Design Having An Antiferromagnetic Coupling (AFC) Null Shield For Same Ga	US	Issued	17/396,213	Aug 6, 2021	11,646,054	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Controlled Imbalance in Super Block Allocation in ZNS SSD	US	Issued	17/412,153	Aug 25, 2021	11,640,254	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING PROBLEMATIC SIGNAL MODULATION PATTERNS AS ERASURES USING WR	US	Issued	17/474,345	Sep 14, 2021	11,671,198	Jun 10, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Storing Logical-to-Physical Address Table Entries in a C	US	Issued	17/465,165	Sep 2, 2021	11,550,658	Jan 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ARCHIVAL DATA STORAGE LIBRARY	US	Issued	17/402,370	Aug 13, 2021	11,682,426	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Longitudinal Sensor Bias Structures and Method of Formation Thereof	US	Issued	17/495,994	Oct 7, 2021	11,631,535	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH OPTICAL-COUPLING M	US	Issued	17/395,820	Aug 6, 2021	11,437,064	Sep 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods For Writing HDD Metadata In NAND Flash	US	Issued	17/491,379	Sep 30, 2021	11,694,721	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Performing a Targeted Read Scrub Operation During I	US	Issued	17/465,192	Sep 2, 2021	11,599,277	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SHARED DISK CONFIGURATION IN A MULTIPLE ACTUATOR HARD DISK DRIVE	US	Issued	17/475,217	Sep 14, 2021	11,456,009	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Drive Configured to Enable Magnetic Media to Fly Above an Upstream or a Down	US	Issued	17/512,127	Oct 27, 2021	11,532,320	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Planar Design For Sensors in A Dual Free Layer Read Head	US	Issued	17/512,216	Oct 27, 2021	11,514,934	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Read Sensors Having Stabilized Upper Readers, And Related Methods	US	Issued	17/500,572	Oct 13, 2021	11,514,935	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CARRIAGE ASSEMBLY WITH ASYMMETRICAL SWAGE BOSSES AND ASSOCIATED METHO	US	Issued	17/843,524	Jun 17, 2022	11,646,055	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	CARRIAGE ASSEMBLY WITH ASYMMETRICAL SWAGE BOSSES AND ASSOCIATED METHO	US	Issued	17/522,128	Nov 9, 2021	11,410,692	Aug 9, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Prediction-Based Pre-Erase of Blocks to Improve Sequ	US	Issued	17/482,690	Sep 23, 2021	11,599,298	Mar 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	REPEATABLE RUNOUT COMPENSATION VALVE GENERATION	US	Issued	17/494,825	Oct 5, 2021	11,456,014	Sep 27, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	PER HEAD, PER PROFILE FINALIZE TO MOVE REPEATABLE RUNOUT COMPENSATION VA	US	Issued	17/506,660	Oct 20, 2021	11,482,253	Oct 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Endurance Groups ECC Allocation	US	Issued	17/464,384	Sep 1, 2021	11,556,274	Jan 17, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Selective HMB Backup In NVM For Low Power Mode	US	Issued	17/471,608	Sep 10, 2021	11,531,473	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND SYSTEM FOR MAINTENANCE ALLOCATION BETWEEN NVM GROUPS	US	Issued	17/470,141	Sep 9, 2021	11,640,267	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	VIBRATION SENSOR FEEDFORWARD CONTROL FOR MAGNETIC STORAGE DEVICE	US	Issued	17/519,434	Nov 4, 2021	11,574,649	Feb 7, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE POWER LOSS MANAGEMENT FOR DATA STORAGE DEVICES	US	Issued	17/531,734	Nov 20, 2021	11,644,986	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Parallel Commands Overlap Detection Based on Queue-Depth	US	Issued	17/460,531	Aug 30, 2021	11,640,264	May 2, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Memory Buffer (HMB) Random Cache Access	US	Issued	17/541,028	Dec 2, 2021	11,604,735	Mar 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Slider Assemblies Having Recesses With Solder Structures For Magnetic Recording Dev	US	Issued	17/476,966	Sep 16, 2021	11,508,402	Nov 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNED EDGE PROFILE OF A DISK SUBSTRATE FOR USE IN MAGNETIC RECORDING MEDIA	US	Issued	17/543,441	Dec 6, 2021	11,664,050	May 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH PRE-TRAINED MODEL AND INFERENCE CIRCUIT	US	Issued	17/503,612	Oct 18, 2021	11,687,252	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE OPERATION PROCESSING DURING DATA MIGRATION USING MIGRATED INDIC	US	Issued	17/503,950	Oct 18, 2021	11,693,577	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUSPENSION PAD PEEL-PREVENTION CONFIGURATION	US	Issued	17/551,911	Dec 15, 2021	11,631,426	Apr 18, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE-PORTION HARD DISK DRIVE SLIDER PAD CONFIGURATION	US	Issued	17/541,219	Dec 2, 2021	11,676,628	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Protection During Concurrent Operations for Multiple Actuator Data Storage Dev	US	Issued	17/511,917	Oct 27, 2021	11,650,761	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Full Die Recovery In ZNS SSD	US	Issued	17/539,793	Dec 1, 2021	11,687,263	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED PHYSICAL LAYERS WITH PASSIVE INTERFACING FOR CONFIGURABLE INTEGR	US	Issued	17/457,659	Dec 5, 2021	11,687,483	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR DATA PROTECTION USING XOR PARITY	US	Issued	17/563,533	Dec 28, 2021	11,687,409	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Two-Dimensional Magnetic Recording (TDMR) for High Area Density Tape Drive	US	Issued	17/551,981	Dec 15, 2021	11,532,325	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Two-Dimensional Magnetic Recording (TDMR) to Counter Tape Dimensional Stability (US	Issued	17/552,072	Dec 15, 2021	11,670,329	Jun 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK HUB FOR RETAINING MAGNETIC RECORDING MEDIA FOR FILM THICKNESS MEASU	US	Issued	17/569,375	Jan 5, 2022	11,651,793	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) SLIDER WITH STRAY LIGHT REMOVAL	US	Issued	17/522,404	Nov 9, 2021	11,514,946	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH MULTI-ACTUATOR DRIVE WITH CROSS-ACTUATOR ALIGN	US	Issued	17/543,209	Dec 6, 2021	11,581,012	Feb 14, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT CURRENT (DC) LEVEL SHIFTING CIRCUIT FOR USE IN THE DETECTION OF MEDIA	US	Issued	17/576,038	Jan 14, 2022	11,587,589	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Servo Writer Head Design For The Rotated Servo Pattern	US	Issued	17/651,117	Feb 15, 2022	11,676,630	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Centralized SRAM Error Location Detection and Recovery Mechanism	US	Issued	17/539,800	Dec 1, 2021	11,687,405	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCALIZED ONBOARD SOCKET HEATING ELEMENTS FOR BURN-IN TEST BOARDS	US	Issued	17/591,129	Feb 2, 2022	11,650,246	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD CONTAINING A NEAR-FIE	US	Issued	17/588,758	Jan 31, 2022	11,626,137	Apr 11, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH MAIN POLE HAVING RECES	US	Issued	17/588,473	Jan 31, 2022	11,532,329	Dec 20, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA ACCESS AND LOGICAL MAPPING FOR MAGNETIC DISKS	US	Issued	17/679,565	Feb 24, 2022	11,657,848	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Immediate Partial Host Buffer Fetching	US	Issued	17/457,587	Dec 3, 2021	11,656,798	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Flat Profile Tape Recording Head Having Beveled Non-Functional Portions	US	Issued	17/657,248	Mar 30, 2022	11,615,807	Mar 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Beam Combiner For VCSEL Array In HAMR Head	US	Issued	17/708,558	Mar 30, 2022	11,657,845	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR BEARING DESIGN WITH ROUGHENED LEADING EDGE SHALLOW STEP FOR EN	US	Issued	17/652,872	Feb 28, 2022	11,587,583	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR BEARING DESIGN WITH ULTRA-LOW PRESSURE FOR LOW POWER-CONSUM	US	Issued	17/652,918	Feb 28, 2022	11,587,584	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR BEARING DESIGNS WITH HIGHER PRESSURE AND HIGHER THERMAL FLYING	US	Issued	17/652,811	Feb 28, 2022	11,594,247	Feb 28, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Two Layer Leading Shield Design With Non-Conformal Shapes For Magnetic Recording	US	Issued	17/652,067	Feb 22, 2022	11,651,783	May 16, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DETERMINING LASER INDUCED THERMAL PROTRUSION AND LASER THRESHOLD IN HEA	US	Issued	17/672,050	Feb 15, 2022	11,587,586	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD TO MEASURE THERMAL PROTRUSION BY SENSING SPACING CHANGE DUE TO	US	Issued	17/678,428	Feb 23, 2022	11,587,587	Feb 21, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC TRACK INTERFERENCE WRITE COUNTING FOR MAGNETIC DISKS	US	Issued	17/725,197	Apr 20, 2022	11,657,847	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Timestamp And Read Counter For Magnetic Recording Devices	US	Issued	17/651,100	Feb 15, 2022	11,694,722	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Angled Free Layer for Multi-Level Read Signals	US	Issued	17/680,043	Feb 24, 2022	11,688,427	Jun 27, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head Having Joined Modules	US	Issued	17/692,889	Mar 11, 2022	11,676,626	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Joined Multi-Module Tape Recording Head	US	Issued	17/706,335	Mar 28, 2022	11,545,184	Jan 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Externalizing Inter-Symbol Interference Data in a Data Channel	US	Issued	17/683,958	Mar 1, 2022	11,677,420	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SAMPLED DATA POLYDYNE FEEDFORWARD POSITION CONTROL	US	Issued	17/575,963	Jan 14, 2022	11,676,629	Jun 13, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	POLYDYNE ACCELERATION TRAJECTORY CONTROL	US	Issued	17/575,976	Jan 14, 2022	11,646,060	May 9, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE NON-UNIFORM DISK SHROUD CLEARANCE	US	Issued	17/712,023	Apr 1, 2022	11,615,810	Mar 28, 2023

WESTERN DIGITAL TECHNOLOGIES, INC.	Asymmetric Write Head Shields Compatible With Dual-Free-Layer (DFL) Readers	US	Issued	17/740,293	May 9, 2022	11,682,417	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Assemblies Having Movable Reel Configurations For Magnetic Recording Devices	US	Issued	17/824,700	May 25, 2022	11,562,769	Jan 24, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ADAPTIVE WRITE POLICY AND ENHANCED LONGEVITY	US	Issued	17/829,653	Jun 1, 2022	11,694,717	Jul 4, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data integrity protection with partial updates	US	Issued	17/845,770	Jun 21, 2022	11,681,581	Jun 20, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Grouping of storage media based on parameters associated with the storage media	US	Issued	10/645,129	Aug 21, 2003	7,191,283	Mar 13, 2007
WESTERN DIGITAL TECHNOLOGIES, INC.	Method for delineation of phase change memory (PCM) cells separated by PCM and us	US	Issued	11/781,239	Jul 21, 2007	7,550,313	Jun 23, 2009
WESTERN DIGITAL TECHNOLOGIES, INC.	Phase change memory cells delineated by regions of modified film resistivity	US	Issued	12/407,068	Mar 19, 2009	7,642,549	Jan 5, 2010
WESTERN DIGITAL TECHNOLOGIES, INC.	RELIABLE PHYSICAL UNCLONABLE FUNCTION FOR DEVICE AUTHENTICATION	US	Issued	13/680,688	Nov 19, 2012	8,861,736	Oct 14, 2014
WESTERN DIGITAL TECHNOLOGIES, INC.	WIRE BOND PAD DESIGN FOR COMPACT STACKED-DIE PACKAGE	US	Pending	17/514,771	Oct 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Flip-Chip Package With Reduced Underfill Area	US	Pending	16/874,751	May 15, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING KEEP-OUT-ZONE AREA FOR A SEMICONDUCTOR DEVICE	US	Pending	17/028,484	Sep 22, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE WITH REDUCED STRESS DIE PICK AND PLACE	US	Pending	17/174,802	Feb 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Detection of Defects in Semiconductor Devices	US	Pending	17/203,271	Mar 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMOELECTRIC SEMICONDUCTOR DEVICE AND METHOD OF MAKING SAME	US	Pending	17/902,641	Sep 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL SEMICONDUCTOR DEVICE WITH SIDE GROOVES	US	Pending	17/328,013	May 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SUBSTRATE COMPONENT LAYOUT AND BONDING METHOD FOR INCREASED PACKAGE	US	Pending	17/323,132	May 18, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE PACKAGE HAVING A BALL GRID ARRAY WITH MULTIPLE SOLD	US	Pending	17/354,096	Jun 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING VERTICAL CONTACT FINGERS	US	Pending	17/348,989	Jun 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package Die Stacking System and Method	US	Pending	17/369,307	Jul 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package Mold Flow Control System and Method	US	Pending	17/490,279	Sep 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	STACKED SSD SEMICONDUCTOR DEVICE	US	Pending	17/517,911	Nov 3, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package Having Improved Conductive Stub Coverage	US	Pending	17/510,212	Oct 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package Having Multi-Layer Molding Compound and Method	US	Pending	17/486,322	Sep 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER AND SEMICONDUCTOR DIES FORMED THEREFROM INCLUDING	US	Pending	17/688,099	Mar 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING A SUSPENDED REINFORCING LAYER AND METHO	US	Pending	17/536,800	Nov 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Mold Compound Dispensing System and Method	US	Pending	17/540,371	Dec 2, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Exposed Bond Wires	US	Pending	17/670,763	Feb 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device With Optimized Underfill Flow	US	Pending	17/699,979	Mar 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enclosure Fitting for Electronic Device	US	Pending	17/658,443	Apr 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method of Thinning a Semiconductor Die	US	Pending	17/658,447	Apr 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Wafer Dicing Method	US	Pending	17/838,491	Jun 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD HAVING A SACRIFICIAL PAD TO MITIGATE GALVANIC CORROS	US	Pending	17/719,815	Apr 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD WITH EMBEDDED BUMP PADS	US	Pending	17/726,990	Apr 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Flip Chip Bump With Multi-PI Opening	US	Pending	17/750,047	May 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Laser Cutting With Electron Removal	US	Pending	17/837,175	Jun 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Surface Mount Technology Method and Magnetic Carrier System	US	Pending	17/744,291	May 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING REINFORCING BLOCKS	US	Pending	17/840,322	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING SELECT DIES OF KNOWN THICKNESSES	US	Pending	17/831,810	Jun 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MECHANICAL SUPPORT FOR A TAIL OFFSET DIE STACK	US	Pending	17/829,719	Jun 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DIE SEPARATION RING FOR WAFERS HAVING A LARGE DIE ASPECT RATIO	US	Pending	17/750,864	May 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER THINNED BY HORIZONTAL STEALTH LASING	US	Pending	17/841,357	Jun 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	BIFACIAL SEMICONDUCTOR WAFER	US	Pending	17/888,845	Aug 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	BALL GRID ARRAY SEMICONDUCTOR DEVICE WITH THERMAL PADS AND PRINTED CIRCU	US	Pending	63/425,359	Nov 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Integrated Die Ejector for Die Attach Ejector Devices	US	Pending	63/490,665	Mar 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR CHIP WITH VARYING THICKNESS PROFILE	US	Pending	63/481,453	Jan 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH THERMAL DISSIPATION FEATURES FOR A FLIP CHIP STRUCTURE	US	Pending	63/489,266	Mar 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR CHIP HAVING A HIGH THERMAL LIQUID COOLANT	US	Pending	63/488,555	Mar 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SUBSTRATE HAVING AN INCREASED METAL TRACE THICKNESS	US	Pending	63/493,824	Apr 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Translation Lookup and Garbage Collection Optimizations on Storage System with Page	US	Pending	17/561,180	Dec 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERALIZED VERIFICATION SCHEME FOR SAFE METADATA MODIFICATION	US	Pending	17/744,551	May 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and System for Identifying Erased Memory Areas	US	Pending	17/705,122	Mar 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Priority-Based Data Movement	US	Pending	17/955,432	Sep 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NUCLEIC ACID SEQUENCING BY SYNTHESIS USING MAGNETIC SENSOR ARRAYS	US	Pending	17/602,319	Apr 8, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC SENSOR ARRAYS FOR NUCLEIC ACID SEQUENCING AND METHODS OF MAKIN	US	Pending	17/905,724	Mar 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-THROUGHPUT NUCLEIC ACID SEQUENCING WITH SINGLE-MOLECULE-SENSOR AR	US	Pending	17/996,360	Apr 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE-MOLECULE, REAL-TIME, LABEL-FREE DYNAMIC BIOSENSING WITH NANOSCALE	US	Pending	18/004,402	Jul 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTION OF LOGICAL-TO-PHYSICAL ADDRESS ENTRIES ACROSS MULTIPLE MEMOR	US	Pending	17/493,722	Oct 4, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cache Write Overlap Handling	US	Pending	17/860,263	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Pending	29/756,994	Nov 2, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE	US	Pending	29/755,015	Oct 16, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	USING FILE SYSTEM EXTENDED ATTRIBUTES TO UPDATE DATABASES IN HIERARCHICAL	US	Pending	16/775,023	Jan 28, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	DIRECT HOST ACCESS TO STORAGE DEVICE MEMORY SPACE	US	Pending	18/139,912	Apr 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe CONTROLLER MEMORY MANAGER	US	Pending	18/076,578	Dec 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW POWER STATE STAGING	US	Pending	18/323,945	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAMR STACK SHAPE OPTIMIZATION FOR MAGNETIC RECORDING	US	Pending	17/869,325	Jul 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE SETS OF TRIM PARAMETERS	US	Pending	17/834,840	Jun 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE	US	Pending	29/794,416	Jun 11, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Controller for Quality Of Service Based Arbitrations	US	Pending	17/860,203	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADJUSTMENT OF STORAGE DEVICE PARAMETERS BASED ON WORKLOAD CHARACTERIS	US	Pending	17/643,789	Dec 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING THROUGH-PACKAGE DEBUG FEATURES	US	Pending	17/833,027	Jun 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE	US	Pending	29/794,408	Jun 11, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH DEEP LEARNING NEURAL NETWORK	US	Pending	16/212,586	