

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3276157

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
CYPRESS SEMICONDUCTOR CORPORATION	03/12/2015
SPANSION LLC	03/12/2015

RECEIVING PARTY DATA

Name:	MORGAN STANLEY SENIOR FUNDING, INC.
Street Address:	1585 BROADWAY
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10036

PROPERTY NUMBERS Total: 4736

Property Type	Number
Patent Number:	6012103
Patent Number:	6249825
Patent Number:	6493770
Patent Number:	6223266
Patent Number:	6065099
Patent Number:	6092210
Patent Number:	6105097
Patent Number:	6389495
Patent Number:	6708244
Patent Number:	6742071
Patent Number:	8966414
Application Number:	12872995
Patent Number:	6434187
Patent Number:	6522299
Patent Number:	6762725
Patent Number:	6509851
Patent Number:	6563354
Patent Number:	6525962
Patent Number:	6779061

PATENT

Property Type	Number
Patent Number:	6892315
Patent Number:	6297705
Patent Number:	6525616
Patent Number:	6946920
Patent Number:	6407641
Patent Number:	6681359
Patent Number:	6629265
Patent Number:	6486701
Patent Number:	6501815
Patent Number:	6532169
Patent Number:	6674665
Patent Number:	6683818
Application Number:	11709897
Patent Number:	8352527
Patent Number:	8037249
Patent Number:	7855592
Patent Number:	7471135
Patent Number:	8058937
Patent Number:	7821859
Patent Number:	8129924
Patent Number:	8476846
Application Number:	13934032
Patent Number:	7818701
Patent Number:	8902173
Patent Number:	7982448
Patent Number:	7684257
Patent Number:	7863971
Patent Number:	7672190
Patent Number:	8074086
Patent Number:	8099534
Patent Number:	8125441
Patent Number:	8537107
Patent Number:	7880452
Patent Number:	8093825
Patent Number:	8266405
Application Number:	13312929
Patent Number:	7961060
Patent Number:	8218598

Property Type	Number
Patent Number:	7586333
Patent Number:	8072429
Patent Number:	8060661
Patent Number:	8144126
Application Number:	13049556
Patent Number:	7929363
Patent Number:	6137333
Patent Number:	6327175
Patent Number:	6388939
Patent Number:	6405353
Patent Number:	6114914
Patent Number:	6101134
Patent Number:	6243303
Patent Number:	6530040
Patent Number:	6662315
Patent Number:	6678879
Patent Number:	6229345
Patent Number:	6323683
Patent Number:	6191636
Patent Number:	6442657
Patent Number:	6388469
Patent Number:	6194965
Patent Number:	6499089
Patent Number:	7062425
Patent Number:	6775627
Patent Number:	6864710
Patent Number:	6239632
Patent Number:	6704381
Patent Number:	6510483
Patent Number:	6567884
Patent Number:	6249464
Patent Number:	6535437
Patent Number:	6088289
Patent Number:	6333891
Patent Number:	6640267
Patent Number:	6640300
Patent Number:	6927756
Patent Number:	6240031

Property Type	Number
Patent Number:	6311294
Patent Number:	6791366
Patent Number:	6625761
Patent Number:	6288948
Patent Number:	6404682
Patent Number:	6362668
Patent Number:	6639432
Patent Number:	6691201
Patent Number:	6567970
Patent Number:	6922820
Patent Number:	6907539
Patent Number:	6671831
Patent Number:	6675336
Patent Number:	6804802
Patent Number:	6657501
Patent Number:	6529447
Patent Number:	6844756
Patent Number:	6492706
Patent Number:	6904442
Patent Number:	6640266
Patent Number:	6708190
Patent Number:	6904436
Patent Number:	6839778
Patent Number:	7047173
Patent Number:	6839873
Patent Number:	6469930
Patent Number:	6556048
Patent Number:	6542004
Patent Number:	6848068
Patent Number:	6957278
Patent Number:	6538468
Patent Number:	6996727
Patent Number:	6615393
Patent Number:	6400188
Patent Number:	6559686
Patent Number:	6366145
Patent Number:	6417698
Patent Number:	6993105

Property Type	Number
Patent Number:	6711226
Patent Number:	6535023
Patent Number:	7728619
Application Number:	12057648
Patent Number:	8131890
Patent Number:	7859906
Patent Number:	8593428
Patent Number:	8076949
Application Number:	12036090
Patent Number:	8049569
Patent Number:	8125445
Application Number:	11904576
Patent Number:	7710803
Patent Number:	7719329
Patent Number:	8080984
Patent Number:	8145809
Patent Number:	8370543
Patent Number:	7671664
Patent Number:	8436263
Patent Number:	8589632
Patent Number:	8949478
Patent Number:	8316158
Patent Number:	8125243
Patent Number:	8766662
Patent Number:	8769177
Application Number:	14319041
Patent Number:	8108529
Patent Number:	8280060
Patent Number:	8761397
Application Number:	14311889
Patent Number:	7995397
Patent Number:	8279677
Patent Number:	8699275
Patent Number:	8315269
Patent Number:	8810260
Patent Number:	7915838
Patent Number:	8860683
Patent Number:	8878811

Property Type	Number
Patent Number:	7564270
Patent Number:	7804307
Application Number:	13191806
Patent Number:	6166991
Patent Number:	6363031
Patent Number:	6526495
Patent Number:	6388464
Patent Number:	6512395
Patent Number:	6578185
Patent Number:	6249466
Patent Number:	6651134
Patent Number:	6323734
Patent Number:	6973101
Patent Number:	6417696
Patent Number:	6307437
Patent Number:	6400642
Patent Number:	6553549
Patent Number:	6377071
Patent Number:	6373302
Patent Number:	6532524
Patent Number:	6670676
Patent Number:	6637017
Patent Number:	6721878
Patent Number:	6704863
Patent Number:	6388479
Patent Number:	6353336
Patent Number:	6351139
Patent Number:	6351146
Patent Number:	6369609
Patent Number:	6687864
Patent Number:	6384628
Patent Number:	6651181
Patent Number:	6608500
Patent Number:	5867693
Patent Number:	5864252
Patent Number:	6683805
Patent Number:	6967861
Patent Number:	7092281

Property Type	Number
Patent Number:	7313032
Patent Number:	8099688
Patent Number:	7466604
Patent Number:	5606294
Patent Number:	6950484
Patent Number:	6675312
Patent Number:	6748456
Patent Number:	6757844
Patent Number:	6854102
Patent Number:	6593769
Patent Number:	6690224
Patent Number:	6665847
Patent Number:	6384621
Patent Number:	6388942
Patent Number:	6578118
Patent Number:	7016349
Patent Number:	6631455
Patent Number:	6581144
Patent Number:	6507242
Patent Number:	6816955
Patent Number:	6622204
Patent Number:	6745338
Patent Number:	7080276
Patent Number:	7093151
Patent Number:	7024653
Patent Number:	6563437
Patent Number:	6611935
Patent Number:	6959257
Patent Number:	6580291
Patent Number:	6249177
Patent Number:	6445211
Patent Number:	6373231
Patent Number:	6486712
Patent Number:	6404270
Patent Number:	6473357
Patent Number:	6466050
Patent Number:	6625711
Patent Number:	6629226

Property Type	Number
Patent Number:	6810098
Patent Number:	6715021
Patent Number:	6483386
Patent Number:	6857088
Patent Number:	6467042
Application Number:	12004831
Patent Number:	7667468
Patent Number:	8237418
Patent Number:	8604760
Patent Number:	8085252
Application Number:	12156384
Patent Number:	8092083
Patent Number:	8686985
Patent Number:	8902131
Application Number:	11855281
Patent Number:	8164365
Patent Number:	8570073
Application Number:	14066263
Patent Number:	8035401
Patent Number:	8564605
Patent Number:	8082373
Patent Number:	8661168
Patent Number:	8543628
Application Number:	12239450
Patent Number:	8814713
Application Number:	14467511
Patent Number:	8111577
Patent Number:	8462576
Patent Number:	8705309
Patent Number:	8090894
Patent Number:	8788959
Application Number:	12058534
Patent Number:	8266575
Patent Number:	8661400
Patent Number:	8065653
Patent Number:	8499270
Patent Number:	7737724
Patent Number:	8482313

Property Type	Number
Application Number:	13930756
Patent Number:	8026739
Patent Number:	8476928
Application Number:	13914308
Application Number:	11968145
Patent Number:	8516025
Patent Number:	6850554
Patent Number:	6553057
Patent Number:	6369660
Patent Number:	6557059
Patent Number:	8014993
Patent Number:	6601936
Patent Number:	6362898
Patent Number:	6882443
Patent Number:	6233640
Patent Number:	6505267
Patent Number:	6279060
Patent Number:	6218969
Patent Number:	6252375
Patent Number:	6040792
Patent Number:	6996655
Patent Number:	6792499
Patent Number:	7155664
Patent Number:	5789776
Patent Number:	5892712
Patent Number:	6122191
Patent Number:	6363011
Patent Number:	5774400
Patent Number:	6163048
Patent Number:	6614070
Patent Number:	6137720
Patent Number:	6140676
Patent Number:	6750102
Patent Number:	6350665
Patent Number:	7231374
Patent Number:	7084066
Patent Number:	7605088
Patent Number:	6817903

Property Type	Number
Patent Number:	6681376
Patent Number:	6808944
Patent Number:	6803318
Patent Number:	6756315
Patent Number:	6841008
Patent Number:	6844237
Patent Number:	7183222
Patent Number:	6480052
Patent Number:	6850075
Patent Number:	6392941
Patent Number:	6813672
Patent Number:	6816979
Patent Number:	6904551
Patent Number:	6577163
Patent Number:	6970908
Patent Number:	7023259
Patent Number:	6590417
Patent Number:	6710623
Patent Number:	6501696
Patent Number:	6707741
Patent Number:	6541879
Patent Number:	6777969
Patent Number:	6724220
Patent Number:	7221187
Patent Number:	7825688
Patent Number:	8358150
Patent Number:	8736303
Application Number:	14283888
Patent Number:	6507214
Patent Number:	6765407
Patent Number:	6603330
Patent Number:	6941336
Patent Number:	6910126
Patent Number:	6967511
Patent Number:	6823282
Patent Number:	7127630
Patent Number:	6892322
Patent Number:	7185162

Property Type	Number
Patent Number:	6952778
Patent Number:	7188063
Patent Number:	7206733
Patent Number:	7076420
Patent Number:	6825689
Patent Number:	6573753
Patent Number:	6614320
Patent Number:	6859884
Patent Number:	8572297
Patent Number:	8130025
Patent Number:	8106637
Patent Number:	8040266
Patent Number:	8078894
Patent Number:	8909960
Patent Number:	7966345
Patent Number:	7821866
Patent Number:	7895387
Patent Number:	8525799
Patent Number:	8766910
Patent Number:	7808842
Patent Number:	8040164
Patent Number:	8103223
Patent Number:	8565693
Application Number:	14047635
Patent Number:	8086417
Patent Number:	8315832
Patent Number:	8508244
Application Number:	13965587
Patent Number:	8581853
Patent Number:	8400409
Patent Number:	8024491
Patent Number:	8037228
Patent Number:	8040175
Patent Number:	7893772
Patent Number:	7719908
Application Number:	12072935
Application Number:	11968119
Patent Number:	8525798

Property Type	Number
Application Number:	13671389
Patent Number:	8487912
Patent Number:	8149643
Patent Number:	8358557
Patent Number:	8063603
Patent Number:	8482241
Application Number:	11963661
Patent Number:	8446158
Application Number:	12151858
Patent Number:	6852649
Patent Number:	6693042
Patent Number:	6780771
Patent Number:	7157792
Patent Number:	6509270
Patent Number:	6593208
Patent Number:	6831346
Patent Number:	7172914
Patent Number:	6969684
Patent Number:	6786809
Patent Number:	6630643
Patent Number:	6844235
Patent Number:	6534805
Patent Number:	6492710
Patent Number:	6537893
Patent Number:	6770566
Patent Number:	6586296
Patent Number:	6531366
Patent Number:	6709928
Patent Number:	6667224
Patent Number:	6833330
Patent Number:	6761619
Patent Number:	6979640
Patent Number:	6853202
Patent Number:	7391104
Patent Number:	6931928
Patent Number:	7698015
Patent Number:	6890859
Patent Number:	6730545

Property Type	Number
Patent Number:	7045387
Patent Number:	6901984
Patent Number:	7818085
Patent Number:	6828201
Patent Number:	7151048
Patent Number:	7078334
Patent Number:	7014552
Patent Number:	6562675
Patent Number:	6921948
Patent Number:	6841491
Patent Number:	6950954
Patent Number:	6957242
Patent Number:	6611220
Patent Number:	6525593
Patent Number:	6563391
Patent Number:	6608472
Patent Number:	6868500
Patent Number:	6542025
Patent Number:	6981090
Patent Number:	7005933
Patent Number:	6798299
Patent Number:	7180342
Patent Number:	7058732
Patent Number:	6975695
Patent Number:	6617901
Patent Number:	6948084
Patent Number:	6971045
Patent Number:	6507213
Patent Number:	6980575
Patent Number:	6466051
Patent Number:	6421408
Patent Number:	6593725
Patent Number:	6577297
Patent Number:	6999063
Patent Number:	7092980
Patent Number:	7023257
Patent Number:	8149048
Patent Number:	6854067

Property Type	Number
Patent Number:	6892310
Patent Number:	7386740
Patent Number:	8484487
Patent Number:	7149316
Patent Number:	8176296
Patent Number:	8555032
Application Number:	13966028
Patent Number:	6466505
Patent Number:	6411150
Patent Number:	6931465
Patent Number:	6469548
Patent Number:	8806229
Patent Number:	8271810
Application Number:	13622132
Patent Number:	8358142
Patent Number:	8692563
Application Number:	14203145
Application Number:	12395969
Patent Number:	8564546
Patent Number:	8797277
Patent Number:	8902174
Patent Number:	8154310
Application Number:	13443718
Patent Number:	8624845
Patent Number:	8321174
Application Number:	13670671
Patent Number:	8179056
Application Number:	12413579
Patent Number:	8063805
Patent Number:	7723659
Patent Number:	8860684
Patent Number:	8095747
Patent Number:	8856434
Patent Number:	7898299
Patent Number:	8143920
Patent Number:	8217909
Patent Number:	8184102
Patent Number:	8629851

Property Type	Number
Application Number:	14153996
Patent Number:	8174510
Patent Number:	8638310
Application Number:	14152882
Patent Number:	8248081
Application Number:	13588477
Application Number:	12195989
Patent Number:	8674950
Patent Number:	8482536
Application Number:	13933506
Patent Number:	8866795
Patent Number:	8145812
Patent Number:	6713831
Patent Number:	6699795
Patent Number:	7112834
Patent Number:	6803330
Patent Number:	6844262
Patent Number:	6664120
Patent Number:	6905893
Patent Number:	6777307
Patent Number:	7129178
Patent Number:	6969689
Patent Number:	6818558
Patent Number:	7031791
Patent Number:	7105377
Patent Number:	7094707
Patent Number:	6687648
Patent Number:	6863595
Patent Number:	6677213
Patent Number:	7042054
Patent Number:	7365403
Patent Number:	7867918
Patent Number:	6835616
Patent Number:	7227212
Patent Number:	6866986
Patent Number:	7026235
Patent Number:	6838392
Patent Number:	6859312

Property Type	Number
Patent Number:	6866571
Patent Number:	6885955
Patent Number:	6803289
Patent Number:	6964929
Patent Number:	6893974
Patent Number:	7192867
Patent Number:	6903002
Patent Number:	6794269
Patent Number:	7256083
Patent Number:	8080453
Patent Number:	7229929
Patent Number:	6680516
Patent Number:	7396773
Patent Number:	7155196
Patent Number:	6914566
Patent Number:	7221926
Patent Number:	7103108
Patent Number:	7230971
Patent Number:	6910164
Patent Number:	6760872
Patent Number:	7346849
Patent Number:	6782467
Patent Number:	6816976
Patent Number:	6441642
Patent Number:	6789180
Patent Number:	6452417
Patent Number:	6961807
Patent Number:	7173469
Patent Number:	7020728
Patent Number:	6531782
Patent Number:	6418040
Patent Number:	6944691
Patent Number:	6657506
Patent Number:	6466078
Patent Number:	7116599
Patent Number:	6525980
Patent Number:	6445635
Patent Number:	6970392

Property Type	Number
Patent Number:	6498513
Patent Number:	6826642
Patent Number:	6674306
Patent Number:	6853218
Patent Number:	6515517
Patent Number:	6772251
Patent Number:	6700807
Patent Number:	6990508
Patent Number:	7003545
Patent Number:	6594816
Patent Number:	6754725
Patent Number:	6566952
Patent Number:	6918057
Patent Number:	7043495
Patent Number:	8250249
Patent Number:	8063665
Patent Number:	8941410
Patent Number:	8339188
Patent Number:	8143934
Patent Number:	8441303
Patent Number:	8441298
Patent Number:	8890600
Patent Number:	7940202
Patent Number:	8299951
Patent Number:	8217700
Patent Number:	8266361
Patent Number:	8711096
Patent Number:	8169238
Patent Number:	8536902
Patent Number:	8089289
Patent Number:	8570053
Patent Number:	8564313
Application Number:	14058464
Application Number:	13342942
Patent Number:	8258986
Patent Number:	8395589
Patent Number:	8245579
Patent Number:	8093914

Property Type	Number
Patent Number:	8890547
Patent Number:	8519722
Application Number:	12842338
Application Number:	12605683
Patent Number:	8319505
Patent Number:	8570052
Application Number:	14037098
Patent Number:	8464145
Patent Number:	8780073
Application Number:	14316600
Application Number:	12618661
Patent Number:	8487639
Patent Number:	8575947
Application Number:	14071107
Application Number:	12634511
Patent Number:	7189652
Patent Number:	6803321
Patent Number:	6869850
Patent Number:	6773975
Patent Number:	6943126
Patent Number:	6753944
Patent Number:	6774452
Patent Number:	7192839
Patent Number:	6881634
Patent Number:	6857938
Patent Number:	6977217
Patent Number:	6869853
Patent Number:	6774012
Patent Number:	7092153
Patent Number:	7072103
Patent Number:	6764890
Patent Number:	6833622
Patent Number:	7352444
Patent Number:	7112790
Patent Number:	6902993
Patent Number:	7256087
Patent Number:	7629653
Patent Number:	7323411

Property Type	Number
Patent Number:	7268052
Patent Number:	7071124
Patent Number:	7371637
Patent Number:	8445381
Patent Number:	7659180
Patent Number:	7320944
Patent Number:	7197737
Patent Number:	7253094
Patent Number:	7390750
Patent Number:	7323377
Patent Number:	7750420
Patent Number:	7105413
Patent Number:	7773442
Patent Number:	8045410
Patent Number:	8493804
Patent Number:	8837245
Patent Number:	6768362
Patent Number:	6956419
Patent Number:	6625782
Patent Number:	6892337
Patent Number:	7043502
Patent Number:	6649832
Patent Number:	6628154
Patent Number:	6768384
Patent Number:	6820160
Patent Number:	6566923
Patent Number:	7015734
Patent Number:	7013359
Patent Number:	7689724
Patent Number:	6925554
Patent Number:	6574158
Patent Number:	6744323
Patent Number:	6549050
Patent Number:	6628217
Patent Number:	6819539
Patent Number:	6472915
Patent Number:	7395366
Patent Number:	6781418

Property Type	Number
Patent Number:	7010772
Patent Number:	6609243
Patent Number:	7139292
Patent Number:	6492853
Patent Number:	6657470
Patent Number:	6643833
Patent Number:	6646466
Patent Number:	6671868
Patent Number:	6747479
Patent Number:	6633189
Patent Number:	6559726
Patent Number:	6734504
Patent Number:	6580623
Patent Number:	6538485
Patent Number:	6724232
Patent Number:	6654941
Patent Number:	6771136
Patent Number:	8112571
Patent Number:	8283727
Patent Number:	8841727
Patent Number:	8112897
Patent Number:	8462135
Application Number:	13915328
Patent Number:	8633904
Application Number:	14140909
Patent Number:	8773390
Patent Number:	8405622
Patent Number:	8102292
Patent Number:	8572320
Application Number:	14066522
Application Number:	12702930
Application Number:	13619807
Application Number:	13569048
Patent Number:	8730187
Patent Number:	8866500
Application Number:	14514204
Patent Number:	8375258
Application Number:	13765524

Property Type	Number
Patent Number:	8595398
Patent Number:	8441452
Application Number:	12699741
Application Number:	12757614
Patent Number:	8355887
Patent Number:	8892397
Patent Number:	8219729
Application Number:	14512944
Patent Number:	8830181
Patent Number:	8598908
Patent Number:	8601254
Application Number:	12765400
Patent Number:	8135884
Patent Number:	8838852
Application Number:	12773801
Patent Number:	8284084
Patent Number:	8487655
Application Number:	13916386
Application Number:	14229908
Patent Number:	7351663
Patent Number:	7915175
Patent Number:	8513753
Patent Number:	7425489
Patent Number:	7361602
Patent Number:	8093719
Patent Number:	7446063
Patent Number:	7394075
Patent Number:	7277347
Patent Number:	7659558
Patent Number:	7253496
Patent Number:	7206247
Patent Number:	7592661
Patent Number:	7678640
Patent Number:	8063655
Patent Number:	7838937
Patent Number:	7981800
Patent Number:	7474979
Patent Number:	8399360

Property Type	Number
Patent Number:	7384833
Patent Number:	8129788
Patent Number:	7906982
Patent Number:	7901976
Patent Number:	7667241
Patent Number:	7768068
Patent Number:	8017445
Patent Number:	7944020
Patent Number:	8607424
Patent Number:	7936023
Patent Number:	8252640
Patent Number:	8154088
Patent Number:	7939372
Patent Number:	8283772
Patent Number:	7939371
Patent Number:	8106489
Application Number:	13917500
Patent Number:	8643124
Application Number:	14172775
Patent Number:	6736474
Patent Number:	6826734
Patent Number:	6710618
Patent Number:	6959421
Patent Number:	7080327
Patent Number:	6701508
Patent Number:	6715132
Patent Number:	6785881
Patent Number:	6966039
Patent Number:	7010773
Patent Number:	7086014
Patent Number:	7406674
Patent Number:	8069428
Patent Number:	8793635
Application Number:	14445364
Patent Number:	7143360
Patent Number:	7770113
Patent Number:	7844437
Patent Number:	8370791

Property Type	Number
Patent Number:	7073134
Patent Number:	8042093
Application Number:	13211329
Patent Number:	6901563
Patent Number:	6637015
Patent Number:	6898703
Patent Number:	6654934
Patent Number:	7035886
Patent Number:	7231339
Patent Number:	8103497
Patent Number:	7103530
Patent Number:	7379860
Patent Number:	8473275
Patent Number:	6971004
Patent Number:	7287112
Patent Number:	8533677
Patent Number:	8527949
Patent Number:	8069405
Patent Number:	6701487
Patent Number:	7308608
Patent Number:	8179161
Patent Number:	8558578
Application Number:	14054657
Patent Number:	8752033
Application Number:	14272376
Application Number:	14035836
Patent Number:	8112551
Patent Number:	8639850
Application Number:	12776323
Patent Number:	8111097
Patent Number:	8299850
Patent Number:	8089383
Patent Number:	8089384
Application Number:	12777090
Patent Number:	8832475
Patent Number:	8125360
Patent Number:	8643519
Application Number:	14150627