Dec 6, 2018		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SYSTEMS AND METHODS FOR SELF ADAPTIVE CHIP-ENABLE SETUP TIM	US	Pending	16/862,439	Apr 29, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP NON-VOLATILE MEMORY (NVM) SEARCH	US	Pending	17/450,940	Oct 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Apparatus and Method for Regulating Available Storage of a Data Storage System	US	Pending	17/959,899	Oct 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Solid State Drive Cache Eviction Policy By An Unsupervised Reinforcement Learning Sch	US	Pending	18/104,180	Jan 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SUPER-SPARSE IMAGE COMPRESSION USING CROSS-BAR NON-VOLATILE MEMORY DEV	US	Pending	17/668,037	Feb 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Electronic Device	US	Pending	29/775,446	Mar 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN TORQUE OSCILLATOR (STO) SENSORS USED IN NUCLEIC ACID SEQUENCING ARRAY	US	Pending	18/325,942	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR MOLECULE DETECTION BASED ON THERMAL STABILITIES	US	Pending	18/165,089	Feb 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL SENSOR ARRAY FOR MOLECULE DETECTION AND RELATED DETECTION SCHEM	US	Pending	17/661,578	May 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetoresistive Sensor Array for Molecule Detection and Related Detection Schemes	US	Pending	17/464,533	Sep 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED OPTICAL DETECTION FOR NUCLEIC ACID SEQUENCING USING THERMALLY-D	US	Pending	17/457,404	Dec 2, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Execution Condition Embedded in a Command or a Request to Storage Device	US	Pending	17/652,815	Feb 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Electronic Device	US	Pending	29/775,449	Mar 23, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER TARGET CALIBRATION FOR CONTROLLING DRIVE-TO-DRIVE PERFORMANCE VAR	US	Pending	17/889,088	Aug 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE CONTROLLER HAVING DATA AUGMENTATION COMPONENTS FOR USE WITH	US	Pending	17/897,040	Aug 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH ON-CHIP DATA AUGMENTATION COMPONENTS FO	US	Pending	17/897,028	Aug 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING APPARATUS COMPRISING DISK WITH REDUCED THICKNESS AN	US	Pending	16/583,169	Sep 25, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE ACCELERATOR FOR SPARSE TENSORS IN CONVOLUTIONAL NEURAL NETWORK	US	Pending	16/830,129	Mar 25, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE ACCELERATOR FOR SPARSE TENSORS (FAST) IN MACHINE LEARNING	US	Pending	16/726,084	Dec 23, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Devices Using Virtual Side Shields for Improved Areal Density Capa	US	Pending	17/860,343	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCRYPTION	US	Pending	17/218,179	Mar 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ENCRYPTION	US	Pending	17/218,180	Mar 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-TRANSFER TORQUE MAGNETORESISTIVE MEMORY DEVICE WITH A FREE LAYER ST	US	Pending	17/575,840	Jan 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method and device for covertly communicating state changes	US	Pending	16/924,186	Jul 9, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	Embedded PHY (EPHY) IP Core for FPGA	US	Pending	18/197,902	May 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A PLURALITY OF REFERENCE LAYERS	US	Pending	17/358,990	Jun 25, 2021		

WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE CONTROLLED MAGNETIC ANISOTROPY (VCMA) MEMORY DEVICES INCLUDING	US	Pending	18/065,098	Dec 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Zoned Namespaces in Solid-State Drives	US	Pending	17/643,792	Dec 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Replication Barriers for Dependent Data Transfers between Data Stores	US	Pending	16/702,333	Dec 3, 2019
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual SLC/QLC Programming and Resource Releasing	US	Pending	17/455,696	Nov 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSOR SYSTEM WITH LOW POWER SENSOR DEVICES AND HIGH POWER SENSOR DEVI	US	Pending	17/582,435	Jan 24, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Parking for ZNS Devices	US	Pending	17/860,369	Jul 8, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA PARKING FOR SSDS WITH STREAMS	US	Pending	16/858,350	Apr 24, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HIDING PARITY SWAPPING BEHAVIOR	US	Pending	17/455,885	Nov 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	REFERENCE-GUIDED GENOME SEQUENCING	US	Pending	16/822,010	Mar 18, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR LOCATING A SAMPLE READ IN A REFERENCE GENOME	US	Pending	16/820,711	Mar 17, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Elements of Amorphous Based Dual Free Layer Structures and Recording Dev	US	Pending	17/878,388	Aug 1, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BiSb Topological Insulator with Seed Layer or Interlayer to Prevent Sb Diffusion and Pr	US	Pending	17/954,679	Sep 28, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Integrity Protection Of SSDs Utilizing Streams	US	Pending	18/093,734	Jan 5, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR TREATMENT OF A GLASS SUBSTRATE WITH IMPROVED EDGE STRENGTH	US	Pending	16/889,629	Jun 1, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Heat Treatment Of NFT And Surrounding Material	US	Pending	17/448,170	Sep 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFECTIVE KEY MANAGEMENT FOR DATA ENCRYPTION AND DECRYPTION	US	Pending	17/950,593	Sep 22, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	BALL GRID ARRAY SUBSTRATE	US	Pending	17/539,062	Nov 30, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERNAL THERMAL TRANSFER FOR MEMORY DEVICE	US	Pending	16/908,709	Jun 22, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	MATRIX-VECTOR MULTIPLICATION USING SOT-BASED NON-VOLATILE MEMORY CELLS	US	Pending	17/172,155	Feb 10, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED MACHINE LEARNING FOR STORAGE DEVICES	US	Pending	17/179,075	Feb 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	EMBEDDED MULTI-ATTRIBUTE MACHINE LEARNING FOR STORAGE DEVICES	US	Pending	17/180,057	Feb 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MACHINE LEARNING SUPPLEMENTED STORAGE DEVICE CALIBRATION	US	Pending	17/180,247	Feb 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Context Metadata Message for Optimized Two-Chip Performance	US	Pending	17/881,220	Aug 4, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic PCR Assay And Uses Thereof	US	Pending	16/894,481	Jun 5, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE STORAGE DEVICES THAT REDUCE READ TIME FOR READ TIME-SENSITIVE D	US	Pending	16/895,907	Jun 8, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL DEVICES FOR TILT IN CAMERA SYSTEMS	US	Pending	17/455,862	Nov 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	RAID Stripe Allocation Based on Memory Device Health	US	Pending	16/909,527	Jun 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Asynchronous Neural Network Systems	US	Pending	17/178,809	Feb 18, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Managing Storage Device Compute Operations	US	Pending	16/917,544	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCESSING SHARED PARTITIONS ON A STORAGE DRIVE OF A REMOTE DEVICE	US	Pending	16/917,484	Jun 30, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive Host Memory Buffer Traffic Control Based On Real Time Feedback	US	Pending	17/897,928	Aug 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER THINNED BY STEALTH LASING	US	Pending	18/128,622	Mar 30, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR WAFER THINNED BY STEALTH LASING	US	Pending	16/933,177	Jul 20, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE SERVER WITH ON-DEMAND MEDIA SUBTITLES	US	Pending	16/936,780	Jul 23, 2020
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Device With Reinforcement Learning With Q-Learning Acceleration	US	Pending	17/212,526	Mar 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Reduction Of High Tape Contact Pressure Points Against Head Assembly	US	Pending	17/991,620	Nov 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL GASKET FOR MANUFACTURING OF HERMETICALLY-SEALED HARD DISK DRIVE	US	Pending	17/741,347	May 10, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Storage Management in Multi-Channel, Variable-Bit-R	US	Pending	17/176,831	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Internal Compression Storage Devices	US	Pending	17/181,805	Feb 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF OPERATIONS DURING EXCEPTION HANDLING IN MEMORY	US	Pending	17/180,656	Feb 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Device Using CoA Technology	US	Pending	18/071,340	Nov 29, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	CREATING AND USING DELTA L2P ENTRIES	US	Pending	17/870,407	Jul 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DELTA L2P ENTRY USAGE	US	Pending	17/870,414	Jul 21, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DRAM-less SSD with Command Draining	US	Pending	17/714,861	Apr 6, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Command Draining Using Host Memory Buffer	US	Pending	17/980,177	Nov 3, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DRAM-less SSD with Secure HMB for Low Latency	US	Pending	17/652,652	Feb 25, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICES AND RELATED METHODS TO SECURE HOST MEMORY BUFFERS	US	Pending	17/183,140	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR USE WITH RECURRENT NEURAL NETWORKS	US	Pending	17/184,371	Feb 24, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH THERMAL STABILITY LUBRICANTS	US	Pending	17/220,836	Apr 1, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	LUBRICANTS AND METHODS TO DETERMINE DEWETTING THICKNESS THEREOF	US	Pending	17/864,265	Jul 13, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Data-Driven Intelligent Thermal Throttling	US	Pending	17/177,523	Feb 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	AUDIO PRIVACY PROTECTION FOR SURVEILLANCE SYSTEMS	US	Pending	17/176,697	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Dynamic Allocation of Secondary Backup Blocks	US	Pending	17/183,678	Feb 24, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Management of Idle Time Compute Tasks in Storage Systems	US	Pending	17/176,833	Feb 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE MIXED DIGITAL AND ANALOG COMPUTATIONAL STORAGE SYSTEMS	US	Pending	17/173,843	Feb 11, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Emulation of Relational Data Table Relationships Using a Schema	US	Pending	17/181,894	Feb 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Emulation of Code-Description Tables on SQL Databases Using ENUM Data Type	US	Pending	17/181,910	Feb 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MANAGING LOW ENDURANCE SEMICONDUCTOR MEMORY WR	US	Pending	17/180,782	Feb 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF NON-VOLATILE MEMORY EXPRESS NODES	US	Pending	17/175,449	Feb 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Semi-And-Cached TLP Coalescing	US	Pending	17/747,056	May 18, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH INTELLIGENT COMPUTE TASK DISTRIBUTION	US	Pending	17/177,334	Feb 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING A THREE-DIMENSIONAL MEMORY DEVICE USING COMPOSITE HA	US	Pending	18/346,520	Jul 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING A THREE-DIMENSIONAL MEMORY DEVICE USING COMPOSITE HA	US	Pending	63/464,823	May 8, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Routing Techniques to Delay Thermal Throttling	US	Pending	17/180,659	Feb 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH TEMPERATURE LUBRICANTS FOR MAGNETIC MEDIA	US	Pending	18/105,368	Feb 3, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	DEDUPLICATION OF STORAGE DEVICE ENCODED DATA	US	Pending	17/182,725	Feb 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	ADVERSARIAL INFORMATION BOTTLENECK STRATEGY FOR IMPROVED MACHINE LEARN	US	Pending	17/409,667	Aug 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR OPTIMIZED FETCHING OF MULTILINGUAL CONTENT IN M	US	Pending	17/182,033	Feb 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection Of Scattered Data Locations	US	Pending	17/185,789	Feb 25, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER REALLOCATION FOR MEMORY DEVICE	US	Pending	17/199,534	Mar 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	TLC Data Programming With Hybrid Parity	US	Pending	17/202,163	Mar 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD OF ACCESS	US	Pending	17/228,715	Apr 13, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING DISCRETE CHARGE STORAGE ELEM	US	Pending	63/503,530	May 22, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermally Conductive Non-Oil Bleed Liquid Thermal Interface Materials	US	Pending	17/204,552	Mar 17, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD WITH STACKED PASSIVE COMPONENTS	US	Pending	17/237,604	Apr 22, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized Threshold Translation From Serialized Pipeline	US	Pending	17/210,428	Mar 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	KEY BASED PARTIAL DATA RESTRICTION IN STORAGE SYSTEMS	US	Pending	17/211,540	Mar 24, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Persistent Switch-Based Storage Controller	US	Pending	17/737,838	May 5, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYNCHRONOUS FIFO FOR POWER-DOMAIN CROSSING	US	Pending	17/342,239	Jun 8, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head with Trailing Shield Having Multiple Throat-Heights	US	Pending	18/082,730	Dec 16, 2022
WESTERN DIGITAL TECHNOLOGIES, INC.	Block Allocation for Multi-CE/Die Structure SSD	US	Pending	17/235,499	Apr 20, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTING STORAGE ARCHITECTURE WITH MULTI-STORAGE PROCESSING CORES	US	Pending	17/318,956	May 12, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Command Queue Order Adjustment in a Data Storage Device	US	Pending	17/232,888	Apr 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	STATE-BY-STATE PROGRAM LOOP DELTA DETECTION MODE FOR DETECTING A DEFECT	US	Pending	17/231,344	Apr 15, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems and Methods of Compensating Degradation in Analog Compute-In-Memory (A	US	Pending	17/347,472	Jun 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS OF DETERMINING DEGRADATION IN ANALOG COMPUTE-IN-M	US	Pending	17/347,457	Jun 14, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE PRE-BIASING WRITE CURRENT FOR ENERGY ASSISTED MAGNET	US	Pending	18/322,163	May 23, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURED FIRMWARE WITH ANTI-MALWARE	US	Pending	17/356,206	Jun 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE DATA RECOVERY USING REMOTE NETWORK STORAGE	US	Pending	17/324,706	May 19, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Processing of Surveillance Video Streams Using Image Classification and Object Detect	US	Pending	17/326,628	May 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE PRINTED CIRCUIT FINGER LAYOUT FOR LOW CROSS-TALK	US	Pending	17/356,155	Jun 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Tape Having Alternating Sections For Use In Ultra-High Areal Density Tape St	US	Pending	17/455,120	Nov 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED CACHE MANAGEMENT	US	Pending	17/331,453	May 26, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	PERFORMING BACKGROUND OPERATIONS DURING HOST READ IN SOLID STATE MEMO	US	Pending	17/353,176	Jun 21, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Enhanced Digital Signal Processor (DSP) NAND Flash	US	Pending	17/349,508	Jun 16, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	Video Processing In a Data Storage Device	US	Pending	18/104,176	Jan 31, 2023
WESTERN DIGITAL TECHNOLOGIES, INC.	ALIGNED COMMAND BASED FIRMWARE ARCHITECTURE FOR UNALIGNED WRITE HAND	US	Pending	17/356,054	Jun 23, 2021
WESTERN DIGITAL TECHNOLOGIES, INC.	BiSbX (012) Layers Having Increased Operating Temperatures For SOT And MRAM Devi	US	Pending	18/082,721	Dec 16, 2022

WESTERN DIGITAL TECHNOLOGIES, INC.	REMOTE REGISTRATION OF A DATA STORAGE DEVICE WITH BIOMETRIC AUTHENTICATION	US	Pending	17/359,644	Jun 28, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-NETWORK FAILURE INDICATION AND RECOVERY	US	Pending	17/353,781	Jun 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Auto-Peeling of Surveillance Video Content to In	US	Pending	17/348,148	Jun 15, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORING LOG AND USER DATA IN SSD WITH INDEPENDENT PLANE OPERATIONS	US	Pending	17/321,736	May 17, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIA WITH MAGNESIUM TRAPPING	US	Pending	17/365,863	Jul 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Neural Network Soft Information Detector in a Read Channel	US	Pending	17/480,301	Sep 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE PRINTED CIRCUIT COPPER OVERLAY FOR TEMPERATURE MANAGEMENT	US	Pending	18/195,375	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING CONDUCTIVE BUMPS TO IMPROVE EMI/RFI SHIELDING	US	Pending	17/354,119	Jun 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRECISE POWER CYCLE MANAGEMENT IN DATA STORAGE DEVICES	US	Pending	17/682,060	Feb 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Firmware Updates in Composable Infrastructure	US	Pending	17/353,068	Jun 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Progressive Fading for Video Surveillance System	US	Pending	17/352,874	Jun 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) WRITE HEAD WITH PROTECTIVE MULTILAYER	US	Pending	17/860,238	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Retention-Specific Refresh Read	US	Pending	17/358,576	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Bias for Data Retention in Fuse ROM and Flash Memory	US	Pending	17/358,749	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Pulsed Bias for Power-Up or Read Recovery	US	Pending	17/358,927	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Site-Based Calibration of Object Detection Parameters	US	Pending	17/358,739	Jun 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head with Stable Magnetization of Shields	US	Pending	18/142,938	May 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTING APPARATUS FOR TEMPERATURE TESTING OF ELECTRONIC DEVICES	US	Pending	17/412,889	Aug 26, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE-CONTROLLED MAGNETIC ANISOTROPY MEMORY DEVICE INCLUDING AN ANISOTROPIC	US	Pending	17/341,049	Jun 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE-CONTROLLED MAGNETIC ANISOTROPY MEMORY DEVICE INCLUDING AN ANISOTROPIC	US	Pending	17/341,090	Jun 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE-CONTROLLED MAGNETIC ANISOTROPY MEMORY DEVICE INCLUDING AN ANISOTROPIC	US	Pending	17/341,119	Jun 7, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPINTRONIC DEVICES WITH SELF-COOLING FUNCTION	US	Pending	17/387,270	Jul 28, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR MEMORY HANG RECOVERY USING A DISTRIBUTED