Property Type	Number
Patent Number:	8816986
Application Number:	12476245
Patent Number:	8698760
Application Number:	14201520
Patent Number:	8725983
Application Number:	14275491
Patent Number:	8386885
Patent Number:	8861158
Patent Number:	8786295
Patent Number:	8364870
Patent Number:	8645598
Application Number:	12844798
Application Number:	13950672
Patent Number:	8723825
Patent Number:	8723827
Application Number:	14275387
Patent Number:	8547135
Application Number:	14042268
Application Number:	12871718
Application Number:	12871754
Patent Number:	8254200
Application Number:	13436872
Patent Number:	8119538
Patent Number:	8822349
Application Number:	14562462
Patent Number:	8278684
Patent Number:	7903458
Patent Number:	7898852
Patent Number:	8637921
Application Number:	14166608
Patent Number:	8436460
Patent Number:	8067284
Patent Number:	8680601
Application Number:	14225152
Application Number:	13539459
Patent Number:	8614124
Application Number:	13539461
Patent Number:	7881118

Property Type	Number
Patent Number:	8269287
Patent Number:	7706180
Patent Number:	7859904
Patent Number:	7787303
Patent Number:	8670278
Patent Number:	8283261
Patent Number:	8318608
Application Number:	13620071
Patent Number:	8940645
Patent Number:	8691648
Patent Number:	8592891
Patent Number:	8063434
Patent Number:	8859374
Application Number:	14307858
Patent Number:	8633537
Application Number:	14159315
Patent Number:	7880219
Patent Number:	8860122
Application Number:	13436875
Patent Number:	8088683
Patent Number:	7799670
Patent Number:	8536640
Patent Number:	8402313
Patent Number:	7337407
Patent Number:	8935623
Patent Number:	7003732
Patent Number:	7185321
Patent Number:	7111012
Patent Number:	8103496
Patent Number:	7100139
Patent Number:	7765095
Patent Number:	7774190
Patent Number:	6922821
Patent Number:	7526422
Patent Number:	8112267
Patent Number:	7150002
Patent Number:	8078970
Patent Number:	8160864

Property Type	Number
Patent Number:	7089175
Patent Number:	7099818
Patent Number:	7047181
Patent Number:	7236921
Patent Number:	6957180
Patent Number:	7162410
Patent Number:	7046039
Patent Number:	6731152
Patent Number:	6654309
Patent Number:	7012456
Patent Number:	7299307
Patent Number:	7096340
Patent Number:	6661724
Patent Number:	6829190
Patent Number:	8046206
Patent Number:	6727765
Patent Number:	7761845
Patent Number:	7103381
Patent Number:	7068739
Patent Number:	7000057
Patent Number:	7115462
Patent Number:	7569449
Patent Number:	7146454
Application Number:	12899437
Application Number:	12900283
Application Number:	12896520
Application Number:	12917076
Patent Number:	8947373
Patent Number:	8447890
Application Number:	12902958
Patent Number:	8773420
Patent Number:	8704818
Application Number:	14258905
Application Number:	13008014
Patent Number:	8901944
Application Number:	13247922
Application Number:	12981265
Patent Number:	8773146

Property Type	Number
Application Number:	14325582
Patent Number:	8472276
Application Number:	13079788
Patent Number:	8810543
Application Number:	14463240
Patent Number:	8825925
Patent Number:	8482546
Application Number:	13923037
Application Number:	13179307
Application Number:	13180337
Application Number:	13340667
Application Number:	13183263
Application Number:	14044387
Application Number:	13191708
Application Number:	13035061
Patent Number:	8749504
Application Number:	12981332
Patent Number:	8717331
Patent Number:	8576189
Patent Number:	8729913
Patent Number:	8593431
Patent Number:	8866493
Patent Number:	8692795
Application Number:	14137020
Application Number:	14029500
Application Number:	14229069
Patent Number:	7670963
Patent Number:	8045373
Patent Number:	8163660
Application Number:	14105041
Patent Number:	8737027
Patent Number:	7859899
Patent Number:	8093128
Patent Number:	8143129
Patent Number:	8679927
Patent Number:	8871595
Patent Number:	8542514
Patent Number:	7969804

Property Type	Number
Patent Number:	8125835
Patent Number:	8542541
Application Number:	14035728
Patent Number:	8222688
Patent Number:	8710579
Application Number:	14265129
Patent Number:	8710578
Patent Number:	8071453
Application Number:	13312964
Application Number:	13434347
Patent Number:	8143673
Application Number:	13892585
Patent Number:	8467243
Patent Number:	8724386
Patent Number:	8772057
Patent Number:	8772059
Application Number:	08914980
Patent Number:	6579777
Patent Number:	5751507
Patent Number:	6011420
Patent Number:	5701024
Patent Number:	5652182
Patent Number:	6786998
Patent Number:	6091129
Patent Number:	6004874
Patent Number:	7142400
Patent Number:	6680632
Patent Number:	6657472
Patent Number:	6847218
Patent Number:	6912605
Patent Number:	7131033
Patent Number:	7170179
Patent Number:	6822899
Patent Number:	6933786
Patent Number:	7280574
Patent Number:	7085873
Patent Number:	6753988
Patent Number:	6801212

Property Type	Number
Patent Number:	6745264
Patent Number:	6757776
Patent Number:	7047460
Patent Number:	7159065
Patent Number:	7346724
Patent Number:	7660936
Patent Number:	8041872
Patent Number:	7080189
Patent Number:	6963986
Patent Number:	8078973
Application Number:	13324952
Patent Number:	6959350
Patent Number:	7107365
Patent Number:	7275119
Patent Number:	6891429
Patent Number:	7293118
Patent Number:	7765344
Patent Number:	7194638
Patent Number:	7069347
Patent Number:	7409027
Patent Number:	6798297
Patent Number:	6768618
Patent Number:	7112974
Patent Number:	7055121
Patent Number:	6738834
Patent Number:	6784717
Patent Number:	8965014
Application Number:	13213895
Application Number:	13213981
Patent Number:	8941393
Patent Number:	8493359
Application Number:	13947596
Patent Number:	8436627
Patent Number:	8410795
Patent Number:	8587546
Application Number:	14035245
Application Number:	13091132
Application Number:	13247590

Property Type	Number
Application Number:	13223702
Application Number:	13247727
Application Number:	13360296
Patent Number:	8847911
Application Number:	13249514
Application Number:	13309674
Application Number:	13436535
Application Number:	13341285
Patent Number:	8947377
Application Number:	13246467
Application Number:	13341596
Patent Number:	8558497
Patent Number:	8570790
Patent Number:	8630111
Application Number:	14486137
Patent Number:	8638316
Patent Number:	8525609
Patent Number:	8947142
Application Number:	13248705
Application Number:	13247951
Application Number:	13431832
Patent Number:	8903679
Application Number:	13248355
Application Number:	13231176
Application Number:	13250336
Patent Number:	8576633
Application Number:	13247544
Patent Number:	5821623
Patent Number:	5907784
Patent Number:	5770521
Patent Number:	5610104
Patent Number:	5872802
Patent Number:	5661418
Patent Number:	5955897
Patent Number:	5898315
Patent Number:	6707112
Patent Number:	6004399
Patent Number:	6016012

Property Type	Number
Patent Number:	5977638
Patent Number:	5911887
Patent Number:	5897354
Patent Number:	6309971
Patent Number:	6627547
Patent Number:	5763021
Patent Number:	5897371
Patent Number:	5861676
Patent Number:	6156645
Patent Number:	6359316
Patent Number:	5825600
Patent Number:	5968851
Patent Number:	6689264
Patent Number:	6165375
Patent Number:	6406640
Patent Number:	6015718
Patent Number:	5931173
Patent Number:	6033991
Patent Number:	6399462
Patent Number:	6555484
Patent Number:	5851892
Patent Number:	6586806
Patent Number:	5914895
Patent Number:	5986932
Patent Number:	6036780
Patent Number:	6169322
Patent Number:	5959889
Patent Number:	6097618
Patent Number:	6801064
Patent Number:	7392495
Patent Number:	7340627
Patent Number:	8732486
Patent Number:	8112615
Patent Number:	7064596
Patent Number:	8156539
Patent Number:	7024506
Patent Number:	6943560
Patent Number:	7089338

Property Type	Number
Patent Number:	6784700
Patent Number:	6759865
Patent Number:	6800495
Patent Number:	6825728
Patent Number:	6791898
Patent Number:	6842320
Patent Number:	7511590
Patent Number:	7080222
Patent Number:	6948030
Patent Number:	7433439
Patent Number:	7107036
Patent Number:	6819185
Patent Number:	7017097
Patent Number:	6737877
Patent Number:	6981238
Patent Number:	7024501
Patent Number:	6957309
Patent Number:	6990618
Patent Number:	7257147
Patent Number:	7636382
Patent Number:	6876563
Patent Number:	6836169
Patent Number:	7187705
Patent Number:	6911857
Patent Number:	7352255
Patent Number:	6856181
Patent Number:	6781465
Patent Number:	7068091
Patent Number:	7738496
Application Number:	13247248
Application Number:	13430648
Patent Number:	8576524
Application Number:	13248326
Patent Number:	8843664
Application Number:	14491809
Application Number:	13247779
Patent Number:	8729911
Patent Number:	8681122

Property Type	Number
Patent Number:	8487909
Application Number:	13940516
Application Number:	13246565
Application Number:	13538122
Application Number:	13242703
Application Number:	13240938
Patent Number:	8878823
Application Number:	14095930
Patent Number:	8493360
Application Number:	13336862
Application Number:	13337438
Patent Number:	8685813
Application Number:	14201456
Patent Number:	8692799
Application Number:	13341847
Application Number:	13340418
Application Number:	13340453
Patent Number:	8559262
Patent Number:	8570809
Patent Number:	8908438
Patent Number:	8750051
Application Number:	14286497
Application Number:	13432038
Patent Number:	8773913
Application Number:	13432053
Application Number:	13339099
Patent Number:	8531235
Patent Number:	8780640
Patent Number:	8599618
Application Number:	13430348
Patent Number:	6403488
Patent Number:	6054710
Patent Number:	6140228
Patent Number:	6756302
Patent Number:	6906421
Patent Number:	6207991
Patent Number:	6114724
Patent Number:	5976900

Property Type	Number
Patent Number:	6069382
Patent Number:	6124157
Patent Number:	6161507
Patent Number:	6171180
Patent Number:	5952670
Patent Number:	6255180
Patent Number:	6221776
Patent Number:	6187667
Patent Number:	6534398
Patent Number:	6065128
Patent Number:	6534378
Patent Number:	6638856
Patent Number:	5972124
Patent Number:	6302766
Patent Number:	6316821
Patent Number:	6649447
Patent Number:	6834262
Patent Number:	6331728
Patent Number:	6576491
Patent Number:	6825544
Patent Number:	6596466
Patent Number:	6436848
Patent Number:	6887784
Patent Number:	6214743
Patent Number:	6303496
Patent Number:	6822333
Patent Number:	6890860
Patent Number:	6322716
Patent Number:	6172907
Patent Number:	6344281
Patent Number:	6562638
Patent Number:	7394308
Patent Number:	7176720
Patent Number:	7084662
Patent Number:	7233183
Patent Number:	7053662
Patent Number:	7162565
Patent Number:	7190191

Property Type	Number
Patent Number:	7030662
Patent Number:	7112975
Patent Number:	7642833
Patent Number:	7109763
Patent Number:	7019576
Patent Number:	6970032
Patent Number:	7019585
Patent Number:	7173475
Patent Number:	7158429
Patent Number:	7033900
Patent Number:	8264043
Patent Number:	7355880
Patent Number:	7057434
Patent Number:	7334072
Patent Number:	7388350
Patent Number:	8093864
Patent Number:	8310201
Application Number:	14529707
Patent Number:	7068077
Patent Number:	7535772
Patent Number:	8397034
Patent Number:	7088166
Patent Number:	7301370
Patent Number:	7777521
Patent Number:	7254792
Patent Number:	7796464
Patent Number:	7274209
Patent Number:	7072989
Patent Number:	7409616
Patent Number:	7502878
Patent Number:	7864157
Application Number:	12470274
Patent Number:	8896553
Application Number:	13725822
Application Number:	13429878
Application Number:	13341857
Application Number:	13338665
Application Number:	13340971

Property Type	Number
Patent Number:	8922527
Patent Number:	8797301
Application Number:	14332727
Application Number:	13342096
Patent Number:	8674672
Application Number:	13427853
Application Number:	13340349
Application Number:	13975197
Application Number:	13693905
Application Number:	13427845
Application Number:	13428721
Patent Number:	8861271
Application Number:	14512647
Patent Number:	8675434
Application Number:	13428320
Patent Number:	8823664
Application Number:	13429869
Application Number:	13629281
Patent Number:	8294687
Patent Number:	8766944
Application Number:	13424361
Application Number:	13435195
Patent Number:	8779780
Application Number:	13435890
Patent Number:	8907738
Application Number:	13431401
Patent Number:	8875002
Application Number:	13741145
Application Number:	13741090
Application Number:	13537877
Patent Number:	8791753
Patent Number:	8411062
Patent Number:	8432170
Patent Number:	6911395
Patent Number:	6734108
Patent Number:	6969448
Patent Number:	6635566
Patent Number:	6305076

Property Type	Number
Patent Number:	6665929
Patent Number:	6399512
Patent Number:	6556487
Patent Number:	6727161
Patent Number:	8030172
Patent Number:	6436799
Patent Number:	6624052
Patent Number:	6275425
Patent Number:	6362675
Patent Number:	6682772
Patent Number:	6376259
Patent Number:	6430093
Patent Number:	6535446
Patent Number:	6459609
Patent Number:	6445608
Patent Number:	6661696
Patent Number:	6495413
Patent Number:	6597028
Patent Number:	6650158
Patent Number:	6894549
Patent Number:	6538914
Patent Number:	6728093
Patent Number:	6853535
Patent Number:	6717839
Patent Number:	7176824
Patent Number:	7271744
Patent Number:	7116572
Patent Number:	7313010
Patent Number:	7120220
Patent Number:	7142627
Patent Number:	7652909
Patent Number:	7570090
Patent Number:	8081500
Application Number:	12833817
Patent Number:	7126869
Patent Number:	8140013
Patent Number:	8032107
Patent Number:	7369090

Property Type	Number
Patent Number:	8791862
Application Number:	14445494
Patent Number:	7215246
Patent Number:	7728461
Patent Number:	8093765
Patent Number:	7078944
Patent Number:	7135899
Patent Number:	7123065
Patent Number:	7276953
Patent Number:	7046580
Patent Number:	7205797
Patent Number:	7126391
Patent Number:	7245162
Patent Number:	7215170
Patent Number:	7126436
Patent Number:	7119630
Patent Number:	7752471
Patent Number:	7089133
Patent Number:	7183822
Patent Number:	7752506
Patent Number:	7199646
Patent Number:	7417485
Patent Number:	8300683
Patent Number:	8526487
Patent Number:	7202699
Patent Number:	7349515
Patent Number:	7202696
Patent Number:	7264975
Patent Number:	7151418
Patent Number:	7701908
Patent Number:	7394293
Patent Number:	7215214
Patent Number:	7616073
Patent Number:	7113445
Patent Number:	7187245
Application Number:	13612696
Application Number:	13536255
Patent Number:	8384467

Property Type	Number
Application Number:	13776244
Patent Number:	8854056
Patent Number:	8837657
Application Number:	13431648
Application Number:	13405071
Patent Number:	8484838
Application Number:	13528739
Application Number:	14229524
Application Number:	14318354
Patent Number:	8416113
Patent Number:	8816890
Patent Number:	8760195
Patent Number:	8854081
Patent Number:	8659317
Application Number:	13731865
Patent Number:	8760203
Application Number:	13538991
Application Number:	13631369
Application Number:	13564099
Patent Number:	8842482
Application Number:	13605092
Application Number:	13628033
Application Number:	13693927
Application Number:	13836566
Application Number:	13829734
Application Number:	14018596
Application Number:	13727944
Patent Number:	8773386
Patent Number:	8640081
Patent Number:	8767867
Application Number:	13801791
Application Number:	13912028
Application Number:	13671246
Application Number:	13895110
Application Number:	13630645
Application Number:	13629432
Patent Number:	8957763
Patent Number:	8723654

Property Type	Number
Application Number:	12833836
Patent Number:	8583942
Application Number:	14077971
Patent Number:	8729874
Patent Number:	8665007
Patent Number:	8584959
Patent Number:	8823267
Patent Number:	8729960
Patent Number:	8841890
Patent Number:	8949514
Patent Number:	8934279
Application Number:	13467874
Application Number:	13467816
Patent Number:	8552515
Application Number:	14026118
Patent Number:	8518791
Patent Number:	8728901
Patent Number:	8518792
Application Number:	14010174
Patent Number:	8669801
Patent Number:	8916434
Application Number:	14514008
Patent Number:	8842460
Patent Number:	7924599
Patent Number:	7672151
Patent Number:	5438023
Patent Number:	5578867
Patent Number:	5572459
Patent Number:	5608246
Patent Number:	5909624
Patent Number:	5434572
Patent Number:	5530668
Patent Number:	5889428
Patent Number:	5598366
Patent Number:	5592410
Patent Number:	5815430
Patent Number:	6008659
Patent Number:	8199110

Property Type	Number
Patent Number:	7388440
Patent Number:	7173453
Patent Number:	7173493
Patent Number:	7106042
Patent Number:	7126398
Patent Number:	7343510
Patent Number:	7184359
Patent Number:	7519101
Patent Number:	8325782
Patent Number:	7729408
Patent Number:	8488651
Patent Number:	7138841
Patent Number:	7421559
Patent Number:	8060721
Patent Number:	8555011
Patent Number:	8527729
Patent Number:	7173865
Patent Number:	7474687
Patent Number:	7219252
Patent Number:	7447254
Patent Number:	7629963
Patent Number:	8384670
Patent Number:	8818784
Patent Number:	7737734
Patent Number:	7026802
Patent Number:	7173477
Patent Number:	7787829
Patent Number:	8521097
Patent Number:	7196586
Patent Number:	7349190
Patent Number:	7227804
Patent Number:	7006404
Patent Number:	7149114
Patent Number:	7516280
Patent Number:	7362163
Patent Number:	7701281
Patent Number:	7362079
Patent Number:	7653118

Property Type	Number
Patent Number:	8534555
Patent Number:	8816985
Application Number:	14463015
Patent Number:	8810546
Patent Number:	8773405
Patent Number:	8780065
Application Number:	14299136
Patent Number:	8874396
Patent Number:	8547118
Patent Number:	8705310
Application Number:	14258950
Patent Number:	8527802
Patent Number:	8873264
Patent Number:	8754662
Application Number:	14303881
Application Number:	14018360
Application Number:	14023342
Application Number:	14137426
Patent Number:	8675405
Application Number:	14216589
Patent Number:	8796098
Application Number:	14451341
Application Number:	14305122
Application Number:	13791758
Patent Number:	8897067
Patent Number:	8947122
Application Number:	14108967
Patent Number:	8823399
Application Number:	14468630
Application Number:	13928695
Application Number:	14040293
Patent Number:	8692802
Application Number:	13801094
Patent Number:	8866490
Patent Number:	8866491
Application Number:	14514654
Patent Number:	8839184
Application Number:	14567863

Property Type	Number
Patent Number:	8773396
Patent Number:	5852376
Patent Number:	5969935
Patent Number:	5800683
Patent Number:	5818771
Patent Number:	6190926
Patent Number:	5920453
Patent Number:	5864932
Patent Number:	6027947
Patent Number:	6150184
Patent Number:	6211542
Patent Number:	5902131
Patent Number:	5854568
Patent Number:	5880989
Patent Number:	5892728
Patent Number:	5956266
Patent Number:	5969980
Patent Number:	5978251
Patent Number:	5986919
Patent Number:	5995406
Patent Number:	6028783
Patent Number:	6185123
Patent Number:	6252793
Patent Number:	6560137
Patent Number:	6856573
Patent Number:	6287637
Patent Number:	6174735
Patent Number:	6201726
Patent Number:	6358755
Patent Number:	6203608
Patent Number:	6263398
Patent Number:	6249014
Patent Number:	6613586
Patent Number:	6242299
Patent Number:	6141237
Patent Number:	6222454
Patent Number:	6414873
Patent Number:	6512694

Property Type	Number
Patent Number:	7710776
Patent Number:	8222111
Patent Number:	8121172
Patent Number:	7221200
Patent Number:	8174291
Patent Number:	7038482
Patent Number:	7761769
Patent Number:	7239178
Patent Number:	7660611
Patent Number:	7332921
Patent Number:	7685705
Patent Number:	7406572
Patent Number:	7196925
Patent Number:	7123113
Patent Number:	7432749
Patent Number:	7142477
Patent Number:	7702369
Patent Number:	7158056
Patent Number:	7612690
Patent Number:	7430140
Patent Number:	7068205
Patent Number:	7346823
Patent Number:	6967869
Patent Number:	7221233
Patent Number:	7888962
Patent Number:	7405683
Patent Number:	7447922
Patent Number:	8019299
Patent Number:	7259547
Patent Number:	7221202
Patent Number:	7265633
Patent Number:	7424650
Patent Number:	7730437
Patent Number:	7356635
Patent Number:	7765354
Patent Number:	7123033
Patent Number:	7623565
Patent Number:	8483259

Property Type	Number
Patent Number:	7132854
Patent Number:	7212076
Patent Number:	7746096
Application Number:	13904481
Patent Number:	8577644
Application Number:	14059200
Patent Number:	8674958
Application Number:	14226660
Patent Number:	8717070
Application Number:	14037687
Patent Number:	8902554
Patent Number:	8614587
Application Number:	14107871
Application Number:	14262614
Patent Number:	8836669
Application Number:	14475034
Patent Number:	8610443
Patent Number:	8866494
Patent Number:	8779783
Patent Number:	8810263
Application Number:	14015720
Application Number:	14097126
Patent Number:	8860682
Application Number:	14512598
Patent Number:	8739103
Application Number:	14222904
Application Number:	13924292
Patent Number:	8963343
Patent Number:	8872526
Application Number:	14297115
Application Number:	14303014
Application Number:	14497170
Application Number:	14109045
Application Number:	14317696
Application Number:	14227021
Patent Number:	8943256
Application Number:	14293762
Application Number:	14513179

Property Type	Number
Patent Number:	8953380
Application Number:	14494917
Patent Number:	8883624
Application Number:	14228899
Application Number:	13551407
Application Number:	14599157
Patent Number:	7760540
Patent Number:	7518916
Patent Number:	7539054
Patent Number:	7505303
Patent Number:	8315096
Patent Number:	7385857
Patent Number:	7890804
Patent Number:	8064255
Patent Number:	8817536
Patent Number:	7675775
Patent Number:	7957192
Patent Number:	7778098
Patent Number:	8059458
Patent Number:	5828599
Patent Number:	6026018
Patent Number:	6097629
Patent Number:	6346826
Patent Number:	6185124
Patent Number:	7285766
Patent Number:	7268341
Patent Number:	7773070
Patent Number:	8345003
Patent Number:	7042575
Patent Number:	7138620
Patent Number:	7459671
Patent Number:	7435942
Patent Number:	7248345
Patent Number:	7405389
Patent Number:	8471191
Patent Number:	8558163
Patent Number:	7250893
Patent Number:	7247832