POWER	US	Pending	17/411,770	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cumulative Wordline Dispersion And Deviation For Read Sense Determination	US	Pending	17/412,159	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cell Statistics Generator for NVM Devices	US	Pending	17/412,161	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL CAVITY SURFACE EMITTING LASER AND HEAD GIMBAL ASSEMBLY	US	Pending	17/463,089	Aug 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICAL CAVITY SURFACE EMITTING LASER, HEAD GIMBAL ASSEMBLY, AND FABRICATION	US	Pending	17/591,414	Feb 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Vertical Cavity Surface Emitting Laser, Head Gimbal Assembly, And Fabrication Process	US	Pending	17/839,172	Jun 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	IDLE POWER MODE FOR EXTERNAL STORAGE DEVICE	US	Pending	17/390,643	Jul 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Implied Streams	US	Pending	17/588,682	Jan 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOUSINGS FOR ELECTRONIC DEVICES AND MEMORY DEVICES	US	Pending	17/461,405	Aug 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Solution for Super Device Imbalance in ZNS SSD	US	Pending	17/412,140	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Purposeful Super Device Imbalance For ZNS SSD Efficiency	US	Pending	17/412,145	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Super Block Allocation Across Super Device In ZNS SSD	US	Pending	17/412,151	Aug 25, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Anti-Parallel Coupled Writer Shields with Stable Magnetic Domain Configuration	US	Pending	17/541,794	Dec 3, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH METAL-DOPED CAPPING LAYER	US	Pending	17/472,415	Sep 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	REGULAR EXPRESSION FILTER FOR UNICODE TRANSFORMATION FORMAT STRINGS	US	Pending	17/486,310	Sep 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Longitudinal Sensor Bias Structures and Method of Formation Thereof	US	Pending	18/130,304	Apr 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID MEMORY MANAGEMENT OF NON-VOLATILE MEMORY (NVM) DEVICES FOR USE	US	Pending	17/499,588	Oct 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	OBTAINING THRESHOLD VOLTAGE MEASUREMENTS FOR MEMORY CELLS BASED ON A	US	Pending	17/400,609	Aug 12, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIUM WITH OPTICAL-COUPLED M	US	Pending	17/897,374	Aug 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK WITH HIGH INTERNAL STRESS TO REDUCE DISK DEFLECTION	US	Pending	17/492,450	Oct 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	TRUSTED SYSTEMS FOR DECENTRALIZED DATA STORAGE	US	Pending	17/537,302	Nov 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NICKEL-BORON COATINGS FOR HOUSINGS AND ENCLOSURES	US	Pending	17/476,227	Sep 15, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Program Reordering to Mitigate Program Disturbs	US	Pending	17/495,015	Oct 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Data Protection During Power Loss	US	Pending	17/553,024	Dec 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MLM Mapped NAND Latch	US	Pending	17/455,007	Nov 15, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH TUNGSTEN PRE-SEED LAYER	US	Pending	17/488,703	Sep 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DRAM-less SSD With Recovery From HMB Loss	US	Pending	17/725,359	Apr 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Sideband Information Over Host Interface Considering Link States	US	Pending	17/479,790	Sep 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTINUOUS NAND DATA-TRANSFER WITH DYNAMIC TM	US	Pending	17/965,168	Oct 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device With Unbalanced Die Stackup	US	Pending	17/519,261	Nov 4, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Determine Link Startup Sequence (LSS) Type Using Reference Clock Frequency And Att	US	Pending	17/875,054	Jul 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR ELECTRICALLY COUPLING A UNIT UNDER TEST WITH A D	US	Pending	17/550,682	Dec 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Devices, Systems, and Related Methods to Determine Writing Fragmenta	US	Pending	17/476,955	Sep 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	RESOURCE USAGE ARBITRATION IN NON-VOLATILE MEMORY (NVM) DATA STORAGE DE	US	Pending	17/522,366	Nov 9, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Current Assisted HAMR Magnetic Writer	US	Pending	17/876,900	Jul 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems, Devices, and Methods For Testing Integrated Circuits In Their Native Environm	US	Pending	17/654,257	Mar 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Controller Buffer Management and Configuration	US	Pending	17/520,936	Nov 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Reduce Command Latency Using Block Pre-Erase	US	Pending	17/518,144	Nov 3, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cold Storage Partition Management in Proof of Space Blockchain Systems	US	Pending	17/576,634	Jan 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING METAL INTERCONNECT STRUCTURES THAT CONT	US	Pending	63/503,524	May 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	TUNNELING MAGNETORESISTIVE (TMR) DEVICE WITH IMPROVED SEED LAYER	US	Pending	17/472,019	Sep 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Devices, Systems, and Related Methods for Grouping Commands of Door	US	Pending	17/506,212	Oct 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure wireless communication system and method	US	Pending	17/556,913	Dec 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Multi-Cell Mapping	US	Pending	17/523,124	Nov 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Block Erase Type Detection Using Bit Count Check	US	Pending	17/534,832	Nov 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Support Higher Number of Active Zones in ZNS SSD	US	Pending	17/492,224	Oct 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Smart Relocation Scan Optimization	US	Pending	17/559,802	Dec 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL MEASUREMENT OF MATERIALS	US	Pending	17/903,632	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic recording head with assisting electric current in trailing shield	US	Pending	17/845,777	Jun 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head Having Leads Over the Trailing Shield for Assisting Electric C	US	Pending	17/845,788	Jun 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-GUIDED PLACEMENT OF MEMORY DEVICE COMPONENT PACKAGES	US	Pending	17/527,687	Nov 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	COMMAND QUEUING FOR DATA STORAGE DEVICES	US	Pending	17/543,434	Dec 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD AUXILIARY BATTERY POWER FOR HANDLING UNGRACEFUL SHUTDOWN WITH HOST	US	Pending	17/646,095	Dec 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermal Surrogate for a Data Storage Device	US	Pending	17/539,807	Dec 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read level tracking by random threshold movement with short feedback loop	US	Pending	17/453,047	Nov 1, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	READINESS STATES FOR PARTITIONED INTERNAL RESOURCES OF A MEMORY CONTROL	US	Pending	17/567,098	Dec 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW LATENCY PARITY FOR A MEMORY DEVICE	US	Pending	17/567,099	Dec 31, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SPINDLE MOTOR HARD DISK DRIVE	US	Pending	17/840,446	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD WAFER DEVICE AND METHOD OF MANUFACTURING SAME	US	Pending	17/547,455	Dec 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe Dual Port Enterprise SSD Optimization	US	Pending	17/450,525	Oct 11, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Pre-Validation Of Blocks For Garbage Collection	US	Pending	17/533,019	Nov 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enterprise Host Memory Buffer For DRAM-less SSD	US	Pending	17/732,611	Apr 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enterprise Host Memory Buffer	US	Pending	17/543,473	Dec 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Buffers and Data Transfer Management	US	Pending	17/452,310	Oct 26, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Maximum Data Transfer Size per Tenant and Command Type	US	Pending	17/550,175	Dec 14, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARDWARE ACCELERATOR CIRCUITS FOR NEAR STORAGE COMPUTE SYSTEMS	US	Pending	17/717,533	Apr 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Logical to Encoded Value Table in Data Storage Device	US	Pending	17/540,682	Dec 2, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE REBUILD OF INTERRUPTED DEVICES IN DATA STORAGE DEVICE ARRAYS	US	Pending	17/528,768	Nov 17, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	IMAGE GROUP CLASSIFIER IN A USER DEVICE	US	Pending	17/557,541	Dec 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	RANKING IMAGES IN AN IMAGE GROUP	US	Pending	17/557,545	Dec 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES, SYSTEMS, AND METHODS OF USING SMART FLUIDS TO CONTROL TRANSLUCA	US	Pending	17/643,398	Dec 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES, SYSTEMS, AND METHODS OF USING SMART FLUIDS TO CONTROL MOLECULE	US	Pending	17/643,401	Dec 8, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DRAM-less SSD With HMB Cache Management	US	Pending	17/657,456	Mar 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING A METAL OXIDE ETCH STOP LAYER	US	Pending	63/504,924	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	OVONIC THRESHOLD SWITCH SELECTORS WITH HIGH-CONDUCTIVITY CURRENT SPREAD	US	Pending	17/579,147	Jan 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT FOR STORAGE CONTROLLERS	US	Pending	17/565,928	Dec 30, 2021		

WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device With Unbalanced Die Stackup	US	Pending	17/649,614	Feb 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device with Protective Layer	US	Pending	17/673,150	Feb 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Devices Having Supportive Plating Structures	US	Pending	17/675,951	Feb 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Accidental Delete Protection	US	Pending	17/542,795	Dec 6, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-KERNEL CACHING FOR DISTRIBUTED CACHE	US	Pending	17/561,898	Dec 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTATIONAL ACCELERATION FOR DISTRIBUTED CACHE	US	Pending	17/571,922	Jan 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ALIGNED SURFACE MODIFICATION FOR MAGNETOCHEMICAL SENSORS	US	Pending	17/649,249	Jan 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT READER using B1Sb topological insulator	US	Pending	17/705,147	Mar 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW NOISE AMPLIFIERS WITH FEEDBACK FOR NANOPORE APPLICATIONS	US	Pending	17/651,254	Feb 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW NOISE AMPLIFIERS WITH SHIELDS FOR NANOPORE APPLICATIONS	US	Pending	17/651,257	Feb 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING AND INTEGRITY MARKERS FOR MOLECULAR STORAGE APPLICATIONS	US	Pending	17/649,291	Jan 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA AUTO-RELOCATION IN AN INTEGRATED MEMORY ASSEMBLY	US	Pending	17/527,792	Nov 16, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Improving Read Latency During Mixed Read/Write Op	US	Pending	17/687,875	Mar 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) MEDIA WITH DUAL-LAYER MEDIA CAR	US	Pending	18/093,596	Jan 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Device Having Redundant Servo Readers and Method for Using Sa	US	Pending	17/680,068	Feb 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH CLOSED LOOP EXTENDED PARK MODE DURING SPIN DOWN	US	Pending	17/577,300	Jan 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method of Handling Irregular MetaBlock Wear Leveling and UGSD Boot Time Improv	US	Pending	17/650,490	Feb 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Drive Having Independently Controlled Tilting Tandem Tape Heads	US	Pending	17/691,904	Mar 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Channel Recording Head Having Servo Readers Proximate to Write Transducers	US	Pending	17/667,242	Feb 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH MAIN POLE HAVING RECES	US	Pending	18/081,446	Dec 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MICROCHANNEL HEAT SINK FOR DATACENTER SOLID STATE DRIVES	US	Pending	17/579,947	Jan 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTION OF MALICIOUS OPERATIONS FOR DISTRIBUTED CACHE	US	Pending	17/683,737	Mar 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING DIFFERENTIAL HEIGHT PCB	US	Pending	17/572,344	Jan 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Indexless Logical-to-Physical Translation Table	US	Pending	17/743,285	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Linked XOR Flash Data Protection Scheme	US	Pending	17/743,287	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Having Over-Voltage Detection and Protection	US	Pending	17/579,246	Jan 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Device Optimizations in Proof of Space Blockchain Systems	US	Pending	17/584,020	Jan 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Device Throttling in Proof of Space Blockchain Systems	US	Pending	17/584,097	Jan 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Management of Storage Devices Utilizing Non-Fungible Tokens	US	Pending	18/161,209	Jan 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Selective Device Power State Recovery Method	US	Pending	17/456,443	Nov 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimizing Flash Memory Utilization for NVMe KV Pair Storage	US	Pending	17/558,954	Dec 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable length ECC code according to value length in NVMe Key Value pair devices	US	Pending	17/562,105	Dec 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Mitigating DBI Bit Flip Induced Errors	US	Pending	17/646,378	Dec 29, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE FOR STORING MODEL CHECKPOINTS OF RECOMMENDATION DEEP LE	US	Pending	17/970,190	Oct 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Device Based Accelerated Deep-Learning System	US	Pending	17/592,953	Feb 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PCIe TLP Size and Alignment Management	US	Pending	17/569,362	Jan 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PEER STORAGE DEVICE MESSAGING FOR POWER MANAGEMENT	US	Pending	17/583,402	Jan 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Keeping a Zone Random Write Area in Non-Persistent Memory	US	Pending	17/592,920	Feb 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device With Physical Health Indication	US	Pending	17/569,360	Jan 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Log File System (LFS) Invalidation Command And Operational Mode	US	Pending	17/573,169	Jan 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Big Number Hardware Multiplication for Cryptography	US	Pending	17/562,490	Dec 27, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PARITY DATA FOR NON-VOLATILE STORAGE	US	Pending	17/555,957	Dec 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Avoiding Clustering of Reads During a Program Suspen	US	Pending	17/565,768	Dec 30, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Doping Process to Refine Grain Size For Smoother B1Sb Film Surface	US	Pending	17/854,568	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure data content access system and method	US	Pending	17/556,935	Dec 20, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Leading Shield For Magnetic Recording Heads	US	Pending	17/652,066	Feb 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Hinting mechanism for efficient Accelerator Services	US	Pending	18/053,644	Nov 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Biasing for Solid State Drive Accelerators	US	Pending	17/585,410	Jan 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Memory-Die-State-Aware Host Command Submis	US	Pending	17/571,841	Jan 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Data Stream Assignment With Space-Leveling Across Storage Block Containers	US	Pending	17/743,292	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable Capacity Zone Namespace (ZNS) Flash Storage Data Path	US	Pending	17/743,295	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Fused Groups with Uniform Resource Allocation	US	Pending	17/743,298	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Machine Learning Supplemented Storage Device Inspections	US	Pending	17/741,217	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTICAL SYSTEMS AND METHODS FOR LOCATING QUERY SYMBOLS IN A REFERENCE SE	US	Pending	17/736,072	May 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Providing an Adaptive Data Path	US	Pending	17/572,917	Jan 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VOLTAGE SHARING ACROSS MEMORY DIES IN RESPONSE TO A CHARGE PUMP FAILURE	US	Pending	17/592,237	Feb 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH REDUNDANT CONTROL LINE DRIVER	US	Pending	17/589,973	Feb 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ENHANCED PROGRAM OPERATION FOR LAST STATE ON	US	Pending	17/580,293	Jan 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PARASITIC COMMANDS FOR EQUALIZING LOGICAL UNIT CAPACITY IN ASYMMETRIC MU	US	Pending	17/678,765	Feb 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CLAMPED SEMICONDUCTOR WAFERS AND SEMICONDUCTOR DEVICES	US	Pending	17/718,021	Apr 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL SPINDLE MOTORS AND DUAL SPINDLE MOTOR CONTROL FOR DATA STORAGE	US	Pending	17/679,219	Feb 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Quantifying Storage Fragmentation and Predicting Per	US	Pending	17/558,014	Dec 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Optimizing Write-Amplification Factor, Endurance, and	US	Pending	17/558,089	Dec 21, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST AND DEVICE NON-BLOCKING COHERENT REWRITES	US	Pending	17/559,327	Dec 22, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC XOR BIN MAPPING IN MEMORY DEVICES	US	Pending	17/682,640	Feb 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE INTEGRATING WEDGE REPEATABLE RUNOUT (WRRO) LEARNING	US	Pending	17/685,184	Mar 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MESH NETWORK-ON-A-CHIP (NOC) WITH HETEROGENEOUS ROUTERS	US	Pending	17/714,793	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Overlapping Processing of Data Tracks	US	Pending	17/700,893	Mar 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Segmented Front Bar for Particle Robustness	US	Pending	17/660,878	Apr 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	AMPLIFIERS FOR BIOLOGICAL SENSING APPLICATIONS	US	Pending	17/659,688	Apr 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECTOR METRICS TO ESTIMATE HEALTH OF WRITTEN DATA	US	Pending	17/723,263	Apr 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Secure Metadata Protection	US	Pending	17/670,087	Feb 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Write Updates Sorting During BKOPS Idle	US	Pending	17/688,384	Mar 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TOMBSTONE PREVENTION FOR A SURFACE MOUNT DEVICE	US	Pending	17/687,890	Mar 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Relocation With Protection For Open Relocation Destination Blocks	US	Pending	17/653,364	Mar 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tracking Data Usage in Storage Devices	US	Pending	17/721,117	Apr 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device With Enhanced Power Mode Management	US	Pending	17/701,348	Mar 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Network Interface Card implementing Composite Zoned Namespace Architecture	US	Pending	17/694,244	Mar 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	POWER MANAGEMENT SCHEME FOR WIRELESS DEVICES	US	Pending	17/727,805	Apr 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING OVONIC THRESHOLD SWITCH SELECTORS USING MICROWAVE AN	US	Pending	17/591,200	Feb 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Collection and Classifier Training in Edge Video Devices	US	Pending	17/719,049	Apr 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device With Die-Based Enhanced Thermal Management	US	Pending	17/713,126	Apr 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Out of order data transfer hint calibration	US	Pending	17/673,537	Feb 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Instant Submission Queue Release	US	Pending	17/654,528	Mar 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Optimization Of CAT Table During Background Operations	US	Pending	17/713,734	Apr 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MICRO SOLDER JOINT AND STENCIL APERTURE DESIGN	US	Pending	17/714,837	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD FOR GALVANIC EFFECT REDUCTION	US	Pending	17/715,673	Apr 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Combined Contacts	US	Pending	17/724,617	Apr 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Aligned And Unaligned Data Deallocation	US	Pending	17/713,736	Apr 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF THERMAL SHUTDOWN IN DATA STORAGE DEVICES	US	Pending	17/711,225	Apr 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Wireless device loss prevention and discovery	US	Pending	17/852,290	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Power management for wireless device loss prevention and discovery	US	Pending	17/852,301	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPECULATIVE COMMAND PROCESSING INTERFACE IN STORAGE SYSTEMS	US	Pending	17/717,707	Apr 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-KERNEL CACHE REQUEST QUEUING FOR DISTRIBUTED CACHE	US	Pending	17/741,244	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTEXT-AWARE NVMe PROCESSING IN VIRTUALIZED ENVIRONMENTS	US	Pending	17/829,712	Jun 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROTOCOL INDICATOR FOR DATA TRANSFER	US	Pending	17/714,446	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TDS Mitigation Using Different Data Preamble Tones	US	Pending	17/849,504	Jun 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Regenerative Braking For Tape Drive	US	Pending	17/845,792	Jun 21, 2022		

WESTERN DIGITAL TECHNOLOGIES, INC.	High Concurrent Channels Magnetic Recording Head Having Same-Gap-Verify And High	US	Pending	17/849,510	Jun 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	High Concurrent Channels Magnetic Recording Head Having Same-Gap-Verify And Multi	US	Pending	17/849,512	Jun 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SUSPENSION PAD RECORDING SIDEWALLS	US	Pending	17/707,368	Mar 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING DISK WITH METALLIC LAYERS HAVING THICKNESSES CONFIGUR	US	Pending	17/720,248	Apr 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING EMBEDDED MEMORY DIES AND METHOD OF MAN	US	Pending	17/746,104	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Controlled System Management Based on Storage Device Thermal Load	US	Pending	17/714,863	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Look Ahead Optimization According To NVMe Dataset Management Hints	US	Pending	17/725,367	Apr 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Preserving Overwritten Data to Allow a Future Rollbac	US	Pending	17/724,725	Apr 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE STORAGE SYSTEM WITH HYBRID SLC WEAR LEVELING	US	Pending	17/695,518	Mar 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cloud Storage Device implementing Composite Zoned NameSpace Architecture	US	Pending	17/694,255	Mar 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL PERFORMANCE TRIM FOR OPTIMIZATION OF NON-VOLATILE MEMORY PERFORM	US	Pending	17/704,434	Mar 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA COMPRESSION WITH ENTROPY ENCODING	US	Pending	17/701,578	Mar 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE HAVING DUAL ACTUATORS AND METHOD FOR DATA EGRESS TH	US	Pending	17/716,296	Apr 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SMART ISOFET THRESHOLD VOLTAGE AUTOMATIC TUNIN	US	Pending	17/739,552	May 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Folding Method for Enhanced Performance	US	Pending	17/714,328	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Full Disk Serpentine Write Path For Tamper-Proof Disk Drive	US	Pending	17/743,386	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Delaying Flushing of a Write Buffer Based on a Host-Pr	US	Pending	17/592,814	Feb 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE MULTIPLE CONTACT DISK CLAMP	US	Pending	18/135,065	Apr 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Hiding Proof-of-Space in Blockchain Systems	US	Pending	17/714,886	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Configurable Arithmetic HW Accelerator	US	Pending	17/726,755	Apr 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK CARTRIDGE DATA STORAGE LIBRARY	US	Pending	18/095,483	Jan 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	RAIL-BASED MEDIA TRANSPORT ROBOT FOR DISK CARTRIDGE DATA STORAGE LIBRARY	US	Pending	18/097,473	Jan 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROTECTIVE ENCLOSURE FOR AN ELECTRONIC DEVICE	US	Pending	17/724,689	Apr 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Determined Proactive Block Clearance	US	Pending	17/686,620	Mar 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Automatic Prediction Timers Adaptation	US	Pending	17/654,369	Mar 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Complete and fast protection against CID conflict	US	Pending	17/657,844	Apr 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized autonomous defragmentation of storage devices	US	Pending	17/657,455	Mar 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Reducing Link Up Time In PCIe Systems	US	Pending	17/726,762	Apr 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Relative Size Reduction of a Logical-To-Physical Table	US	Pending	17/723,635	Apr 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin Torque Oscillator with Enhanced Spin Polarizer	US	Pending	17/845,797	Jun 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin Torque Oscillator with Multilayer Seed for Improved Performance and Reliability	US	Pending	17/845,809	Jun 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	File System Integration into Data Mining Model	US	Pending	17/737,852	May 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH INTENTIONAL OVERPROGRAMMING TO IMPROVE SHO	US	Pending	17/688,999	Mar 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage With Real Time Dynamic Clock Frequency Control	US	Pending	17/729,854	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Fused Command Handling	US	Pending	17/720,106	Apr 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Lead finger for printed circuit board	US	Pending	17/743,393	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Initiated Transactional Handling for Large Da	US	Pending	17/693,877	Mar 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Recognition and Report of Expected Write Amplification Violation	US	Pending	17/743,391	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Self-Aware Cryptocurrency Wallets	US	Pending	18/157,747	Jan 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRONIC DEVICE WITH HEAT TRANSFER PEDESTAL HAVING OPTIMIZED INTERFACE S	US	Pending	17/725,764	Apr 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Flash-Translation-Layer-Aided Power Allocation in a Data Storage Device	US	Pending	17/734,398	May 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOW LATENCY BLOCK CIPHER IN MEMORY DEVICES	US	Pending	17/732,943	Apr 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Back-to-Back Power Loss Protection	US	Pending	17/731,762	Apr 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATED OVERLAY REGROUPING	US	Pending	17/729,346	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROACTIVE LOSS NOTIFICATION AND HANDLING IN DATA STORAGE DEVICES	US	Pending	17/752,771	May 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	READ THRESHOLD CALIBRATION FOR CROSS-TEMPERATURE LONG, SEQUENTIAL READS	US	Pending	17/714,379	Apr 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimizing Chia Plotting Storage and Memory Space	US	Pending	18/160,974	Jan 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Securing a data storage device against rogue hosts	US	Pending	17/728,850	Apr 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH LATCH-BASED MULTIPLY-ACCUMULATE COMPONENT	US	Pending	17/847,039	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY DIE WITH BIT-FLIP OBJECT INSERTION	US	Pending	17/847,101	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH NOISE INJECTION	US	Pending	17/847,068	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH NOISE INJECTION	US	Pending	17/847,080	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE WITH LATCH-BASED NEURAL NETWORK WEIGHT PARITY DETECTION	US	Pending	17/847,089	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Die Location Based Logical Block Formation and Handling	US	Pending	17/659,809	Apr 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Stream oriented writing for improving sequential write and read performance	US	Pending	17/741,213	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Combining Operations During Reset	US	Pending	17/654,979	Mar 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple Indirection Sizes For Logical-to-Physical Translation Tables	US	Pending	17/744,901	May 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Back Pattern Counter Measure for Solid State Drives	US	Pending	17/752,112	May 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Assemblies Having Flangeless Reel Configurations and Single Flange Reel Configur	US	Pending	17/824,745	May 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE DEVICE WITH MULTIPLE THERMAL POWER STATES	US	Pending	17/741,242	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE DEVICE WITH MULTI-TIER EXTREME THERMAL THROTTLING	US	Pending	17/741,192	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HISTORY-BASED PREDICTION MODELING OF SOLID-STATE DEVICE TEMPERATURE	US	Pending	17/741,207	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VIDEO GROUP CLASSIFICATION USING OBJECT TRACKER	US	Pending	17/729,729	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	GROUP CLASSIFIER TRAINING USING VIDEO OBJECT TRACKER	US	Pending	17/729,746	Apr 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SITE-BASED CALIBRATION OF OBJECT DETECTION RULES	US	Pending	17/743,619	May 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	RESOURCE ALLOCATION IN VIRTUALIZED ENVIRONMENTS	US	Pending	17/836,927	Jun 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ATONOMOUS CYCLING	US	Pending	17/721,688	Apr 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE AUTOMATED ALARM RESPONSE SYSTEM	US	Pending	17/740,826	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Compute Services for Encrypted Data	US	Pending	17/737,686	May 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENCODING-AWARE DATA ROUTING	US	Pending	17/737,877	May 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Allocation of Host Memory Buffer For Sustained Sequential Writes	US	Pending	17/737,830	May 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory Die Management	US	Pending	17/746,068	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems And Methods With Variable Size Super Blocks In Zoned Namespace Devices	US	Pending	17/848,006	Jun 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL MANAGEMENT OF STORAGE DEVICES INCREASING HOST WRITE PERFORMAN	US	Pending	17/748,336	May 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Proactive Die Retirement By Fatal Wordline Leakage D	US	Pending	17/856,073	Jul 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Coupled Substrates	US	Pending	17/737,618	May 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ANALYSES OF SURFACE MOUNT TECHNOLOGY COMPONENTS USING FLUORESCENT DY	US	Pending	17/741,422	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Executing a Low-Priority Speculative Read Comm	US	Pending	17/709,699	Mar 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple authorization requests from a data storage device	US	Pending	17/689,798	Mar 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cryptographic keys for authorization requests from a data storage device	US	Pending	17/689,809	Mar 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Certificates in data storage devices	US	Pending	17/689,817	Mar 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Authorization requests from a data storage device to multiple manager devices	US	Pending	17/689,821	Mar 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Highly Textured 001 B'Sb And Materials for Making Same	US	Pending	17/855,045	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Virtual Block Pools for Protecting Device Health	US	Pending	18/123,436	Mar 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Adjustable Code Rates and Dynamic ECC in a Data Storage Device	US	Pending	17/834,226	Jun 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Adjustable Code Rates and Dynamic ECC in a Data Storage Device with Write Verificati	US	Pending	17/952,463	Sep 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Device Energy Recycling and Cooling	US	Pending	17/746,090	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Interface Bus Speed Optimization	US	Pending	17/841,432	Jun 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Write Shaping	US	Pending	17/750,058	May 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Hot-Cold Chunks Soft-Prediction During Programming	US	Pending	17/751,159	May 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ALIGNMENT OPTIMIZATION OF KEY VALUE PAIR DATA STORAGE	US	Pending	17/746,897	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Look Ahead Based On Key Analysis In Key Value Data Storage Devices	US	Pending	17/829,481	Jun 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Variable length ECC code according to data entropy in NVMe Key Value pair devices	US	Pending	17/827,193	May 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	KEY VALUE DATA PLACEMENT ACCORDING TO EXPECTED READS	US	Pending	17/747,076	May 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH MANIPULATED MEDIA MAPPING TO CONTROL ACCESS LA	US	Pending	17/849,159	Jun 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELF-ALIGNING HEAT FINS FOR THERMAL MANAGEMENT	US	Pending	17/743,184	May 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSS-POINT ARRAY WITH THRESHOLD SWITCHING SELECTOR MEMORY ELEMENT	US	Pending	17/735,277	May 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHODS FOR PROGRAMMING MEMORY CELLS	US	Pending	17/752,208	May 24, 2022		

WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY INTEGRATED WITH ARTIFICIAL INTELLIGENCE SYSTEM FOR PR	US	Pending	17/709,745	Mar 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH DATA PADDING AND SAFE AND EFFICIENT ALIGNMENT O	US	Pending	17/850,945	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH VARIABLE CONTAINERS FOR LOGIC BLOCKS	US	Pending	17/841,460	Jun 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Hybrid Mapping	US	Pending	17/752,470	May 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS OF IMPROVED MODULAR INVERSION WITH DIGITAL SIGNATU	US	Pending	17/827,692	May 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Early Command Cancellation	US	Pending	17/828,489	May 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH MULTI-COMMANDS	US	Pending	17/825,824	May 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH DYNAMIC MAPPING OF LOW-DENSITY PARITY CHECK (LD	US	Pending	17/839,626	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID TERABYTES WRITTEN (TBW) STORAGE SYSTEMS	US	Pending	17/743,926	May 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Just-In-Time Re-Partitioning of Feature Maps for Efficient Balancing of Compute Core V	US	Pending	17/854,592	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONNECTOR FOR AN ELECTRONIC DEVICE HAVING A GRID OF CONNECTION POINTS	US	Pending	17/740,836	May 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SPLIT BURST SERVO PATTERN	US	Pending	17/839,011	Jun 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Token Generation and Parameter Anonymization	US	Pending	17/736,378	May 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZING HUGE PAGE MANAGEMENT	US	Pending	17/749,711	May 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE MULTI-STREAM CLASSIFICATION FOR DATA STORAGE SYSTEMS	US	Pending	17/723,887	Apr 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY COHERENCE IN VIRTUALIZED ENVIRONMENTS	US	Pending	17/850,767	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Usage-Based Assessment for Surveillance Storage Configuration	US	Pending	17/743,622	May 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED CIRCUIT CHIP STORAGE CONTAINER	US	Pending	17/750,026	May 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE MULTIPLE CONTACT DISK SPINDLE MOTOR HUB FLANGE	US	Pending	18/135,084	Apr 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Offset Spiral Data Track Format for Data Storage Devices	US	Pending	17/853,266	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Doped BiSb (012) or Undoped BiSb (001) Topological Insulator with Ge/Fe Buffer Layer	US	Pending	17/854,785	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Migration via Data Storage Device Peer Channel	US	Pending	17/834,209	Jun 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLEXIBLE FASTENER CAPTIVATOR	US	Pending	17/750,219	May 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEVICES AND METHODS FOR PROVIDING PORT MATCHING FEATURES FOR USB-C CABL	US	Pending	17/738,425	May 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH CONCURRENT SUB-BLOCK PROGRAMMING	US	Pending	17/726,923	Apr 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-layer Structures For Magnetic Recording Devices To Facilitate Targeted Magn	US	Pending	17/854,617	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGH-SPEED HIGH-VOLTAGE CMOS WRITE DRIVER	US	Pending	63/509,715	Jun 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ALTERNATING-BIAS