Property Type	Number
Patent Number:	7765251
Patent Number:	7298460
Patent Number:	7884801
Patent Number:	8547336
Patent Number:	7737948
Patent Number:	7342836
Patent Number:	7170319
Patent Number:	7327199
Patent Number:	8018268
Patent Number:	8082531
Patent Number:	8286125
Patent Number:	8539398
Patent Number:	8069436
Patent Number:	7996368
Patent Number:	7428678
Patent Number:	7484027
Patent Number:	7149840
Patent Number:	7405474
Patent Number:	7826998
Patent Number:	7433348
Patent Number:	7818640
Patent Number:	7319314
Patent Number:	7721115
Patent Number:	8819811
Patent Number:	7848703
Patent Number:	8442437
Patent Number:	7616513
Patent Number:	7379375
Patent Number:	7653123
Patent Number:	7408827
Patent Number:	7405987
Patent Number:	7262586
Patent Number:	7746181
Patent Number:	7330389
Patent Number:	7383370
Patent Number:	7332976
Patent Number:	8085100
Patent Number:	8072834

Property Type	Number
Patent Number:	7770096
Patent Number:	7295051
Patent Number:	7454645
Patent Number:	7279925
Patent Number:	7595674
Patent Number:	7426142
Application Number:	14229765
Application Number:	14560135
Application Number:	14493635
Application Number:	14580753
Application Number:	14490514
Patent Number:	8916432
Application Number:	14494097
Application Number:	14479193
Application Number:	14495547
Patent Number:	8942315
Application Number:	14491807
Application Number:	14513189
Patent Number:	5740106
Patent Number:	5635856
Patent Number:	5684434
Patent Number:	5877656
Patent Number:	6433645
Patent Number:	5638008
Patent Number:	5848285
Patent Number:	5898701
Patent Number:	5715205
Patent Number:	5768196
Patent Number:	5765214
Patent Number:	5929671
Patent Number:	5617057
Patent Number:	5986489
Patent Number:	5926035
Patent Number:	6118299
Patent Number:	5682356
Patent Number:	5828617
Patent Number:	5973545
Patent Number:	6510487

Property Type	Number
Patent Number:	5705937
Patent Number:	5801934
Patent Number:	5892670
Patent Number:	5999425
Patent Number:	5796289
Patent Number:	6118321
Patent Number:	5710778
Patent Number:	7567235
Patent Number:	7608914
Patent Number:	8318547
Patent Number:	7492445
Patent Number:	7297912
Patent Number:	7816697
Patent Number:	7746477
Patent Number:	7809035
Patent Number:	7755604
Patent Number:	7728816
Patent Number:	7742514
Patent Number:	7649622
Patent Number:	8263921
Patent Number:	8314774
Patent Number:	8031176
Patent Number:	8669940
Patent Number:	8259069
Application Number:	12072787
Patent Number:	7859240
Patent Number:	7755348
Patent Number:	8217334
Patent Number:	8541727
Patent Number:	8541728
Patent Number:	6828678
Patent Number:	6740588
Patent Number:	7329934
Patent Number:	7095647
Patent Number:	6972265
Patent Number:	6798691
Patent Number:	6822278
Patent Number:	6683815

Property Type	Number
Patent Number:	6862215
Patent Number:	6775191
Patent Number:	6639831
Patent Number:	6759339
Patent Number:	7199055
Patent Number:	7057919
Patent Number:	7283384
Patent Number:	7082053
Patent Number:	7365569
Patent Number:	7660167
Patent Number:	7368960
Patent Number:	7956641
Patent Number:	8089461
Patent Number:	7400183
Patent Number:	8120408
Patent Number:	7636019
Patent Number:	8174332
Patent Number:	7859355
Patent Number:	7560987
Patent Number:	7405629
Patent Number:	7504833
Patent Number:	8072230
Patent Number:	8816704
Patent Number:	7583154
Patent Number:	7492195
Patent Number:	7813213
Patent Number:	7958430
Patent Number:	7375535
Patent Number:	7355489
Patent Number:	7372321
Patent Number:	7730268
Patent Number:	8060708
Patent Number:	7612585
Patent Number:	7805113
Patent Number:	7403446
Patent Number:	7518434
Patent Number:	7962698
Patent Number:	7564923

Property Type	Number
Patent Number:	7716609
Patent Number:	7609799
Patent Number:	7899145
Patent Number:	8290109
Patent Number:	7813410
Patent Number:	8044928
Patent Number:	7692419
Patent Number:	7809973
Patent Number:	7657691
Patent Number:	5736867
Patent Number:	5705921
Patent Number:	5856753
Patent Number:	5745354
Patent Number:	5781034
Patent Number:	5894241
Patent Number:	5789944
Patent Number:	5936973
Patent Number:	5767701
Patent Number:	5675542
Patent Number:	6148390
Patent Number:	6347378
Patent Number:	5789952
Patent Number:	5943488
Patent Number:	5949799
Patent Number:	5850556
Patent Number:	6081866
Patent Number:	6338109
Patent Number:	6211739
Patent Number:	5764714
Patent Number:	5886582
Patent Number:	5857085
Patent Number:	5777944
Patent Number:	6005821
Patent Number:	6023777
Patent Number:	6006305
Patent Number:	6668302
Patent Number:	5812465
Patent Number:	5860160

Property Type	Number
Patent Number:	6066963
Patent Number:	6246263
Patent Number:	6426653
Patent Number:	5737274
Patent Number:	5748021
Patent Number:	5793682
Patent Number:	5821799
Patent Number:	5774413
Patent Number:	5748048
Patent Number:	5896068
Patent Number:	7205164
Patent Number:	7853749
Patent Number:	8417881
Patent Number:	8112054
Patent Number:	7660563
Patent Number:	7439820
Patent Number:	7501803
Patent Number:	7479800
Patent Number:	7660567
Patent Number:	7746922
Patent Number:	7642845
Patent Number:	7994848
Patent Number:	7307485
Patent Number:	7893925
Patent Number:	8462121
Patent Number:	8063881
Patent Number:	7439812
Patent Number:	8222929
Patent Number:	7755419
Patent Number:	7830200
Patent Number:	7656127
Patent Number:	7705600
Patent Number:	8067948
Patent Number:	8717042
Application Number:	14222227
Patent Number:	8040142
Patent Number:	8248084
Application Number:	13590390

Property Type	Number
Patent Number:	7586795
Patent Number:	7952942
Patent Number:	8325540
Application Number:	11698660
Patent Number:	7747911
Patent Number:	7555664
Patent Number:	7479913
Patent Number:	7679422
Patent Number:	7961029
Patent Number:	8248143
Patent Number:	8436672
Patent Number:	7627838
Patent Number:	5751644
Patent Number:	5864507
Patent Number:	5936894
Patent Number:	5953190
Patent Number:	5917335
Patent Number:	5881121
Patent Number:	6088422
Patent Number:	5923194
Patent Number:	5923195
Patent Number:	5912573
Patent Number:	5912572
Patent Number:	5920213
Patent Number:	6084447
Patent Number:	5923582
Patent Number:	5907255
Patent Number:	5848014
Patent Number:	6041388
Patent Number:	5900752
Patent Number:	5929676
Patent Number:	5917350
Patent Number:	5828614
Patent Number:	6058052
Patent Number:	5852579
Patent Number:	6006347
Patent Number:	5872473
Patent Number:	5910742

Property Type	Number
Patent Number:	5841305
Patent Number:	5903142
Patent Number:	6111269
Patent Number:	5864509
Patent Number:	5825715
Patent Number:	6157582
Patent Number:	6898101
Patent Number:	7480165
Patent Number:	6073193
Patent Number:	5940345
Patent Number:	5880999
Patent Number:	6016277
Patent Number:	6006172
Patent Number:	7683701
Patent Number:	7312616
Patent Number:	7884621
Patent Number:	7385793
Patent Number:	7969698
Patent Number:	7791851
Patent Number:	7518420
Patent Number:	7761232
Patent Number:	8027789
Application Number:	13245739
Patent Number:	7339848
Patent Number:	8085067
Patent Number:	7777541
Patent Number:	7859925
Patent Number:	7756194
Patent Number:	7796694
Patent Number:	8239658
Patent Number:	7265595
Patent Number:	8035455
Patent Number:	7721609
Patent Number:	7932787
Patent Number:	8683358
Patent Number:	8112739
Patent Number:	8813021
Patent Number:	8701023

Property Type	Number
Patent Number:	8387019
Patent Number:	8028258
Patent Number:	8661401
Patent Number:	7503019
Patent Number:	8176468
Application Number:	13328881
Patent Number:	8031270
Application Number:	13243987
Patent Number:	7835697
Patent Number:	7495977
Patent Number:	8174326
Patent Number:	7741918
Patent Number:	7961059
Patent Number:	7912109
Patent Number:	5952868
Patent Number:	5963487
Patent Number:	5912569
Patent Number:	6130842
Patent Number:	5848265
Patent Number:	5905389
Patent Number:	5929664
Patent Number:	5926041
Patent Number:	5914844
Patent Number:	6060921
Patent Number:	5936977
Patent Number:	6286118
Patent Number:	5953285
Patent Number:	6115836
Patent Number:	6545505
Patent Number:	6201407
Patent Number:	5966027
Patent Number:	6696855
Patent Number:	6111800
Patent Number:	6324107
Patent Number:	6061817
Patent Number:	6360307
Patent Number:	6023176
Patent Number:	6049242

Property Type	Number
Patent Number:	6265931
Patent Number:	6366979
Patent Number:	6023435
Patent Number:	6081475
Patent Number:	6147908
Patent Number:	6054879
Patent Number:	6148435
Patent Number:	6657241
Patent Number:	5968178
Patent Number:	6107859
Patent Number:	6097222
Patent Number:	6124750
Patent Number:	6278295
Patent Number:	6538466
Patent Number:	6225819
Patent Number:	7813411
Patent Number:	7701297
Patent Number:	7948327
Patent Number:	7728675
Patent Number:	8121283
Patent Number:	8873743
Patent Number:	7184253
Patent Number:	8072277
Patent Number:	7141950
Patent Number:	7327114
Patent Number:	7660086
Patent Number:	7809052
Patent Number:	7902933
Patent Number:	8059015
Patent Number:	8482437
Application Number:	13932672
Patent Number:	7855862
Patent Number:	8135880
Patent Number:	8144125
Patent Number:	8493351
Application Number:	13948885
Patent Number:	8111243
Patent Number:	8610686

Property Type	Number
Application Number:	14109571
Patent Number:	8089472
Patent Number:	8537121
Patent Number:	8803813
Patent Number:	8004497
Patent Number:	8174507
Patent Number:	8519973
Application Number:	13975078
Application Number:	13633845
Patent Number:	7876309
Patent Number:	8436824
Patent Number:	8717302
Patent Number:	8040321
Patent Number:	8564252
Patent Number:	7808275
Patent Number:	7598812
Patent Number:	6496033
Patent Number:	6005814
Patent Number:	6118727
Patent Number:	5963499
Patent Number:	6119249
Patent Number:	6028448
Patent Number:	6211696
Patent Number:	6209110
Patent Number:	6181615
Patent Number:	6057696
Patent Number:	6160410
Patent Number:	6181628
Patent Number:	6314040
Patent Number:	6466072
Patent Number:	6198305
Patent Number:	6094095
Patent Number:	6134686
Patent Number:	6191607
Patent Number:	6385265
Patent Number:	6172553
Patent Number:	6166982
Patent Number:	6084479

Property Type	Number
Patent Number:	6262936
Patent Number:	6445645
Patent Number:	6262937
Patent Number:	6385128
Patent Number:	6069839
Patent Number:	6292403
Patent Number:	6222387
Patent Number:	6055177
Patent Number:	6329840
Patent Number:	6034546
Patent Number:	6201409
Patent Number:	6236230
Patent Number:	6172571
Patent Number:	6507932
Patent Number:	6157178
Patent Number:	6204685
Patent Number:	6201408
Patent Number:	7746159
Patent Number:	7870508
Patent Number:	8068097
Patent Number:	7504876
Patent Number:	7746160
Patent Number:	8085085
Patent Number:	8283972
Patent Number:	8587365
Patent Number:	7876133
Patent Number:	8373455
Patent Number:	8599144
Patent Number:	7545694
Patent Number:	8169421
Patent Number:	7679302
Patent Number:	8217609
Patent Number:	7453230
Patent Number:	7659776
Application Number:	11493350
Application Number:	11512042
Patent Number:	7253643
Patent Number:	8159462