SIGNAL RESISTANCE DETECTION FOR RESISTIVE TEMPERATURE DET	US	Pending	17/883,989	Aug 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONTINUOUS DUAL PATH RESISTANCE DETECTION FOR RESISTIVE TEMPERATURE DETE	US	Pending	17/883,976	Aug 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Proactive Hardening of Data Storage System	US	Pending	17/848,300	Jun 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized Read-Modify-Writes During Relocation of Overlapping Logical Blocks	US	Pending	17/847,078	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ACTIVE TIME-BASED COMMAND PRIORITIZATION IN DATA STORAGE DEVICES	US	Pending	17/841,600	Jun 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROACTIVELY BIASING PARAMETERS OF DATA STORAGE DEVICE BASED ON SPATIAL PO	US	Pending	17/840,303	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Detection and Isolation of Faulty Holdup Capacitors Using Hardware Circuit in Data Sto	US	Pending	17/852,103	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device With Weak Bits Handling	US	Pending	17/843,641	Jun 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Flash Translation Layer Mapping For Large Capacity Data Storage Devices	US	Pending	17/842,563	Jun 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Key Value Data Storage Device With Tiers	US	Pending	17/843,629	Jun 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Key Value Data Storage Device With Improved Utilization For Short Key Value Pairs	US	Pending	17/843,675	Jun 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage Media Based Search Function For Key Value Data Storage Devices	US	Pending	17/850,352	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Key-To-Physical Table Optimization For Key Value Data Storage Devices	US	Pending	17/850,423	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	INTEGRATED CIRCUIT TEST SOCKET WITH INTEGRATED DEVICE PICKING MECHANISM	US	Pending	17/850,858	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH FLEXIBLE LOGICAL TRACKS AND RADIUS-INDEPENDENT D	US	Pending	17/855,660	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Avoiding Ungraceful Shutdowns in Storage Devices	US	Pending	17/746,402	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Accelerated Cooling in Storage Devices	US	Pending	17/746,571	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR HOST MULTI-COMMAND QUEUE GROUPING	US	Pending	17/746,019	May 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRESERVATION OF VOLATILE DATA IN DISTRESS MODE	US	Pending	17/839,712	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE DUAL HEATER MODE FOR HARD DISK DRIVE	US	Pending	17/874,903	Jul 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VERIFY FIRST WRITE TO EACH STORAGE AREA OF HARD DISK DRIVE	US	Pending	17/836,861	Jun 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAILED TEMPERATURE SENSOR DETECTION AND MITIGATION WITHIN DATA STORAGE D	US	Pending	17/853,510	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetoresistive Device Comprising A Synthetic Antiferromagnetic Coupling Layer Of	US	Pending	17/944,516	Sep 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetoresistive Devices Comprising A Synthetic Antiferromagnetic Coupling Layer Of	US	Pending	17/951,596	Sep 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOAD/UNLOAD RAMP FOR HIGH-CAPACITY HARD DISK DRIVE	US	Pending	17/864,259	Jul 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer Storage Device Messaging for Vulnerability Management	US	Pending	17/839,727	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Memory partitioned data storage device	US	Pending	17/849,702	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Proactive Storage Operation Management Using Thermal States	US	Pending	17/839,732	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ANCHORING STRUCTURE FOR IMPROVED STRUCTURAL DYNAMICS OF ACTUATORS IN A	US	Pending	18/206,046	Jun 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Channel Circuit with Asynchronous Sampling from an Oversampled Analog-to-Digital Co	US	Pending	63/407,297	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE MANAGEMENT SYSTEM	US	Pending	17/850,483	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SHARED VIAS FOR DIFFERENTIAL PAIR TRACE ROUTING	US	Pending	17/864,101	Jul 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DEVICE INCLUDING VERTICALLY INTERCONNECTED SEMICONDUCTOR	US	Pending	63/413,512	Oct 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR DEPOSITING UNDERFILL MATERIAL	US	Pending	17/873,318	Jul 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH MAIN POLE HAVING NARR	US	Pending	17/821,166	Aug 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT-ASSISTED MAGNETIC RECORDING (HAMR) HEAD WITH MAIN POLE HAVING NARR	US	Pending	18/322,171	May 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SCRATCHPAD CACHE FOR GAMING AND IOT HOSTS	US	Pending	17/841,378	Jun 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGEMENT OF HOST FILE-SYSTEM DEFRAGMENTATION IN A DATA STORAGE DEVI	US	Pending	17/865,641	Jul 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOGICAL-TO-PHYSICAL MAPPING FOR DEFRAGMENTATION OF HOST FILE SYSTEM IN A	US	Pending	17/865,660	Jul 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Implementation of Symmetric Tree Models for Read T	US	Pending	17/899,073	Aug 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Circuit-Bounded-Array-Based Time and Temperature T	US	Pending	63/421,647	Nov 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Inference of Read Thresholds Based on Memory Param	US	Pending	17/838,481	Jun 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Using a Queue Monitor in a Block Allocation Process	US	Pending	17/828,285	May 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Avoiding Header to Improve Parity	US	Pending	17/824,066	May 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STAGE DATA COMPACTION IN NAND	US	Pending	17/864,609	Jul 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Storage-Class-Memory-Accelerated Boot Partitio	US	Pending	17/752,264	May 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Device-Initiated Hibernation	US	Pending	17/752,305	May 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Prediction-Based Improved Power-Loss Handling	US	Pending	17/839,615	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	VIDEO SURVEILLANCE SYSTEMS USING OUT OF BAND KEY EXCHANGE	US	Pending	17/852,709	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Rate Levelling Among Peer Data Storage Devices	US	Pending	17/846,316	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Peer RAID Control Among Peer Data Storage Devices	US	Pending	17/849,957	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Security indicator on a data storage device	US	Pending	17/849,703	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Performance indicator on a data storage device	US	Pending	17/853,589	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Lane Detection and Configuration	US	Pending	17/828,334	May 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Lane Selection Based on Thermal Conditions	US	Pending	17/828,368	May 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA STRUCTURE CONFIGURED FOR HEAT-ASSISTED MAGNETIC RECORDING AND IM	US	Pending	17/945,747	Sep 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH UNDERLAYER CONFIGURED TO REDUCE DIFFUS	US	Pending	17/886,244	Aug 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Restore to Factory Settings of a Mobile Data Storage Device	US	Pending	17/853,896	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECTOR MAPOUT OF LOW COERCIVITY MEDIA FOR ENHANCING AERIAL DENSITY	US	Pending	17/880,251	Aug 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Logical to Physical Mapping Updates	US	Pending	18/316,664	May 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR ENERGY FEEDBACK AND REPORT GENERATI	US	Pending	17/829,563	Jun 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	AUDIO SENSORS FOR CONTROLLING SURVEILLANCE VIDEO DATA CAPTURE	US	Pending	17/852,718	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PEER-TO-PEER DATA TRANSFER FOR VIDEO ON DEMAND FROM AN EDGE DATA STORA	US	Pending	17/852,704	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Asynchronous operation completion notification	US	Pending	17/852,360	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Transfer of internal device data over command response	US	Pending	17/852,366	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Autonomic troubleshooting of a system of devices	US	Pending	17/852,245	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Automatic data erase from data storage device	US	Pending	17/852,363	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Dynamic Prediction of Random Read with Low M	US	Pending	17/838,493	Jun 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host Buffer Management	US	Pending	17/834,051	Jun 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Multi-Level Conditional Prediction of Future Rand	US	Pending	17/846,335	Jun 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	RELIABILITY ASSESSMENT FOR USE WITH POWER-PER-PROCESSING EVENT ESTIMATION	US	Pending	18/132,230	Apr 7, 2023		

WESTERN DIGITAL TECHNOLOGIES, INC.	POWER-PER-PROCESSING EVENT ESTIMATES BASED ON TOTAL POWER CONSUMPTION	US	Pending	17/959,037	Oct 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DEDUPLICATION FOR DATA TRANSFERS TO PORTABLE STORAGE DEVICES	US	Pending	17/845,630	Jun 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Enabling Metadata-Based Seek Points for Media	US	Pending	17/839,628	Jun 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ROTATIONAL DIPPING OF STORAGE DISK MEDIA	US	Pending	63/413,956	Oct 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE POOL MANAGEMENT BASED ON FRAGMENTATION LEVELS	US	Pending	17/851,595	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURATION OF NEW STORAGE DEVICES IN A STORAGE DEVICE POOL	US	Pending	17/851,566	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE POOL MANAGEMENT BASED ON STORAGE DEVICE LOGICAL TO PHYSICAL	US	Pending	17/850,873	Jun 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPEN BLOCK BOUNDARY GROUP PROGRAMMING FOR NON-VOLATILE MEMORY	US	Pending	17/837,345	Jun 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PCIe IN BAND DETERMINISTIC PROTOCOL CROSS FEATURE	US	Pending	17/956,780	Sep 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	GLASS SHEET FOR FABRICATING MAGNETIC RECORDING MEDIA AND METHOD OF FABRICATION	US	Pending	17/955,403	Sep 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAULT TOLERANCE AND COHERENCE FOR SHARED MEMORY	US	Pending	17/853,752	Jun 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH NOTCH FILTER CALIBRATION BASED ON MULTI-RATE EXERCISE	US	Pending	17/895,541	Aug 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH NOTCH FILTER CALIBRATION BASED ON MULTI-RATE EXERCISE	US	Pending	17/895,640	Aug 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CHEMISORBED LUBRICANTS FOR DATA STORAGE DEVICES	US	Pending	18/204,270	May 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	AROMATIC AND AROMATIC-LIKE CONTAINING MEDIA LUBRICANTS FOR DATA STORAGE DEVICES	US	Pending	63/414,325	Oct 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUORINATED MEDIA LUBRICANTS WITH REDUCED HYDROCARBON FRACTION FOR DATA STORAGE DEVICES	US	Pending	63/436,941	Jan 4, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	FLUORINATED MEDIA LUBRICANTS WITH REDUCED HYDROCARBON FRACTION FOR DATA STORAGE DEVICES	US	Pending	63/453,353	Mar 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Recovery for Zoned Namespace Devices	US	Pending	17/903,528	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Compaction of a Logical-to-Physical Table for Zoned Namespace Nonvolatile Memory	US	Pending	17/900,276	Aug 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Decoupled External Storage Device Booting	US	Pending	17/875,074	Jul 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Sub-Block Erasing	US	Pending	17/878,490	Aug 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION (DR) WARNING SYSTEM	US	Pending	17/822,119	Aug 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA RETENTION MANAGEMENT AFTER POWER OFF	US	Pending	17/899,139	Aug 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPEN BLOCK RELOCATION	US	Pending	17/896,717	Aug 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Content-Rich Error Notification	US	Pending	17/875,741	Jul 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Write coalescing via HMB to optimize write performance	US	Pending	17/885,265	Aug 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe Boot Partition Error Correction Code Enhancement	US	Pending	17/887,687	Aug 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Accelerated Encryption During Power Loss	US	Pending	17/870,395	Jul 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device That Detects And Releases Bottlenecks	US	Pending	17/885,288	Aug 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEDIA STRUCTURE WITH SELECTED SEGREGANTS CONFIGURED TO IMPROVE HEAT-ASSISTED	US	Pending	17/895,566	Aug 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Free Layer TMR Reader With Shaped Rear Bias and Methods of Forming Thereof	US	Pending	17/899,823	Aug 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Data Placement in Zoned Storage	US	Pending	17/860,548	Jul 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD OF MAKING A HARD DISK DRIVE WRITE POLE USING A TRI-TONE ATTENUATED	US	Pending	17/871,297	Jul 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH PRECISE PROGRAMMING	US	Pending	17/852,129	Jun 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Retrimming Removable Storage Devices	US	Pending	17/901,157	Sep 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HANDLING WRITE DATA BURST FOR IMPROVED PERFORMANCE AND RESOURCE USAGE	US	Pending	17/901,719	Sep 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Adaptive Host Memory Buffer Allocation Based on	US	Pending	17/854,312	Jun 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Storage System and Method for Optimizing Host-Activated Defragmentation and Proad	US	Pending	17/874,555	Jul 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual FGL and Dual SPL Spintronic Device To Reduce Perpendicular Field At Writing Local	US	Pending	63/421,486	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Spintronic Device Comprising Dual FGL and Dual SPL To Reduce Perpendicular Field At	US	Pending	63/421,487	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETORESISTIVE MEMORY DEVICE INCLUDING A MAGNETORESISTANCE AMPLIFICATION	US	Pending	17/810,710	Jul 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NAND DIE WITH RDL FOR ALTERED BOND WIRE BANDWIDTH IN MEMORY DEVICES	US	Pending	17/903,965	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Trained States Equalizer in a Read Channel	US	Pending	17/946,399	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Oversampled Phase Lock Loop in a Read Channel	US	Pending	17/958,877	Oct 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZE POWER, RTV, AND COUPLED PES DURING SEEK OPERATIONS	US	Pending	17/945,187	Sep 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST SEARCH FOR LEAKY WORD LINE	US	Pending	17/886,163	Aug 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STRESS TEST FOR GROWN BAD BLOCKS	US	Pending	17/886,155	Aug 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH SERVO CONTROL PROCESSOR WITH INITIAL FAST LOCK O	US	Pending	17/951,490	Sep 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TOGGLE MODE INTERFACE FOR DATA INTEGRITY PROTECTION	US	Pending	17/933,823	Sep 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD USE OF HOST MEMORY BUFFER FOR IMPROVED PERFORMANCE	US	Pending	17/931,447	Sep 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID LOGICAL TO PHYSICAL MAPPING FOR ZNS BASED SSDS	US	Pending	17/933,720	Sep 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Accelerator Queue in Data Storage Device	US	Pending	17/941,664	Sep 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Exception Handling Using Security Subsystem in Storage Device	US	Pending	17/947,075	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Control Table Set Determination in Storage Devices	US	Pending	17/954,252	Sep 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Control Table Set Management in Storage Devices	US	Pending	17/958,185	Sep 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST EXECUTION OF BARRIER COMMAND	US	Pending	63/421,250	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage with Improved Cache Read	US	Pending	17/956,784	Sep 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Adaptive tuning of memory device clock rates based on dynamic parameters	US	Pending	17/939,186	Sep 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	EFFICIENT L2P DRAM FOR HIGH CAPACITY DRIVES	US	Pending	17/945,586	Sep 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NVMe Copy Command Acceleration	US	Pending	17/950,386	Sep 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Metadata Management in Key Value Data Storage Device	US	Pending	17/903,131	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Asymmetric Time Division Peak Power Management (TD-PPM) Timing Windows	US	Pending	17/903,189	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic TD-PPM State And Die Mapping In Multi-NAND Channels	US	Pending	17/949,127	Sep 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PARALLEL FRAGMENTED SGL FETCHING FOR HIDING HOST TURNAROUND TIME	US	Pending	17/943,767	Sep 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic and shared CMB and HMB allocation	US	Pending	17/949,132	Sep 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FINDING AND RELEASING TRAPPED MEMORY IN ULAYER	US	Pending	17/956,783	Sep 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SCATTER GATHER LIST ADAPTIVE BUCKETING	US	Pending	63/423,883	Nov 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimization of non-aligned host writes	US	Pending	17/903,750	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TSV SEMICONDUCTOR DEVICE INCLUDING INDUCTIVE COMPENSATION LOOPS	US	Pending	63/435,310	Dec 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADVANCED ULTRA LOW POWER ERROR CORRECTING CODE ENCODERS AND DECODERS	US	Pending	17/968,249	Oct 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC ORDERING OF MEMORY DIE PROGRAMMING IN A METABLOCK	US	Pending	17/946,565	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTING AN UNSUCCESSFUL ERROR CORRECTION CODE CONDITION USING A DYNAMIC	US	Pending	17/946,537	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Automated Fast Path Processing	US	Pending	17/951,993	Sep 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Method to Enhance Spin Torque Layer Performance in a Spintronic Device	US	Pending	63/418,828	Oct 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Two-Dimensional Magnetic Recording Read Head with TaOx Layer for Flat Middle Shield	US	Pending	63/423,636	Nov 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Middle Shields Two-Dimensional Magnetic Recording Read Heads	US	Pending	63/421,488	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIUM WITH MULTIPLE SOFT UNDERLAYERS AND MAGNETIC	US	Pending	63/417,622	Oct 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Address Translation for Zoned Namespace Nonvolatile Memory Using a Compacted Log	US	Pending	17/900,317	Aug 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data storage device that detects and releases input queue bottlenecks	US	Pending	17/958,610	Oct 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data storage device that detects and releases bottlenecks in hardware	US	Pending	17/958,594	Oct 3, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Buffer Layers, Interlayers, and Barrier Layers Comprising Heusler Alloys for SOT Based S	US	Pending	18/197,495	May 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DC AND SYNCHRONIZED ENERGY ASSISTED PERPENDICULAR MAGNETIC RECORDING (E	US	Pending	63/409,059	Sep 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH MAPPING AND MITIGATION OF LASER MODE HOP EFFECT	US	Pending	63/428,913	Nov 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Victim Zone Selection For Zone Compaction During Garbage Collection In ZNS Devices	US	Pending	63/383,230	Nov 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Zone-Based Garbage Collection in ZNS SSDs	US	Pending	63/383,232	Nov 10, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Collision Avoidance in Sequential Mixed Workloads	US	Pending	63/413,128	Oct 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Hold-Up Capacitor Failure Handling in Data Storage Devices	US	Pending	63/413,131	Oct 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	BLOCK LAYER PERSISTENT MEMORY BUFFER	US	Pending	17/946,541	Sep 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PARTIAL SPEED CHANGES TO IMPROVE IN-ORDER TRANSFER	US	Pending	17/949,130	Sep 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Heads Having One or More Dusting Layers for Magnetic Recording	US	Pending	63/416,211	Oct 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIVACY-PRESERVING DISTRIBUTED COMPUTING	US	Pending	63/416,365	Oct 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	EVALUATING CONVOLUTIONS USING ENCRYPTED DATA	US	Pending	63/423,952	Nov 9, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SENSITIVITY AMPLIFICATION TECHNIQUES FOR MAGNETOCHEMICAL SENSORS	US	Pending	63/379,399	Oct 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CENTER STRUCTURE HAVING ATTACHMENT SUPPORT FOR AN ACTUATOR IN A MULTI-A	US	Pending	63/409,037	Sep 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Offloading Data Storage Device Processing Tasks to a Graphics Processing Unit	US	Pending	63/380,437	Oct 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST INDEPENDENT FORMATTING OF STORAGE DEVICES	US	Pending	63/418,962	Oct 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY CONTROLLING VARIABLE DATA STORAGE DEVICE THRESHOLD TEMPERA	US	Pending	17/939,537	Sep 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Using Control Bus Communication to Accelerate Link Negotiation	US	Pending	63/380,973	Oct 26, 2022		

WESTERN DIGITAL TECHNOLOGIES, INC.	Cobalt-Boron (CoB) Layer for Magnetic Recording Devices, Memory Devices, and Storage	US	Pending	17/956,786	Sep 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TDMR SOT Read Heads Having Recessed Topological Insulator Materials	US	Pending	63/420,842	Oct 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOT Reader with Recessed SOT Topological Insulator Material	US	Pending	63/420,845	Oct 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE HOLDER	US	Pending	29/853,777	Sep 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR UTILIZING A DATA STORAGE DEVICE WITH POWER PERFORMAN	US	Pending	18/216,348	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NAND DIE WITH WIRE-BOND INDUCTIVE COMPENSATION FOR ALTERED BOND WIRE BONDING	US	Pending	63/419,414	Oct 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY PREFETCH BASED ON MACHINE LEARNING	US	Pending	63/430,949	Dec 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPLITTING SEQUENTIAL READ COMMANDS	US	Pending	17/942,452	Sep 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Independent Reader/Writer Overcoats for an SGV Tape Head	US	Pending	17/954,089	Sep 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE BREATHER FILTER ENABLING SORBENT REPLACEMENT	US	Pending	63/419,659	Oct 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Devices with Customized 40-pin Interface with Hot-plug Support	US	Pending	63/397,073	Aug 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Power on Reset and Read Error Handling	US	Pending	17/902,113	Sep 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SLIDER AIR BEARING DESIGNS WITH SIDE BLOCKER FOR CONTAMINATION ROBUSTNESS	US	Pending	63/380,666	Oct 24, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE READ/WRITE CHANNEL WITH DIRECT RADIAL POSITION DEMONSTRATION	US	Pending	63/419,292	Oct 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	System Recovery During CGI-WL Defect	US	Pending	63/385,318	Nov 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Handling Data Storage Device Failure Using Remote System	US	Pending	63/419,127	Oct 25, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ADJACENT TRACK INTERFERENCE-AWARE SERVO TRAJECTORY	US	Pending	63/436,209	Dec 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-PLANAR ANTENNAS FOR PORTABLE STORAGE DEVICES	US	Pending	17/957,330	Sep 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE CARRIAGE ARM DEPRESSION	US	Pending	63/421,399	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Bandwidth balancing for a single NS tenant in MNFD devices	US	Pending	63/397,660	Aug 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE LIBRARY MAGNETIC DISK RETAIN AND EXCHANGE SYSTEM	US	Pending	63/436,819	Jan 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ROTATING ELECTROMAGNET FOR REMOVABLE DISK CLAMP	US	Pending	63/425,607	Nov 15, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	EARLY ERASE TERMINATION AS A COUNTER-MEASURE FOR ERASE DISTURBANCE	US	Pending	17/939,795	Sep 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enhanced Read Retry (ERR) For Data Recovery In Flash Memory	US	Pending	63/488,567	Mar 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	CONFIGURABLE CAPACITORS WITH 3D NON-VOLATILE ARRAY	US	Pending	17/954,757	Sep 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Retrimming Removable Storage Device Using Host System	US	Pending	63/426,340	Nov 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HDD head having same gap verify and system for using same	US	Pending	63/465,312	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DATA STORAGE DEVICE WITH OPPORTUNISTIC	US	Pending	63/523,724	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ENHANCED MANAGEMENT OF LASER PRE-BIAS AND LOG	US	Pending	63/435,721	Dec 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Translation and Data Management In Storage Devices	US	Pending	63/478,621	Jan 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Exposed Physical Partitions in Solid-State Storage Devices	US	Pending	63/384,034	Nov 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Computational SSD Supporting Rapid File Semantic Search	US	Pending	63/378,426	Oct 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	UNALIGNED DEALLOCATED LOGICAL BLOCKS DATAPATH SUPPORT	US	Pending	17/950,603	Sep 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD with Reference Clock Loss Tolerant Oscillator	US	Pending	63/387,622	Dec 13, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Failure Recovery Using Command History Buffer in Storage Device	US	Pending	63/426,681	Nov 18, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Key Version Management in Storage Devices	US	Pending	63/484,900	Feb 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED SSD FOR GAME LOADING AND RENDERING	US	Pending	63/478,054	Dec 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CIRCUIT FAILURE PROTECTION	US	Pending	63/385,866	Dec 2, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Folding Zone Management Optimization in Storage Device	US	Pending	63/427,416	Nov 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Deallocation and Reset of Zones in Storage Device	US	Pending	63/427,418	Nov 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	KEY-PER-IO MULTI-TENANT ISOLATION	US	Pending	63/482,735	Feb 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENSURING QUALITY OF SERVICE IN MULTI-TENANT ENVIRONMENT USING SGLS	US	Pending	63/427,159	Nov 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH FLOW TRACKING ABILITY	US	Pending	17/959,497	Oct 4, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE WITH LOW COST DIES	US	Pending	63/415,167	Oct 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DE-FRAGMENTATION ACCELERATION USING OVERLAP TABLE	US	Pending	63/431,254	Dec 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage with Optimized Boot Files Loading	US	Pending	63/420,838	Oct 31, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HMB MULTI-SEGMENT OPTIMAL SELECTION	US	Pending	17/958,182	Sep 30, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	QoS Optimization By Using Data Tracking Module	US	Pending	63/427,162	Nov 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	PREHEATING LASER DIODES WITH REVERSE BIAS FOR HAMR DISK DRIVES	US	Pending	63/426,176	Nov 17, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	RAISEABLE PROFILE-BASED ACCESS FOR MEDIA CONTENT	US	Pending	63/432,051	Dec 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Read Sensor With Ordered Heusler Alloy Free Layer and Semiconductor Barrier Layer	US	Pending	63/431,252	Dec 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Transparent HMB	US	Pending	63/403,971	Sep 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	IMPROVED HIBERNATE EXIT TIME FOR UFS DEVICES	US	Pending	63/423,633	Nov 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FOCUSED TESTING AND VERIFICATION OF CIRCUIT DESIGNS USING HARDWARE DESCRIPTION	US	Pending	63/430,497	Dec 6, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TEST CONTROLLER ENABLING A SNAPSHOT RESTORE AND RESUME OPERATION WITHIN	US	Pending	63/423,672	Nov 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE MULTIPLE DISK PACK STACKING STRUCTURE	US	Pending	63/426,015	Nov 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEGREGATING LARGE DATA BLOCKS FOR DATA STORAGE SYSTEM	US	Pending	63/386,938	Dec 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE OF CONTROL DATA INFORMATION	US	Pending	63/386,943	Dec 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST DIRECT LOOK AHEAD READ MODE IN A MEMORY DEVICE	US	Pending	63/419,432	Oct 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Measuring Thermal Performance of Substrates used in Semiconductor	US	Pending	63/478,421	Jan 4, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-ENCODING METHOD FOR DNA STORAGE	US	Pending	63/429,208	Dec 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	CALIBRATING STATE TRANSITION PROBABILITIES ASSOCIATED WITH A DNA-BASED STORAGE	US	Pending	63/428,643	Nov 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERATING AND UPDATING SOFT INFORMATION FOR DNA-BASED STORAGE SYSTEMS	US	Pending	63/427,621	Nov 23, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR CORRECTION SYSTEMS AND METHODS FOR DNA STORAGE	US	Pending	63/430,996	Dec 7, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS FOR IMPROVING FIND LAST GOOD PAGE PROCESSING IN MEMORY	US	Pending	63/431,884	Dec 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Swap Defragmentation	US	Pending	63/428,488	Nov 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Coupled Substrates	US	Pending	63/387,328	Dec 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Read Sensors Having Reduced Signal Imbalance	US	Pending	18/308,576	Apr 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Thermal Sensor In Situ Monitoring of Magnetic Recording Head	US	Pending	63/439,507	Jan 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin Orbit Torque Based Thermal Sensor for In Situ Monitoring of Magnetic Recording Head	US	Pending	63/451,708	Mar 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Reducing Read Disturbs When Reading Redundant	US	Pending	63/418,090	Oct 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Error Correction Methods for Computational SSD Supporting Rapid File Semantic Search	US	Pending	63/476,666	Dec 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	WORD LINE LAYER DEPENDENT STRESS AND SCREEN VOLTAGE	US	Pending	63/424,652	Nov 11, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Channel Circuit with Trained Neural Network Noise Mixture Estimator	US	Pending	63/384,532	Nov 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MACHINE LEARNING DEFECT MANAGEMENT IN STORAGE DEVICES	US	Pending	63/482,232	Jan 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING DATA COMMUNICATIONS IN DISTRIBUTED INFERENCE SCHEMES	US	Pending	18/343,173	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE BACKUP	US	Pending	63/431,253	Dec 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISK HUB FOR RETAINING AND ROTATING MAGNETIC RECORDING MEDIA DURING FILM	US	Pending	63/433,086	Dec 16, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM CONTROLLED RF SIGNAL SOURCE ARCHITECTURE WITH TRANSDUCER NEAR POSITION	US	Pending	63/433,808	Dec 20, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dual Circuit Isolation of Writer to Reader Crosstalk for SGV Modules	US	Pending	63/452,533	Mar 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH RAPID IN-FIELD REPEATABLE RUNOUT NOISE REMOVAL	US	Pending	63/447,798	Feb 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Head Assembly with Single Beam, Actuator and Spring Adaptor	US	Pending	63/442,971	Feb 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-LAYER LOAD BEAM FLEXURE FOR MAGNETIC STORAGE DEVICE	US	Pending	63/445,219	Feb 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE ERASE SCHEME FOR A MEMORY DEVICE	US	Pending	63/442,149	Jan 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Reducing Flush Latency	US	Pending	63/419,418	Oct 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Handling Write Commands in Zoned Storage	US	Pending	63/419,411	Oct 26, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE BASED BLOCK READ	US	Pending	63/440,839	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STREAM TEMPERATURE INTERLEAVE MONITOR	US	Pending	63/437,981	Jan 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE-ACTUATOR HDD ASSEMBLY UTILIZING MULTIPLE-PREAMP ARCHITECTURE WITH	US	Pending	63/434,446	Dec 21, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Devices, Methods, and Computer-Readable Media to Back-up Parity Information	US	Pending	63/481,315	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Devices, Methods, and Computer-Readable Media to Store Backed-up Parity Information	US	Pending	63/481,320	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	WRITE BUFFER LINKING FOR EASY CACHE READS	US	Pending	63/421,327	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Write Completion Pacing For Unbalanced Command Length	US	Pending	63/433,675	Dec 19, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Devices, Methods, And Computer Readable Media For Control Page Flush Handling	US	Pending	63/477,299	Dec 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Stream Data Management in Storage Device	US	Pending	63/432,675	Dec 14, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	STATISTICS BASED NON-VOLATILE MEMORY HEALTH MITIGATION	US	Pending	63/430,185	Dec 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple Neural Network Training Nodes in a Read Channel	US	Pending	63/476,939	Dec 22, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	MOUNTING OF CAPACITORS ON PRINTED CIRCUIT BOARDS FOR NON-VOLATILE MEMORY	US	Pending	63/477,520	Dec 28, 2022		

WESTERN DIGITAL TECHNOLOGIES, INC.	COUPLING BETWEEN ROTATING ELEMENTS OF A MAGNETIC STORAGE DEVICE	US	Pending	63/440,072	Jan 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ADAPTIVE CONTROL OF CURRENT BALANCER TO REDUCE	US	Pending	63/440,857	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICES HAVING MULTI-CHANNEL CAPACITIVE SENSORS FOR DETECTING GES	US	Pending	63/435,768	Dec 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART CARD WITH BUS INTERFACE RECEPTACLE PRINTED AS PART OF PCB	US	Pending	63/435,832	Dec 29, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Identification and Retrieval of Recently-Used Files at an External Storage Device	US	Pending	63/443,292	Feb 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE AND METHOD OF ASSEMBLING SAME	US	Pending	63/386,973	Dec 12, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ATS PRI SUPPORT WITH IMPLICIT CACHE	US	Pending	63/421,254	Nov 1, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ADAPTIVE CONTROL OF CURRENT BALANCER TO MITIGAT	US	Pending	63/440,861	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	FOLDERING ORDERING SCHEME FOR IMPROVED THROUGHPUT IN NON-VOLATILE MEM	US	Pending	63/478,209	Jan 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR STORAGE DEVICE INCLUDING STAGGERED SEMICONDUCTOR MEMO	US	Pending	63/441,370	Jan 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Application Tunneling Using a Storage Interface Protocol	US	Pending	63/479,213	Jan 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STACKED CHIP SCALE SEMICONDUCTOR DEVICE	US	Pending	63/439,737	Jan 18, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-SITU INSTALL OF CROSS-FLUX MAGNET IN VOICE COIL MOTOR ACTUATOR	US	Pending	63/435,405	Dec 27, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic DC Field Compensator for MAMR Recording Head	US	Pending	63/454,171	Mar 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAINTAINING CONSISTENT LOCATION FOR SPINDLE INTERRUPTS WHEN SPINDLE MOT	US	Pending	63/440,990	Jan 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Using Zones of Memory in a Read Scrub Operatio	US	Pending	63/423,563	Nov 8, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	EXTENDED CENTER STIFFENER PLATE FOR IMPROVED STRUCTURAL DYNAMICS OF ACTU	US	Pending	63/445,523	Feb 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Offset Edge of Servo Heads Relative to Data Heads for Signal-to-Noise Ratio Optimizati	US	Pending	63/447,550	Feb 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS FOR INCREASING STORAGE CAPACITY AND IMPROVING PERFORMANCE IN D	US	Pending	63/480,583	Jan 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED FOR USE WITH A GENERATIVE-ADVERSARIAL-NET	US	Pending	63/457,929	Apr 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED FOR USE WITH A GENERATIVE-ADVERSARIAL-NET	US	Pending	63/457,939	Apr 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE CONFIGURED FOR USE WITH A GENERATIVE-ADVERSARIAL-NET	US	Pending	63/457,951	Apr 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERATING A RANDOM NUMBER USING A NON-VOLATILE MEMORY BASED PHYSICAL	US	Pending	63/480,709	Jan 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head with an SOT Device Coupled with Side Shield	US	Pending	63/491,620	Mar 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Die