Property Type	Number
Patent Number:	8089288
Patent Number:	8120584
Patent Number:	8537119
Application Number:	14029381
Patent Number:	8026703
Patent Number:	7821331
Patent Number:	8089822
Patent Number:	8902172
Patent Number:	7598794
Patent Number:	7884672
Patent Number:	8547114
Application Number:	13049798
Application Number:	13917528
Patent Number:	8217713
Patent Number:	7852144
Patent Number:	8373664
Patent Number:	8610478
Patent Number:	6417693
Patent Number:	6320881
Patent Number:	6175259
Patent Number:	6373306
Patent Number:	6188255
Patent Number:	6388478
Patent Number:	6271702
Patent Number:	6320811
Patent Number:	6237107
Patent Number:	6172542
Patent Number:	6122203
Patent Number:	5986970
Patent Number:	5946255
Patent Number:	6087858
Patent Number:	5978280
Patent Number:	6100739
Patent Number:	6782064
Patent Number:	6122221
Patent Number:	6144580
Patent Number:	6349055
Patent Number:	6526470

Property Type	Number
Patent Number:	6292013
Patent Number:	6140880
Patent Number:	6191660
Patent Number:	6515551
Patent Number:	6753739
Patent Number:	6378008
Patent Number:	6323701
Patent Number:	6215689
Patent Number:	6275117
Patent Number:	6405228
Patent Number:	6100560
Patent Number:	6467073
Patent Number:	6625765
Patent Number:	6181121
Patent Number:	6134181
Patent Number:	6298005
Patent Number:	6320410
Patent Number:	6489805
Patent Number:	5376835
Patent Number:	5335198
Patent Number:	5367206
Patent Number:	5357458
Patent Number:	5530818
Patent Number:	5406517
Patent Number:	5365484
Patent Number:	5349558
Patent Number:	5477499
Patent Number:	5828601
Patent Number:	5376573
Patent Number:	5630099
Patent Number:	5530803
Patent Number:	5470773
Patent Number:	5955874
Patent Number:	5384272
Patent Number:	5541875
Patent Number:	5576991
Patent Number:	5468981
Patent Number:	5574685

Property Type	Number
Patent Number:	5528171
Patent Number:	5485423
Patent Number:	5457336
Patent Number:	5534731
Patent Number:	5550405
Patent Number:	5481494
Patent Number:	5488327
Patent Number:	5656521
Patent Number:	5801076
Patent Number:	5491657
Patent Number:	5482881
Patent Number:	5617310
Patent Number:	5617347
Patent Number:	5594382
Patent Number:	5617357
Patent Number:	5579261
Patent Number:	5581502
Patent Number:	5534455
Patent Number:	5596531
Patent Number:	5671186
Patent Number:	5693566
Patent Number:	5517443
Patent Number:	5679608
Patent Number:	5708588
Patent Number:	5680345
Patent Number:	5661055
Patent Number:	5656513
Patent Number:	5579274
Patent Number:	5598369
Patent Number:	5553018
Patent Number:	5650964
Patent Number:	5546340
Patent Number:	5590076
Patent Number:	5679599
Patent Number:	5552331
Patent Number:	5561620
Patent Number:	5945705
Patent Number:	5565797

Property Type	Number
Patent Number:	5822762
Patent Number:	5608672
Patent Number:	5726920
Patent Number:	5629892
Patent Number:	5642311
Patent Number:	5650966
Patent Number:	5644531
Patent Number:	5789295
Patent Number:	5708387
Patent Number:	5680348
Patent Number:	5981364
Patent Number:	5869385
Patent Number:	5811334
Patent Number:	5739667
Patent Number:	5776811
Patent Number:	5814853
Patent Number:	5818082
Patent Number:	5638326
Patent Number:	5606282
Patent Number:	5629893
Patent Number:	5712815
Patent Number:	5896393
Patent Number:	5870407
Patent Number:	5751633
Patent Number:	5854108
Patent Number:	5793677
Patent Number:	5724284
Patent Number:	5965934
Patent Number:	5652447
Patent Number:	5715194
Patent Number:	5675537
Patent Number:	5939763
Patent Number:	5793249
Patent Number:	5747882
Patent Number:	5763307
Patent Number:	5831901
Patent Number:	6118316
Patent Number:	5774395

Property Type	Number
Patent Number:	5717632
Patent Number:	5850137
Patent Number:	5693972
Patent Number:	5867430
Patent Number:	5973979
Patent Number:	5793257
Patent Number:	5905361
Patent Number:	5801514
Patent Number:	5883527
Patent Number:	5805502
Patent Number:	5821800
Patent Number:	5795627
Patent Number:	5852582
Patent Number:	5870000
Patent Number:	5801579
Patent Number:	5805499
Patent Number:	5933730
Patent Number:	5805013
Patent Number:	5856946
Patent Number:	5889302
Patent Number:	5808444
Patent Number:	5790456
Patent Number:	6163170
Patent Number:	5796651
Patent Number:	5979660
Patent Number:	5950086
Patent Number:	5754475
Patent Number:	6271151
Patent Number:	5963824
Patent Number:	5917366
Patent Number:	5818303
Patent Number:	5844840
Patent Number:	5940735
Patent Number:	5883826
Patent Number:	5883841
Patent Number:	5912489
Patent Number:	5852576
Patent Number:	5889697

Property Type	Number
Patent Number:	5888870
Patent Number:	6114890
Patent Number:	6823435
Patent Number:	6020238
Patent Number:	6025228
Patent Number:	6017786
Patent Number:	5981341
Patent Number:	6001688
Patent Number:	6046085
Patent Number:	5933729
Patent Number:	6008629
Patent Number:	6002160
Patent Number:	5994780
Patent Number:	6072191
Patent Number:	5859796
Patent Number:	6127222
Patent Number:	5907561
Patent Number:	6027998
Patent Number:	6387755
Patent Number:	6103602
Patent Number:	5949718
Patent Number:	6034394
Patent Number:	5973353
Patent Number:	6258669
Patent Number:	6124608
Patent Number:	6185630
Patent Number:	6228746
Patent Number:	5994239
Patent Number:	6281078
Patent Number:	6667511
Patent Number:	6063662
Patent Number:	6114230
Patent Number:	6140246
Patent Number:	5940709
Patent Number:	6025240
Patent Number:	6005804
Patent Number:	6080682
Patent Number:	6015736

Property Type	Number
Patent Number:	6002151
Patent Number:	6329257
Patent Number:	6166439
Patent Number:	5972749
Patent Number:	6235632
Patent Number:	6188101
Patent Number:	6492675
Patent Number:	6001689
Patent Number:	6031425
Patent Number:	5914903
Patent Number:	5888867
Patent Number:	6137153
Patent Number:	5923063
Patent Number:	6100593
Patent Number:	6091138
Patent Number:	6187092
Patent Number:	6043120
Patent Number:	6110833
Patent Number:	6030868
Patent Number:	6153487
Patent Number:	6248629
Patent Number:	5981339
Patent Number:	6262469
Patent Number:	6285054
Patent Number:	6225659
Patent Number:	6147377
Patent Number:	5990515
Patent Number:	5999452
Patent Number:	6535960
Patent Number:	6211074
Patent Number:	6159794
Patent Number:	6074956
Patent Number:	5990742
Patent Number:	5901090
Patent Number:	6157572
Patent Number:	5875130
Patent Number:	6034395
Patent Number:	5948703

Property Type	Number
Patent Number:	6063666
Patent Number:	5930172
Patent Number:	5973958
Patent Number:	6369421
Patent Number:	6757349
Patent Number:	6091631
Patent Number:	6159795
Patent Number:	6346737
Patent Number:	6118147
Patent Number:	6159860
Patent Number:	5977601
Patent Number:	6110779
Patent Number:	6174819
Patent Number:	6075477
Patent Number:	5909396
Patent Number:	6100754
Patent Number:	6417539
Patent Number:	6060914
Patent Number:	6011721
Patent Number:	6052310
Patent Number:	6107169
Patent Number:	5972751
Patent Number:	6124640
Patent Number:	6133619
Patent Number:	6146795
Patent Number:	6060741
Patent Number:	6011289
Patent Number:	6001713
Patent Number:	6033955
Patent Number:	5995415
Patent Number:	6005803
Patent Number:	6275894
Patent Number:	6507068
Patent Number:	5963474
Patent Number:	5991202
Patent Number:	6242773
Patent Number:	6251717
Patent Number:	6205059

Property Type	Number
Patent Number:	6163049
Patent Number:	6048766
Patent Number:	5978267
Patent Number:	6211020
Patent Number:	6177322
Patent Number:	6369433
Patent Number:	6074917
Patent Number:	6218245
Patent Number:	6080639
Patent Number:	6238975
Patent Number:	6380029
Patent Number:	6249169
Patent Number:	5999448
Patent Number:	6081455
Patent Number:	6321280
Patent Number:	6515328
Patent Number:	5982661
Patent Number:	6246118
Patent Number:	6667552
Patent Number:	6245689
Patent Number:	6338001
Patent Number:	6286070
Patent Number:	6221768
Patent Number:	6355522
Patent Number:	6184084
Patent Number:	6309927
Patent Number:	6895496
Patent Number:	6066873
Patent Number:	6476954
Patent Number:	6143608
Patent Number:	6372651
Patent Number:	6188609
Patent Number:	6366767
Patent Number:	6228782
Patent Number:	6438726
Patent Number:	6381550
Patent Number:	6043122
Patent Number:	6160317

Property Type	Number
Patent Number:	6147923
Patent Number:	6232630
Patent Number:	6204159
Patent Number:	6235586
Patent Number:	6240017
Patent Number:	6211058
Patent Number:	6433383
Patent Number:	6530068
Patent Number:	6300658
Patent Number:	6323047
Patent Number:	6188606
Patent Number:	6218689
Patent Number:	6166951
Patent Number:	6172909
Patent Number:	6383939
Patent Number:	6248627
Patent Number:	6808996
Patent Number:	6252276
Patent Number:	6088287
Patent Number:	6242790
Patent Number:	6411069
Patent Number:	6418054
Patent Number:	6141244
Patent Number:	6141255
Patent Number:	6323516
Patent Number:	6287917
Patent Number:	6380033
Patent Number:	6284602
Patent Number:	6172914
Patent Number:	6049479
Patent Number:	6369416
Patent Number:	6342415
Patent Number:	6266275
Patent Number:	6452441
Patent Number:	6177316
Patent Number:	6235584
Patent Number:	6122198
Patent Number:	6506683

Property Type	Number
Patent Number:	6291296
Patent Number:	6136649
Patent Number:	6275415
Patent Number:	6197635
Patent Number:	6235587
Patent Number:	6200857
Patent Number:	6046932
Patent Number:	6118694
Patent Number:	6144606
Patent Number:	6147906
Patent Number:	6185130
Patent Number:	6255165
Patent Number:	6662262
Patent Number:	6125055
Patent Number:	6201753
Patent Number:	6118702
Patent Number:	6285585
Patent Number:	6331950
Patent Number:	6163478
Patent Number:	6327181
Patent Number:	6111787
Patent Number:	6185128
Patent Number:	6359808
Patent Number:	6259633
Patent Number:	6118698
Application Number:	09422282
Patent Number:	6248635
Patent Number:	6218227
Patent Number:	6207502
Patent Number:	6326268
Patent Number:	6248628
Patent Number:	6265268
Patent Number:	6297143
Patent Number:	6516378
Patent Number:	6117730
Patent Number:	6242305
Patent Number:	6448609
Patent Number:	6399446