Stackup and Interposer	US	Pending	63/490,659	Mar 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Light-Weight BES Approximation	US	Pending	63/440,006	Jan 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Delayed XOR Rebuild with priority in multi-protocol products	US	Pending	63/442,407	Jan 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Recording Head with a Multilayer Spin Torque Element Having Positive and Negative B	US	Pending	63/507,921	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH WRITE PROTECTION AND GUARANTEED RAPID WRITE VE	US	Pending	63/450,510	Mar 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Receiver Design in DDR Memory Interfaces	US	Pending	63/510,224	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ON-CHIP PERFORMANCE THROTTLING	US	Pending	63/446,117	Feb 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING ERASE STATE AS LAST PROGRAM STATE DURING A PROGRAMMING C	US	Pending	63/448,527	Feb 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST LOOK AHEAD READ FOR NON-VOLATILE MEMORY BY REMOVING PRE-READ REDU	US	Pending	63/445,365	Feb 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE LEVEL CELL PUMP SKIP PROGRAM OPERATION PRELIMINARY PERIOD TIMING O	US	Pending	63/445,527	Feb 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOOP DEPENDENT BIT LINE AND READ BIASES IN A MEMORY DEVICE	US	Pending	63/450,709	Mar 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	GENERATION OF QUICK PASS WRITE BIASES IN A MEMORY DEVICE	US	Pending	63/450,771	Mar 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	INTERMEDIATE RE-VERIFY FOR ACHIEVING TIGHTER THRESHOLD VOLTAGE DISTRIBUTIO	US	Pending	63/448,012	Feb 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SUB-BLOCK MODE (SBM) PRE-CHARGE OPERATION SEQUENCES	US	Pending	63/503,398	May 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	TEMPERATURE DEPENDENT REFRESH READ RATE	US	Pending	63/504,404	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	INDEPENDENT PLANE CONCURRENT MEMORY OPERATION IN NON-VOLATILE MEMORY	US	Pending	63/449,173	Mar 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE SLIDER SPLIT PAD CONFIGURATION	US	Pending	63/457,358	Apr 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE STAGE FUSE CIRCUITRY FOR COUNTING FAILURE EVENTS	US	Pending	63/461,898	Apr 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Produce Thinner DTS and Adjustable Capacitance for TDMR Heads	US	Pending	63/459,227	Apr 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SPIN-ORBIT TORQUE (SOT) WRITER WITH TOPOLOGICAL INSULATOR MATERIALS	US	Pending	63/472,944	Jun 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Die Crack Detection in Wafer-to-Wafer Bonding	US	Pending	63/440,719	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Notifications for Avoiding Thermal Shutdown	US	Pending	63/479,022	Jan 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimization Of An Active Range Of msets Stored In A Compressed Address Table	US	Pending	63/445,104	Feb 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Efficient Consolidation For Two Layer FTL	US	Pending	63/486,761	Feb 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	UECC Block Mapping Update To A Bad Block	US	Pending	63/448,411	Feb 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Optimized Predictive Loading in Storage Device	US	Pending	63/443,665	Feb 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Enhanced Read Cache for Stream Switching in Storage Device	US	Pending	63/442,084	Jan 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Simulating Multi-Sensor Environment for Thermal Throttling in Storage Device	US	Pending	63/444,806	Feb 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Capacitor Health Check For Data Storage Devices	US	Pending	63/491,796	Mar 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Garbage Collection Operations	US	Pending	63/483,613	Feb 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MACHINE LEARNING DEFECT MANAGEMENT IN STORAGE DEVICES	US	Pending	63/482,364	Jan 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Recording Head with Current Path between Trailing Shield and Leading Shield	US	Pending	63/496,770	Apr 18, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Nested Error Correction Codes for DNA Data Storage	US	Pending	63/386,068	Dec 5, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	ASSIST CORES FOR SPOT SIZE CONVERTER FOR HEAT ASSISTED MAGNETIC RECORDING	US	Pending	63/506,884	Jun 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR FABRICATING GLASS SUBSTRATES FOR USE IN MAGNE	US	Pending	63/457,598	Apr 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ZNS Protection With Small SLC Cache Using Zone Groups	US	Pending	63/478,280	Jan 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Dynamic Zone Group Creation and Recalibration Balancing	US	Pending	63/478,283	Jan 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ML ASSISTED DYNAMIC DECODING GEAR SELECTION	US	Pending	63/481,056	Jan 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Current Distal to Media Facing Surface for Assisted Magnetic Recording Head	US	Pending	63/465,318	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Padding Reduction in Log Copy	US	Pending	63/485,133	Feb 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Illusory Free Data Storage Space in Data Storage Devices	US	Pending	63/444,803	Feb 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY THAT DYNAMICALLY REDUCES THE NUMBER OF BITS OF DATA	US	Pending	63/477,483	Dec 28, 2022		
WESTERN DIGITAL TECHNOLOGIES, INC.	FAST LOOK NEIGHBOR AHEAD FOR DATA RECOVERY	US	Pending	63/446,168	Feb 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	VARIABLE READ METHOD FOR READ TIME PERFORMANCE IMPROVEMENT OF NON-VO	US	Pending	63/446,098	Feb 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Global Variance Parameter Based on Mutual Information in a Data Channel	US	Pending	63/482,919	Feb 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device Configuration Using Mutual Information	US	Pending	63/483,030	Feb 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DFL Read Head with SiOx Cap Layer on AlOx Refill Layers	US	Pending	63/468,508	May 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PIVOT-TO-ENCLOSURE FASTENING FOR REDUCING TORSIONAL VIBRATION OF ACTUAT	US	Pending	18/128,862	Mar 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Firmware Scheme For 3 Tier Memories	US	Pending	63/481,274	Jan 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND DISK CARRIER FOR USE IN POLISHING GLASS SUBSTRATE DISKS	US	Pending	63/472,092	Jun 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE POOL MANAGEMENT BASED ON OVER-PROVISIONING	US	Pending	63/456,659	Apr 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE POOL MANAGEMENT BASED ON STORAGE DEVICE QUEUE USAGE	US	Pending	63/458,361	Apr 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR COUPLING TO AN ELECTRICAL INTERFACE OF A CIRCUIT	US	Pending	63/457,620	Apr 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH LASER PRE-BIAS OPTIMIZATION USING DISK THERMAL-M	US	Pending	63/455,879	Mar 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH INTELLIGENT WRITE PROTECTION FOR ENERGY ANOMALI	US	Pending	63/455,894	Mar 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING LASER DIODE CAVITY THERMAL TRANSIENTS IN HAMR DISK DRIVES	US	Pending	63/492,802	Mar 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Race-Based Data Access in a Multiple Host Memo	US	Pending	63/437,169	Jan 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Dynamic Controller Memory Buffer Allocation	US	Pending	63/437,171	Jan 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Film and Method for BiSb (012) Texture for SOT Devices	US	Pending	63/471,923	Jun 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR STORAGE DEVICE INCLUDING PCB EDGE HEAT DISSIPATION	US	Pending	63/441,614	Jan 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Chip Package with Detachable Chips	US	Pending	63/492,836	Mar 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Cap Layer Able to Be Reactive Ion Etched for RSB DFL Read Elements	US	Pending	63/459,533	Apr 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Seek Time to the Beginning Position of Data on Tape Media	US	Pending	63/455,508	Mar 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Assisted Efficient Handling of Multiple Versio	US	Pending	63/449,835	Mar 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Assisted Improved Error Recovery Using a C	US	Pending	63/449,802	Mar 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLDER BARRIER CONTACT FOR AN INTEGRATED CIRCUIT	US	Pending	63/491,186	Mar 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	REDUCING PEAK POWER CONSUMPTION IN A MULTI-ACTUATOR HARD DISK DRIVE	US	Pending	63/457,361	Apr 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMAL MANAGEMENT IN DATA STORAGE DEVICE	US	Pending	63/491,768	Mar 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	High Capacity Captive Tape Drive	US	Pending	63/521,818	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SERVER THERMAL MANAGEMENT	US	Pending	63/491,772	Mar 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC ALLOCATION OF CAPACITY TO NAMESPACES IN A DATA STORAGE DEVICE	US	Pending	63/489,569	Mar 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Enhanced Recovery Through a Hardware Reset of	US	Pending	63/449,770	Mar 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Assisted Deferred Defragmentation and Syst	US	Pending	63/442,564	Feb 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SAVE MODE FOR ERASE VERIFY SKIPPING TO REDUCE POWER CONSUMPTION IN ERASE	US	Pending	63/466,908	May 16, 2023		

WESTERN DIGITAL TECHNOLOGIES, INC.	SLOW PROGRAMMING ON WEAK WORD LINES OF A MEMORY DEVICE	US	Pending	63/501,758	May 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	FULL SEQUENCE PROGRAM FOR EDGE WORD LINE QUAD-LEVEL MEMORY CELLS	US	Pending	63/462,066	Apr 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	BINARY READ-BASED FAST ALGORITHM FOR OPTIMAL READ LEVEL ACQUISITION	US	Pending	63/468,098	May 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE SINGLE-SIDE ERASE TO IMPROVE CELL RELIABILITY	US	Pending	63/467,732	May 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	RECONFIGURABLE LINES IN DIFFERENT SUB-BLOCK MODES IN A NAND MEMORY DEVI	US	Pending	63/467,084	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN SITU DATA REFRESH WITHOUT ERASE/PROGRAM CYCLES	US	Pending	63/462,293	Apr 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART EARLY PROGRAM TERMINATION ALGORITHM FOR NEIGHBOR PLANE DISTURB	US	Pending	63/466,875	May 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOWER VREAD FOR ERASED WORD LINES IN POST-WRITE DUMMY READS	US	Pending	63/467,030	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	UNSELECT WORD LINE SWITCH BIAS SCHEME FOR NON-VOLATILE MEMORY APPARATU	US	Pending	63/466,938	May 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ESTIMATING PEAK SOURCE CURRENT USING MEMORY DIE SUBSTRATE TEMPERATURE	US	Pending	63/504,985	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC XOR DATA PROGRAMMING BY MEMORY DIE FOR UNCORRECTABLE PAGE	US	Pending	63/509,004	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	I/O MODULATION SCHEME FOR ULTRA-HIGH DATA THROUGHPUT WITH MASSIVE NAN	US	Pending	63/500,716	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE CONTAINING TRENCH SUPPORT BRIDGE STRUC	US	Pending	63/500,371	May 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	POST-PROGRAM ERASE IN 3D NAND	US	Pending	63/488,249	Mar 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	RAMP SUPPORT FOR A MAGNETIC STORAGE DEVICE	US	Pending	63/467,244	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA INTEGRITY CHECK IN NON-VOLATILE STORAGE	US	Pending	63/490,061	Mar 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MAGNETIC RECORDING MEDIA WITH DEAD MAGNETIC LAYER	US	Pending	63/469,675	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SHOCK ABSORBER ASSEMBLY FOR A PRINTED CIRCUIT BOARD	US	Pending	63/501,303	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	RECOVERY OF RETIRED MEMORY BLOCKS IN A MEMORY DEVICE	US	Pending	63/492,420	Mar 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CONTROLLER WITH COMMON REQUEST BUFFER	US	Pending	63/489,615	Mar 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROACTIVE CACHING OF DATA FOR ACCELERATOR CORES IN A STORAGE DEVICE	US	Pending	63/444,717	Feb 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Protocol For Solid State Drive With High Quality Of Service	US	Pending	63/451,338	Mar 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURELY ERASING DATA ON INOPERATIVE STORAGE DEVICE	US	Pending	63/454,423	Mar 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Irregular Jumbo Block Size Unification	US	Pending	63/491,119	Mar 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Low Power Optimization Based Upon Host Exit Latency	US	Pending	63/453,288	Mar 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multiple Security Range Commands	US	Pending	63/499,569	May 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Semiconductor Device Package with Die Stackup and Connection Platform	US	Pending	63/503,381	May 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DATA STORAGE DEVICE WITH ASSISTIVE EN	US	Pending	63/522,964	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Read Scrub with Reduced Read Amplification	US	Pending	63/450,422	Mar 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Runtime Exclusive-Or Zoning During Folding	US	Pending	63/444,613	Feb 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE AND METHOD OF MAKING THEREOF USING IO	US	Pending	63/499,549	May 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE WITH THROUGH-STACK CONTACT VIA STRUCTU	US	Pending	63/499,819	May 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE WITH LATERALLY SEPARATED SOURCE SELECT	US	Pending	63/508,386	Jun 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROCESSING COMMANDS IN A SEQUENTIAL WRITE REQUIRED ZONE MODEL	US	Pending	63/501,260	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEM AND METHOD FOR VALID WINDOW MAXIMIZATION IN TOGGLE MODE LINK US	US	Pending	63/504,851	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Flash Interface with Switching Logic	US	Pending	63/455,395	Mar 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Near-Field Transducer For Heat Assisted Magnetic Recording Comprising Of Thermally	US	Pending	63/523,573	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH ACCELERATED POST-EMERGENCY-POWER-OFF RECOVERY	US	Pending	63/522,939	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHODS AND APPARATUS FOR IDENTIFYING SUBSTRATES SUITABLE FOR USE IN MAG	US	Pending	63/523,792	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	CURRENT SOURCE FOR READ OF PROGRAMMABLE RESISTANCE MEMORY CELLS	US	Pending	63/504,428	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Access control system and a data storage device	US	Pending	63/462,526	Apr 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Selecting a Data Recovery Mechanism Based on a	US	Pending	63/449,783	Mar 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	REVERSE GARBAGE COLLECTION PROCESS FOR A STORAGE DEVICE	US	Pending	63/501,531	May 11, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DETECTION OF DATA STORAGE DEVICE REMOVAL	US	Pending	63/460,497	Apr 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR RELEASING A SOURCE BLOCK HAVING AN U	US	Pending	63/493,795	Apr 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Hiding Tweak Generation Latency	US	Pending	63/461,953	Apr 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR DYNAMIC LOGICAL PAGE WRITE ORDERING	US	Pending	63/468,063	May 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE DEVICE CARRIER AND LATCHING MECHANISM	US	Pending	63/463,254	May 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-STEP READ PASS VOLTAGE DISCHARGE FOR ICC REDUCTION	US	Pending	63/500,732	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERASE SATURATION MITIGATION IN NON-VOLATILE MEMORY	US	Pending	63/500,728	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	CMB CACHING USING HYBRID SRAM/DRAM DATA PATH	US	Pending	63/497,784	Apr 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	RAPID INSTALLATION SCREW WITH RADIALLY EXPANDING THREADS	US	Pending	63/457,582	Apr 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	USE OF COMMON HEAD SLIDER FOR DIFFERENT RPM HARD DISK DRIVES	US	Pending	63/463,461	May 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCING SPIN UP AND SPIN DOWN TIMES FOR DATA STORAGE DEVICES	US	Pending	63/500,855	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH LASER WRITE BIAS OPTIMIZATION USING DISK THERMAL	US	Pending	63/523,771	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ABORTED OPERATION DETECTION FOR NONVOLATILE MEMORY WITH NON-UNIFORM	US	Pending	63/509,134	Jun 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	POSITIVE SENSING IN LOW POWER OPERATION MODE IN A MEMORY DEVICE	US	Pending	63/467,138	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR HANDLING IN ASYMMETRIC SUB-BLOCKS	US	Pending	63/461,400	Apr 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MANAGING DATA DESCRIPTOR READS DURING COMMAND PROCESSING IN A STORAGE	US	Pending	63/456,617	Apr 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SSD Content Preloading Via Broadcasting System	US	Pending	63/521,307	Jun 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	EXCESS CMB UTILIZATION BY STORAGE CONTROLLER	US	Pending	63/465,070	May 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Link Optimization For SSDs	US	Pending	63/502,164	May 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED POWER UP IN STORAGE MEMORY DEVICES	US	Pending	63/498,506	Apr 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPLE CIRCUIT BOARD ASSEMBLY INCLUDING A SUPPORT ELEMENT AND METHOD	US	Pending	63/488,812	Mar 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NEAR-FIELD TRANSDUCER (NFT) DESIGNS FOR IMPROVED PERFORMANCE OF HEAT-ASS	US	Pending	63/504,944	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH INTELLIGENT ERASE TESTING TO AVOID NEIGHBOR PLA	US	Pending	63/489,877	Mar 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE CONTAINING PERIPHERAL CIRCUIT WITH FIN AR	US	Pending	63/499,822	May 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-localized Spin Valve Reader Hybridized with Spin Orbit Torque Layer	US	Pending	63/521,819	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Non-localized Spin Valve Multi-Free-Layer Reader Hybridized with Spin Orbit Torque La	US	Pending	63/523,308	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Higher Areal Density Non-Local Spin Orbit Torque (SOT) Writer with Topological Insulat	US	Pending	63/523,750	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY CONTROLLER SUPPORT FOR MIXED READ	US	Pending	63/505,784	Jun 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	BYPASS BUFFER FOR WORN OUT CODEWORDS	US	Pending	63/502,572	May 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	System and Method for Flexible Emergency Power Fail Management for Multiple Persi	US	Pending	63/455,413	Mar 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	LOCAL EXTENSION OF HEAD OVERCOAT WITH A NEAR-FIELD TRANSDUCER EXTENDING	US	Pending	63/505,558	Jun 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Avoiding Garbage Collection in Media Storage Devices	US	Pending	63/496,895	Apr 18, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Logical Range Lock	US	Pending	63/462,785	Apr 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR SCANNING MEMORY BLOCKS	US	Pending	63/465,297	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC VREADK TO REDUCE NEIGHBORING WORD LINE INTERFERENCE IN A MEM	US	Pending	63/463,347	May 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL REFERENCE ZQ CALIBRATION CIRCUITS AND METHODS	US	Pending	63/500,698	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Statistically Driven Run Level Firmware Migration	US	Pending	63/462,960	Apr 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HYBRID ERASE FOR DATA RETENTION THRESHOLD VOLTAGE MARGIN IMPROVEMENT	US	Pending	63/467,384	May 18, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	WORD LINE DEPENDENT WORD LINE SWITCH DESIGN AND PROGRAMMING TECHNIQU	US	Pending	63/467,216	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAM VERIFY WORD LINE RAMPING DELAY FOR LOWER CURRENT CONSUMPTION	US	Pending	63/468,937	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING A BIT-LINE BIAS VERTICAL TRANSIS	US	Pending	63/498,915	Apr 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE WITH LAYER CONTACT VIA STRUCTURES LOCAT	US	Pending	63/501,182	May 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Redundant Storage Across Namespaces with Dynamically Allocated Capacity in Data St	US	Pending	63/498,037	Apr 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH SECURE ERASE	US	Pending	63/495,257	Apr 10, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE CONTAINING OVERLYING THIN FILM TRANSISTO	US	Pending	63/502,720	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEASURING LASER DIODE TEMPERATURE AND PREDICTING MODE HOPS USING LASER	US	Pending	63/510,382	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STEADY STATE LASER DIODE FINGERPRINT MEASUREMENT AND COMPENSATION	US	Pending	63/510,386	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTABLE PERFORMANCE-BASED PARTITIONING	US	Pending	63/472,511	Jun 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC THROTTLING OF INPUT/OUTPUT QUEUES IN A DATA STORAGE DEVICE ARRAY	US	Pending	63/503,555	May 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SECURED FAILOVER ACCESS THROUGH DATA STORAGE DEVICE SIDE CHANNELS	US	Pending	63/510,347	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE ADJUSTMENT OF MULTI-CAMERA SURVEILLANCE VIDEO DATA CAPTURE	US	Pending	63/503,045	May 18, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Partial Die Blocks	US	Pending	63/501,435	May 11, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR HANDLING DURING A MEMORY COMPACTION PROCESS	US	Pending	63/502,470	May 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Phase-Coherent In-Line VCSEL Array with Slider Trailing Mount for HAMR	US	Pending	63/523,839	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	APPARATUS AND METHOD FOR TWO-STEP READ OF RESISTIVE RANDOM ACCESS MEMM	US	Pending	63/504,665	May 26, 2023		

WESTERN DIGITAL TECHNOLOGIES, INC.	PACKAGED MEMORY DEVICE WITH OVERHANG SUPPORT STRUCTURE	US	Pending	63/504,647	May 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THERMALLY CONDUCTIVE SPACER	US	Pending	63/506,323	Jun 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD FOR OPTIMIZING LOGICAL-TO-PHYSICAL TABLE UPDATES FOR FIXED GRANUL	US	Pending	63/463,754	May 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Reclaim Package Cache for Thermal Throttling	US	Pending	63/463,732	May 3, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Multi-Tenant Device Read Command Service Balancing	US	Pending	63/471,018	Jun 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRINTED CIRCUIT BOARD FOR A REFLOW PROFILING PROCESS	US	Pending	63/507,507	Jun 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	BOND WIRE HAVING A RECYCLED THERMOPLASTIC CORE WITH CONDUCTIVE FILLERS	US	Pending	63/505,617	Jun 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTI-PLANE HIGH DENSITY CONNECTOR	US	Pending	63/503,991	May 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SEMICONDUCTOR DIE STACKING ARCHITECTURE AND CONNECTION METHOD THEREFO	US	Pending	63/510,912	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	READ POWER SAVINGS BY TEMPORARILY DISABLING BITLINE VOLTAGE	US	Pending	63/472,701	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTRICALLY COUPLING PRINTED CIRCUIT BOARDS USING A SNAP-FIT CONNECTOR	US	Pending	63/504,242	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ELECTROLYTIC CAPACITORS HAVING ENCLOSURES THAT ENABLE THE CAPACITORS TO B	US	Pending	63/505,629	Jun 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE AND METHOD FOR USING A DYNAMIC FLOATING FLASH REGION	US	Pending	63/465,589	May 11, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DATA STORAGE DEVICE WITH AVERAGED M	US	Pending	63/452,942	Mar 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DATA STORAGE DEVICE WITH AVERAGED M	US	Pending	63/524,062	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENERGY-ASSISTED MAGNETIC RECORDING DATA STORAGE DEVICE WITH AVERAGED M	US	Pending	63/454,519	Mar 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Performance-Dependent Storage of Parity Inform	US	Pending	63/462,787	Apr 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device with Balanced Background Operations and Method Therefor	US	Pending	63/472,403	Jun 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMICALLY DETERMINING A MEMORY BLOCK THRESHOLD FOR INITIATING A GARBA	US	Pending	63/508,799	Jun 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Improving Asynchronous Independent Plane Read	US	Pending	63/521,914	Jun 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	EARLY DETECTION OF ROOM TEMPERATURE DATA RETENTION PHENOMENA	US	Pending	63/508,988	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE PACKAGE DATA STORAGE DEVICE	US	Pending	63/505,639	Jun 1, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SNAP FIT BRACKET FOR ELECTROLYTIC CAPACITORS	US	Pending	63/506,742	Jun 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ASYMMETRIC PASS VOLTAGE SCHEME FOR NON-VOLATILE MEMORY APPARATUS SIZE	US	Pending	63/523,810	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPTIMIZED READ CURRENT CONSUMPTION BASED ON LOWER PAGE READ INFORMATI	US	Pending	63/472,663	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	AUTOMATIC BIT LINE VOLTAGE AND BIT LINE VOLTAGE TEMPERATURE COMPENSATION	US	Pending	63/472,474	Jun 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SYSTEMS AND METHODS TO AVOID OVER PROGRAMMING AT INFREQUENT SMART VE	US	Pending	63/522,267	Jun 21, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENABLING SIGNIFICANT SCALING OF WORDLINE SWITCH WITH WORDLINE DEPENDENT	US	Pending	63/468,846	May 25, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	CHANNEL PRE-CHARGE PROCESS FOR MEMORY DEVICES	US	Pending	63/472,636	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	OPEN BLOCK DETECTION METHOD USING FOR FIRST AND SECOND TIME PERIOD READ	US	Pending	63/521,290	Jun 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND APPARATUS FOR SUBSTRATE AND SPACER SEPARATION	US	Pending	63/523,801	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STOP READ GO SETTINGS FOR LOW SUSPEND LATENCY APPLICATIONS	US	Pending	63/522,492	Jun 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ANALOG BITSCAN TECHNIQUES IN A MEMORY DEVICE	US	Pending	63/523,943	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING TECHNIQUES THAT UTILIZE ANALOG BITSCAN IN A MEMORY DEVICE	US	Pending	63/523,955	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PROGRAMMING TECHNIQUES THAT UTILIZE ANALOG BITSCAN IN A MEMORY DEVICE	US	Pending	63/523,973	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERASE TECHNIQUES USING ANALOG BITSCAN IN A MEMORY DEVICE	US	Pending	63/524,015	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Continuous Frequency Servo in a Data Storage Device	US	Pending	63/508,796	Jun 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE IDLE SWEEP FOR THERMAL ASPERITY AVOIDANCE	US	Pending	63/523,073	Jun 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRE-SOLDER BUMP PREVENTIVE OVERCOATING	US	Pending	63/523,276	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SUSPENSION ARM AND SLIDER CONTACT FOR MAGNETIC STORAGE DEVICE	US	Pending	63/523,812	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Magnetic Control of Molecule Translocation Speed Through a Nanopore	US	Pending	63/510,036	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Methods for Improving Track Density in Dual-Reel Removable Tape Devices and Fixed T	US	Pending	63/523,291	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	INSULATION LAYER FOR A SEMICONDUCTOR PACKAGE	US	Pending	63/506,457	Jun 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTIVE WIRE COATING DURING WIRE BONDING	US	Pending	63/509,125	Jun 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ERROR RATE MANAGEMENT IN NON-UNIFORM MEMORY ARRAYS	US	Pending	63/505,300	May 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ADAPTIVE WORD LINE STRESS FOR LEAK DETECTION IN NON-VOLATILE MEMORY	US	Pending	63/505,330	May 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH ADJUSTABLE RAMP RATE	US	Pending	63/506,820	Jun 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DUAL FREE LAYER READ HEAD HAVING RECESSED SIDEWALL INSULATOR LAYER AND M	US	Pending	63/506,180	Jun 5, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICES INCLUDING SELF-ALIGNED CHANNEL CAP STRU	US	Pending	63/504,915	May 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING BACKSIDE SEMICONDUCTOR SOUR	US	Pending	18/343,118	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING BACKSIDE SEMICONDUCTOR SOUR	US	Pending	18/343,162	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING INCLINED WORD LINE CONTACT ST	US	Pending	63/506,902	Jun 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	VERTICALLY MOUNTABLE SNAP FIT BRACKET FOR ELECTROLYTIC CAPACITORS	US	Pending	63/506,708	Jun 7, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Read Synchronization from Phase Modulated Synchronization Fields in a Data Sto	US	Pending	63/508,678	Jun 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH EARLY RAMP FOR IMPROVED PERFORMANCE	US	Pending	63/500,761	May 8, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SELECTABLE PERFORMANCE BOOST FOR STORAGE DEVICES	US	Pending	63/521,851	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SINGLE BLOCK MODE BLOCK HANDLING FOR SINGLE-SIDE GIDL ERASE	US	Pending	63/522,559	Jun 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	VPASS AUTO LAYER COMPENSATION IN A MEMORY DEVICE	US	Pending	63/472,760	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Tape Heads Having Tiered Servo Readers	US	Pending	63/524,423	Jun 30, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISAGGREGATED MEMORY MANAGEMENT	US	Pending	63/468,637	May 24, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	GROUND REFERENCED BANDGAP CIRCUIT IN A NEGATIVELY BIASED SUBSTRATE CMOS	US	Pending	63/507,643	Jun 12, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	CROSS-POINT MAGNETORESISTIVE MEMORY ARRAY CONTAINING CARBON-BASED LAYE	US	Pending	63/499,555	May 2, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MEMORY DEVICE INCLUDING ALUMINUM NITRIDE DIFFUSION BARRIER LAYER AND ME	US	Pending	18/344,227	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	USING DATA STORAGE DEVICE OPERATIONAL PROFILES FOR INTERFACE-BASED PERFOR	US	Pending	63/508,685	Jun 16, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HEAT HARVESTING IN DATA STORAGE DEVICES	US	Pending	63/508,994	Jun 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Predictable Low-Latency in a Time-Sensitive Envir	US	Pending	63/471,411	Jun 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Optimized Refresh	US	Pending	63/467,131	May 17, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Controlled Data Compression	US	Pending	63/522,870	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH SUB-BLOCK ERASE	US	Pending	63/504,496	May 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH SUB-BLOCK PROGRAMMING	US	Pending	63/504,506	May 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC BITSCAN FOR NON-VOLATILE MEMORY	US	Pending	63/505,284	May 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST STORAGE COMMAND MANAGEMENT FOR DYNAMICALLY ALLOCATED NAMESPAC	US	Pending	63/510,060	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Host-Managed Data Integrity	US	Pending	63/472,997	Jun 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	MULTIPATH INITIATOR FOR DATA STORAGE DEVICE ARRAYS	US	Pending	63/510,045	Jun 23, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	SOLID-STATE DRIVE SECURE DATA WIPING FOR REUSE AND RECYCLING	US	Pending	63/523,889	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	ACCESS CONTROL FOR CLOUD-SHARED FILES FROM A STORAGE DEVICE	US	Pending	63/522,104	Jun 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND DEVICE FOR SECURE DATA TRANSFER AND STORAGE	US	Pending	63/523,880	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	METHOD AND DEVICE FOR FACILITATING SECURE DATA TRANSFER AND STORAGE	US	Pending	63/523,891	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PREDICTIVE ADJUSTMENT OF MULTI-CAMERA SURVEILLANCE VIDEO DATA CAPTURE US	US	Pending	63/510,426	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISAGGREGATED MEMORY MANAGEMENT FOR VIRTUAL MACHINES	US	Pending	63/523,601	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH LAYOUT ADAPTIVE PROBLEMATIC WORD LINE DETECTIO	US	Pending	63/510,716	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST-INDEPENDENT FORMAT OPERATION OF USB-BASED STORAGE DEVICES	US	Pending	63/522,675	Jun 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HOST-INDEPENDENT DISK OPTIMIZATION AND DATA OPERATIONS FOR USB-BASED STO	US	Pending	63/522,692	Jun 22, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE WITH KEY-VALUE DELETE MANAGEMENT FOR MULTI-HOST NAN	US	Pending	63/510,412	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE-FREE MESSAGE AUTHENTICATORS FOR ERROR-CORRECTING-CODES	US	Pending	63/510,492	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DYNAMIC MODE SELECTION FOR HYBRID SINGLE-LEVEL CELL AND MULTI-LEVEL CELL DA	US	Pending	63/510,443	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Performing an Action on an Area of Memory to Sa	US	Pending	63/471,403	Jun 6, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA TRANSMISSION SCHEDULING FOR DISAGGREGATED MEMORY SYSTEMS	US	Pending	63/523,608	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Removable Memory Card with Efficient Card Lock Mechanism, XY Ratios, and Pads Lay	US	Pending	63/522,206	Jun 21, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	EVOLVING BAD BLOCK DETECTION IN NON-VOLATILE MEMORY	US	Pending	63/510,823	Jun 28, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Providing External-Interrupt-Based Customized B	US	Pending	63/472,041	Jun 9, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	THREE-DIMENSIONAL MEMORY DEVICE INCLUDING TRENCH BRIDGE STRUCTURES HAV	US	Pending	63/467,848	May 19, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH DECLINE STATE OPERATION	US	Pending	63/505,306	May 31, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	PRIORITY BASED THERMAL MANAGEMENT FOR DATA STORAGE DEVICE ENCLOSURES	US	Pending	63/524,107	Jun 29, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Spin Orbital Squared (SO-SQ) Logic	US	Pending	63/521,306	Jun 15, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	COMPUTATIONAL STORAGE DEVICE WITH COMPUTATION PRECISION-DEFINED FIXED P	US	Pending	63/523,444	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Data Storage Device and Method for Time-Pooled Hot Data Relocation	US	Pending	63/472,617	Jun 13, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	STORAGE POWER REDUCTION IN BATTERY-OPERATED DEVICES	US	Pending	63/523,464	Jun 27, 2023		

WESTERN DIGITAL TECHNOLOGIES, INC.	NON-VOLATILE MEMORY WITH NEIGHBOR PLANE PROGRAM DISTURB AVOIDANCE	US	Pending	63/510,578	Jun 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	DISTRIBUTED TEMPERATURE SENSING SCHEME TO SUPPRESS PEAK ICC IN NON-VOLATILE MEMORY	US	Pending	63/510,334	Jun 26, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	HIGHLY TEXTURED BUFFER LAYER TO GROW YBIPT (110) FOR SPINTRONIC APPLICATION	US	Pending	63/508,164	Jun 14, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	TESTING PADDLE FOR SEMICONDUCTOR DEVICE CHARACTERIZATION	US	Pending	63/509,203	Jun 20, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Wire Bonding For Semiconductor Devices	US	Published	17/186,715	Feb 26, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	PACKAGED MEMORY DEVICE WITH FLIP CHIP AND WIRE BOND DIES	US	Published	17/191,849	Mar 4, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	MONOLITHIC SURFACE MOUNT PASSIVE COMPONENT	US	Published	17/344,350	Jun 10, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	HARD DISK DRIVE BASE HAVING VIBRATION PROPAGATION MITIGATION FEATURE	US	Published	14/280,452	May 16, 2014		
WESTERN DIGITAL TECHNOLOGIES, INC.	BACKGROUND FIRMWARE UPDATE	US	Published	16/134,910	Sep 18, 2018		
WESTERN DIGITAL TECHNOLOGIES, INC.	RECONFIGURABLE SYSTOLIC NEURAL NETWORK ENGINE	US	Published	16/233,968	Dec 27, 2018		
WESTERN DIGITAL TECHNOLOGIES, INC.	ENHANCED STORAGE DEVICE MEMORY ARCHITECTURE FOR MACHINE LEARNING	US	Published	16/363,744	Mar 25, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	Systems And Methods For Evaluating Integrity Of Adjacent Sub Blocks Of Data Storage	US	Published	16/457,166	Jun 28, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	NEURAL NETWORK ENGINE UTILIZING A SERIAL BUS	US	Published	16/453,735	Jun 26, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	SMART VIDEO SURVEILLANCE SYSTEM USING A NEURAL NETWORK ENGINE	US	Published	17/561,881	Dec 24, 2021		
WESTERN DIGITAL TECHNOLOGIES, INC.	EXCEPTION ANALYSIS FOR DATA STORAGE DEVICES	US	Published	16/572,973	Sep 17, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	Relocation of Data in Memory At Different Transfer Rates Based on Temperature	US	Published	16/670,105	Oct 31, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	IN-LINE DATA IDENTIFICATION ON NETWORK	US	Published	16/724,226	Dec 21, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	ZONED NAMESPACE MANAGEMENT OF NON-VOLATILE STORAGE DEVICES	US	Published	16/712,659	Dec 12, 2019		
WESTERN DIGITAL TECHNOLOGIES, INC.	DATA STORAGE DEVICE ADAPTOR WITH SECUREMENT MECHANISM	US	Published	18/160,848	Jan 27, 2023		
WESTERN DIGITAL TECHNOLOGIES, INC.	Host Supported Partitions in Storage Device	US	Published	16/749,408	Jan 22, 2020		
WESTERN DIGITAL TECHNOLOGIES, INC.	REFERENCE-GUIDED GENOME SEQUENCING	US	Published	16/821,849	Mar 17, 2020		
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