Property Type	Number
Patent Number:	6147907
Patent Number:	6867097
Patent Number:	6329273
Patent Number:	6436766
Patent Number:	6180454
Patent Number:	6441418
Patent Number:	6163481
Patent Number:	6319775
Patent Number:	6406960
Patent Number:	6458677
Patent Number:	6232632
Patent Number:	6309949
Patent Number:	6608612
Patent Number:	6236596
Patent Number:	6181610
Patent Number:	6225161
Patent Number:	6598176
Patent Number:	6274433
Patent Number:	6238978
Patent Number:	6518072
Patent Number:	6410956
Patent Number:	6638358
Patent Number:	6225646
Patent Number:	6376308
Patent Number:	6168993
Patent Number:	6465835
Patent Number:	6236603
Patent Number:	6212108
Patent Number:	6160740
Patent Number:	6178117
Patent Number:	6137727
Patent Number:	6509604
Patent Number:	6812521
Patent Number:	6329687
Patent Number:	6787840
Patent Number:	6359307
Patent Number:	6294430
Patent Number:	6240016

Property Type	Number
Patent Number:	6198664
Patent Number:	6285588
Patent Number:	6160750
Patent Number:	6747624
Patent Number:	6243316
Patent Number:	6215705
Patent Number:	6348379
Patent Number:	6420752
Patent Number:	6682978
Patent Number:	6266281
Patent Number:	6215702
Patent Number:	6243300
Patent Number:	6455888
Patent Number:	6285583
Patent Number:	6410443
Patent Number:	6343033
Patent Number:	6225849
Patent Number:	6205055
Patent Number:	6376877
Patent Number:	6448606
Patent Number:	6246611
Patent Number:	6207978
Patent Number:	6218810
Patent Number:	6429479
Patent Number:	6285594
Patent Number:	6622201
Patent Number:	6240040
Patent Number:	7103132
Patent Number:	6316293
Patent Number:	6486506
Patent Number:	6351017
Patent Number:	6635943
Patent Number:	6368916
Patent Number:	6432618
Patent Number:	6346466
Patent Number:	6529083
Patent Number:	6456170
Patent Number:	6306706

Property Type	Number
Patent Number:	6448594
Patent Number:	8183619
Patent Number:	6530997
Patent Number:	6333675
Patent Number:	6232635
Patent Number:	6208556
Patent Number:	6430087
Patent Number:	6269026
Patent Number:	RE42114
Patent Number:	6534411
Patent Number:	6350627
Patent Number:	6194871
Patent Number:	6259645
Patent Number:	6222768
Patent Number:	6201737
Patent Number:	6232244
Patent Number:	6610580
Patent Number:	6445051
Patent Number:	6306758
Patent Number:	6294460
Patent Number:	6348406
Patent Number:	6376389
Patent Number:	6380067
Patent Number:	7964905
Patent Number:	6359824
Patent Number:	6208561
Patent Number:	6512264
Patent Number:	6306777
Patent Number:	6351420
Patent Number:	6261904
Patent Number:	6355514
Patent Number:	6212098
Patent Number:	6272043
Patent Number:	6798002
Patent Number:	6284600
Patent Number:	6205074
Patent Number:	6452225
Patent Number:	6344393

Property Type	Number
Patent Number:	6410388
Patent Number:	6486029
Patent Number:	6242306
Patent Number:	6362052
Patent Number:	6376341
Patent Number:	6403420
Patent Number:	6458656
Patent Number:	6764904
Patent Number:	6448608
Patent Number:	6303437
Patent Number:	6495853
Patent Number:	6229735
Patent Number:	6713842
Patent Number:	6475868
Patent Number:	6327194
Patent Number:	6377488
Patent Number:	6395654
Patent Number:	6362051
Patent Number:	6346467
Patent Number:	6417082
Patent Number:	6436850
Patent Number:	6429108
Patent Number:	6298007
Patent Number:	6587982
Patent Number:	6622274
Patent Number:	6381179
Patent Number:	6356482
Patent Number:	6266284
Patent Number:	6275421
Patent Number:	6654848
Patent Number:	6353566
Patent Number:	6285627
Patent Number:	6348356
Patent Number:	6732308
Patent Number:	6370065
Patent Number:	6466065
Patent Number:	6506640
Patent Number:	6324108

Property Type	Number
Patent Number:	6438041
Patent Number:	6391730
Patent Number:	6320359
Patent Number:	6400633
Patent Number:	6288951
Patent Number:	6813735
Patent Number:	6310805
Patent Number:	6400638
Patent Number:	6501681
Patent Number:	6271087
Patent Number:	6482699
Patent Number:	6366501
Patent Number:	6349062
Patent Number:	6537881
Patent Number:	6373742
Patent Number:	6347052
Patent Number:	6537866
Patent Number:	6252803
Patent Number:	6452840
Patent Number:	6233175
Patent Number:	6363014
Patent Number:	6269023
Patent Number:	6292425
Patent Number:	6331952
Patent Number:	6331953
Patent Number:	6490205
Patent Number:	6438031
Patent Number:	6515344
Patent Number:	6507527
Patent Number:	6500768
Patent Number:	6653189
Patent Number:	6524914
Patent Number:	6440789
Patent Number:	6452449
Patent Number:	6277690
Patent Number:	6693009
Patent Number:	6306707
Patent Number:	6331951

Property Type	Number
Patent Number:	6593606
Patent Number:	6472898
Patent Number:	6538270
Patent Number:	6417081
Patent Number:	6324099
Patent Number:	6465306
Patent Number:	6468865
Patent Number:	6622230
Patent Number:	6413820
Patent Number:	6969654
Patent Number:	7012008
Patent Number:	6463003
Patent Number:	6785856
Patent Number:	6864869
Patent Number:	6864873
Patent Number:	6684353
Patent Number:	6468861
Patent Number:	6596591
Patent Number:	6597162
Patent Number:	6449190
Patent Number:	6826192
Patent Number:	6459625
Patent Number:	6337563
Patent Number:	6346795
Patent Number:	6445030
Patent Number:	6410949
Patent Number:	6275424
Patent Number:	6727195
Patent Number:	7424383
Patent Number:	6418053
Patent Number:	6496410
Patent Number:	6466483
Patent Number:	6424566
Patent Number:	6671207
Patent Number:	6462686
Patent Number:	6647475
Patent Number:	6614683
Patent Number:	6538923

Property Type	Number
Patent Number:	6344994
Patent Number:	6442074
Patent Number:	6307784
Patent Number:	6493261
Patent Number:	6456533
Patent Number:	6480069
Patent Number:	6528390
Patent Number:	6306713
Patent Number:	6534363
Patent Number:	7217652
Patent Number:	6627526
Patent Number:	6515525
Patent Number:	6518845
Patent Number:	6713809
Patent Number:	6376309
Patent Number:	6373225
Patent Number:	6462609
Patent Number:	6376312
Patent Number:	6480420
Patent Number:	6459628
Patent Number:	6784866
Patent Number:	6337246
Patent Number:	6838869
Patent Number:	6493266
Patent Number:	6621761
Patent Number:	6396749
Patent Number:	6680507
Patent Number:	6455373
Patent Number:	6966016
Patent Number:	6400608
Patent Number:	6514822
Patent Number:	6509229
Patent Number:	6438037
Patent Number:	6510085
Patent Number:	6515902
Patent Number:	6381163
Patent Number:	6617179
Patent Number:	6509202

Property Type	Number
Patent Number:	6436778
Patent Number:	6618290
Patent Number:	6459618
Patent Number:	6399984
Patent Number:	6456531
Patent Number:	6456536
Patent Number:	6449188
Patent Number:	6370061
Patent Number:	6465303
Patent Number:	6512701
Patent Number:	6900085
Patent Number:	6424570
Patent Number:	6633949
Patent Number:	6525368
Patent Number:	6436768
Patent Number:	6487121
Patent Number:	6519182
Patent Number:	6933554
Patent Number:	6589804
Patent Number:	6665777
Patent Number:	6782440
Patent Number:	6715059
Patent Number:	6675277
Patent Number:	6535424
Patent Number:	6892298
Patent Number:	6525959
Patent Number:	6888157
Patent Number:	6456141
Patent Number:	6472327
Patent Number:	6709927
Patent Number:	6525969
Patent Number:	6353864
Patent Number:	7152177
Patent Number:	6979619
Patent Number:	6922794
Patent Number:	6492677
Patent Number:	6440797
Patent Number:	6645801

Property Type	Number
Patent Number:	7317690
Patent Number:	6469939
Patent Number:	6509232
Patent Number:	6630384
Patent Number:	6727771
Patent Number:	6664191
Patent Number:	6642586
Patent Number:	6788113
Patent Number:	6510082
Patent Number:	6620705
Patent Number:	6858496
Patent Number:	6525966
Patent Number:	6700201
Patent Number:	6654283
Patent Number:	7002381
Patent Number:	6731130
Patent Number:	6723605
Patent Number:	6828199
Patent Number:	6500713
Patent Number:	6653190
Patent Number:	6639271
Patent Number:	6670669
Patent Number:	6740926
Patent Number:	6974995
Patent Number:	6674138
Patent Number:	6674657
Patent Number:	6496414
Patent Number:	6514830
Patent Number:	6809033
Patent Number:	6515903
Patent Number:	6529412
Patent Number:	7057949
Patent Number:	6770938
Patent Number:	6532175
Patent Number:	6852594
Patent Number:	6944794
Patent Number:	6611473
Patent Number:	6614686

Property Type	Number
Patent Number:	6781412
Patent Number:	6653871
Patent Number:	7342946
Patent Number:	7015134
Patent Number:	6461905
Patent Number:	6731099
Patent Number:	6654285
Patent Number:	6750520
Patent Number:	6750103
Patent Number:	6611132
Patent Number:	6674277
Patent Number:	7136956
Patent Number:	6731536
Patent Number:	6737703
Patent Number:	6768683
Patent Number:	6646914
Patent Number:	6781884
Patent Number:	6706576
Patent Number:	6642573
Patent Number:	6639844
Patent Number:	6706595
Patent Number:	6620717
Patent Number:	6828764
Patent Number:	6586990
Patent Number:	6590260
Patent Number:	6510090
Patent Number:	6903609
Patent Number:	6803265
Patent Number:	6617215
Patent Number:	6479348
Patent Number:	6475847
Patent Number:	6593590
Patent Number:	6756806
Patent Number:	6734028
Patent Number:	6784682
Patent Number:	6750066
Patent Number:	6762454
Patent Number:	8673716

Property Type	Number
Patent Number:	6700815
Patent Number:	6901010
Patent Number:	6690602
Patent Number:	6806165
Patent Number:	6606273
Patent Number:	6822259
Patent Number:	6716710
Patent Number:	6720133
Patent Number:	6642148
Patent Number:	6825083
Patent Number:	6764920
Patent Number:	6689666
Patent Number:	6670241
Patent Number:	6882133
Patent Number:	6621742
Patent Number:	6816423
Patent Number:	6799256
Patent Number:	6594181
Patent Number:	6693321
Patent Number:	6990623
Patent Number:	6610577
Patent Number:	6808992
Patent Number:	6806155
Patent Number:	6605517
Patent Number:	6475863
Patent Number:	6653191
Patent Number:	7208382
Patent Number:	6596586
Patent Number:	6602776
Patent Number:	6680509
Patent Number:	6734080
Patent Number:	6642106
Patent Number:	6735127
Patent Number:	6735123
Patent Number:	6607925
Patent Number:	6590811
Patent Number:	6670691
Patent Number:	6777957

Property Type	Number
Patent Number:	6617639
Patent Number:	6646462
Patent Number:	6784061
Patent Number:	6589841
Patent Number:	6538834
Application Number:	10189643
Patent Number:	6627945
Patent Number:	7052969
Patent Number:	6770523
Patent Number:	6859748
Patent Number:	6813189
Patent Number:	6750157
Patent Number:	6665214
Patent Number:	7010736
Patent Number:	7028240
Patent Number:	6707718
Patent Number:	6631086
Patent Number:	7098878
Patent Number:	6856552
Patent Number:	6891752
Patent Number:	7012298
Patent Number:	6714063
Patent Number:	6643185
Patent Number:	6809402
Patent Number:	6696331
Patent Number:	6730564
Patent Number:	6864106
Patent Number:	6753570
Patent Number:	6759295
Patent Number:	6884638
Patent Number:	6771543
Patent Number:	6707078
Patent Number:	6828623
Patent Number:	6744668
Patent Number:	6690236
Patent Number:	6765271
Patent Number:	6716698
Patent Number:	6773988

Property Type	Number
Patent Number:	7142454
Patent Number:	6728160
Patent Number:	6744666
Patent Number:	6627973
Patent Number:	6660588
Patent Number:	6797565
Patent Number:	6754106
Patent Number:	6897533
Patent Number:	6771093
Patent Number:	6815292
Patent Number:	6867063
Patent Number:	6859393
Patent Number:	6833297
Patent Number:	7670936
Patent Number:	6630383
Patent Number:	7439141
Patent Number:	6867623
Patent Number:	6781417
Patent Number:	6754109
Patent Number:	6795357
Patent Number:	6994939
Patent Number:	6836398
Patent Number:	6867119
Patent Number:	6900488
Patent Number:	6753247
Patent Number:	6819615
Patent Number:	6847047
Patent Number:	6870183
Patent Number:	6858450
Patent Number:	6716702
Patent Number:	6709924
Patent Number:	6605511
Patent Number:	6946905
Patent Number:	6768677
Patent Number:	7102928
Patent Number:	7076703
Patent Number:	7049188
Patent Number:	6897110

Property Type	Number
Patent Number:	6744675
Patent Number:	6798068
Patent Number:	6628545
Patent Number:	6906959
Patent Number:	6991987
Patent Number:	6743677
Patent Number:	7074677
Patent Number:	6795342
Patent Number:	6788583
Patent Number:	6803275
Patent Number:	6731542
Patent Number:	6737701
Patent Number:	6773954
Patent Number:	6717850
Patent Number:	6770905
Patent Number:	6746971
Patent Number:	7220985
Patent Number:	6686263
Patent Number:	6828607
Patent Number:	6735124
Patent Number:	7015135
Patent Number:	7342436
Patent Number:	7032193
Patent Number:	6765420
Patent Number:	6905971
Patent Number:	7180512
Patent Number:	6751146
Patent Number:	6808945
Patent Number:	7057229
Patent Number:	6885590
Patent Number:	6797650
Patent Number:	7151292
Patent Number:	6894925
Patent Number:	6696821
Patent Number:	6747900
Patent Number:	6968172
Patent Number:	6690225
Patent Number:	6643177

Property Type	Number
Patent Number:	7070911
Patent Number:	6768160
Patent Number:	7064743
Patent Number:	6771545
Patent Number:	7007134
Patent Number:	6639849
Patent Number:	6765828
Patent Number:	6735114
Patent Number:	6888763
Patent Number:	7033957
Patent Number:	6790752
Patent Number:	6774432
Patent Number:	6953752
Patent Number:	6723638
Patent Number:	6949433
Patent Number:	6778448
Patent Number:	6768679
Patent Number:	6670227
Patent Number:	6767791
Patent Number:	7118967
Patent Number:	6879521
Patent Number:	6870778
Patent Number:	6872643
Patent Number:	6894473
Patent Number:	6781885
Patent Number:	6794764
Patent Number:	6744105
Patent Number:	6780708
Patent Number:	RE43911
Patent Number:	7073104
Patent Number:	6765827
Patent Number:	6656763
Patent Number:	7028237
Patent Number:	6912160
Patent Number:	7026687
Patent Number:	6744674
Patent Number:	6936515
Patent Number:	6819612

Property Type	Number
Patent Number:	6914824
Patent Number:	6667212
Patent Number:	8049539
Patent Number:	6970007
Patent Number:	6825060
Patent Number:	7197657
Patent Number:	6798275
Patent Number:	7078314
Patent Number:	6897635
Patent Number:	6956768
Patent Number:	6788152
Patent Number:	6741105
Patent Number:	6806782
Patent Number:	6822909
Patent Number:	6778442
Patent Number:	6768673
Patent Number:	6775187
Patent Number:	7215312
Patent Number:	6861696
Patent Number:	6773990
Patent Number:	6740605
Patent Number:	7163860
Patent Number:	6754105
Patent Number:	6868014
Patent Number:	6944057
Patent Number:	6791880
Patent Number:	7232729
Patent Number:	6878589
Patent Number:	6960783
Patent Number:	6940120
Patent Number:	7001814
Patent Number:	6853257
Patent Number:	6876185
Patent Number:	6977389
Patent Number:	6917068
Patent Number:	6839279
Patent Number:	6862221
Patent Number:	6963104

Property Type	Number
Patent Number:	6894342
Patent Number:	6765254
Patent Number:	6833581
Patent Number:	6855608
Patent Number:	7324374
Patent Number:	6957297
Patent Number:	8530977
Patent Number:	6975540
Patent Number:	7196372
Patent Number:	6787458
Patent Number:	6803267
Patent Number:	6939766
Patent Number:	7023046
Patent Number:	7060554
Patent Number:	6937518
Patent Number:	7078749
Patent Number:	6897518
Patent Number:	6939770
Patent Number:	6835662
Patent Number:	7176663
Patent Number:	6842063
Patent Number:	6861307
Patent Number:	6934194
Patent Number:	7012838
Patent Number:	7061809
Patent Number:	6958271
Patent Number:	6990642
Patent Number:	7060564
Patent Number:	6987048
Patent Number:	6897476
Patent Number:	7067381
Patent Number:	7116154
Application Number:	10636846
Patent Number:	7098147
Patent Number:	6803272
Patent Number:	6943616
Patent Number:	7253691
Patent Number:	6927133

Property Type	Number
Patent Number:	6970368
Patent Number:	6969663
Patent Number:	6865133
Patent Number:	6900124
Patent Number:	6992370
Patent Number:	6919247
Patent Number:	6853596
Patent Number:	6912163
Patent Number:	7323726
Patent Number:	7414281
Patent Number:	7217964
Patent Number:	6812514
Patent Number:	6943401
Patent Number:	7026230
Patent Number:	6873022
Patent Number:	6862217
Patent Number:	7045990
Patent Number:	6884681
Patent Number:	6936545
Patent Number:	6980473
Patent Number:	6852586
Patent Number:	6973003
Patent Number:	6967873
Patent Number:	6898124
Patent Number:	6963506
Patent Number:	6958511
Patent Number:	6891408
Patent Number:	6963108
Patent Number:	6965143
Patent Number:	6903407
Patent Number:	6911704
Patent Number:	6908816
Patent Number:	7015504
Patent Number:	6955939
Patent Number:	6917191
Patent Number:	6869844
Patent Number:	6970806
Patent Number:	7189659

Property Type	Number
Patent Number:	6940338
Patent Number:	6933219
Patent Number:	6894932
Patent Number:	6950343
Patent Number:	6989319
Patent Number:	6950344
Patent Number:	6933558
Patent Number:	6982188
Patent Number:	7012013
Patent Number:	6841841
Patent Number:	6962849
Patent Number:	6949481
Patent Number:	6955965
Patent Number:	7288809
Patent Number:	6975148
Patent Number:	6970381
Patent Number:	6872609
Patent Number:	6958272
Patent Number:	7023740
Patent Number:	7011998
Patent Number:	7211473
Patent Number:	7019366
Patent Number:	6825526
Patent Number:	7026843
Patent Number:	6819591
Patent Number:	7301193
Patent Number:	6987297
Patent Number:	6958512
Patent Number:	7018868
Patent Number:	6989563
Patent Number:	6927145
Patent Number:	7454650
Patent Number:	7254692
Patent Number:	7071675
Patent Number:	7026211
Patent Number:	6998677
Patent Number:	7012454
Patent Number:	7265014

Property Type	Number
Patent Number:	7019501
Patent Number:	7034514
Patent Number:	7081792
Patent Number:	7067377
Patent Number:	7499309
Patent Number:	7608855
Patent Number:	7018896
Patent Number:	7259039
Patent Number:	7067388
Patent Number:	6927129
Patent Number:	7632749
Patent Number:	7009271
Patent Number:	7109555
Patent Number:	7279735
Patent Number:	7283398
Patent Number:	7029975
Patent Number:	7142455
Patent Number:	7160773
Patent Number:	6963106
Patent Number:	7120063
Patent Number:	6974989
Patent Number:	6989320
Patent Number:	6885250
Patent Number:	6979837
Patent Number:	7500021
Patent Number:	RE41915
Patent Number:	7151027
Patent Number:	7009887
Patent Number:	7091088
Patent Number:	7226839
Patent Number:	7176113
Patent Number:	6834012
Patent Number:	6934190
Patent Number:	7053446
Patent Number:	7251158
Patent Number:	7098709
Patent Number:	7084658
Patent Number:	7098546

Property Type	Number
Patent Number:	6995437
Patent Number:	7068116
Patent Number:	6995423
Patent Number:	6943370
Patent Number:	7157732
Patent Number:	6984563
Patent Number:	7072781
Patent Number:	6893895
Patent Number:	8044387
Patent Number:	7242102
Patent Number:	7020022
Patent Number:	6969886
Patent Number:	7423312
Patent Number:	7079423
Patent Number:	6885221
Patent Number:	7403582
Patent Number:	7307338
Patent Number:	7092297
Patent Number:	7063991
Patent Number:	7042767
Patent Number:	7075159
Patent Number:	7170130
Patent Number:	7507661
Patent Number:	7157335
Patent Number:	6977195
Patent Number:	7199394
Patent Number:	7289353
Patent Number:	7122853
Patent Number:	8691647
Patent Number:	7151293
Patent Number:	7460097
Patent Number:	7103706
Patent Number:	7572727
Patent Number:	7361587
Patent Number:	7301413
Patent Number:	7129133
Patent Number:	7135396
Patent Number:	7148144

Property Type	Number
Patent Number:	7119550
Patent Number:	7079424
Patent Number:	7038948
Patent Number:	7415646
Patent Number:	7149830
Patent Number:	7176740
Patent Number:	7012411
Patent Number:	6878961
Patent Number:	7068204
Patent Number:	7701178
Patent Number:	7115440
Patent Number:	7196379
Patent Number:	7206914
Patent Number:	7067349
Patent Number:	7018922
Patent Number:	7250745
Patent Number:	7135895
Patent Number:	7599228
Patent Number:	7402868
Patent Number:	7221599
Patent Number:	7374654
Patent Number:	7141482
Patent Number:	7319623
Patent Number:	7151028
Patent Number:	7262587
Patent Number:	7119555
Patent Number:	7020021
Patent Number:	7038950
Patent Number:	7443710
Patent Number:	7199416
Patent Number:	7084037
Patent Number:	7220642
Patent Number:	7035141
Patent Number:	7001807
Patent Number:	7141844
Patent Number:	7288487
Patent Number:	7391064
Patent Number:	7272060

Property Type	Number
Patent Number:	7122465
Patent Number:	7400013
Patent Number:	7672803
Patent Number:	7365389
Patent Number:	8319266
Patent Number:	7071538
Patent Number:	7450416
Patent Number:	7379317
Patent Number:	7208757
Patent Number:	7397696
Patent Number:	7312641
Patent Number:	7793085
Patent Number:	6965530
Patent Number:	8125018
Patent Number:	7105374
Patent Number:	7273766
Patent Number:	7232750
Patent Number:	7130210
Patent Number:	7580963
Patent Number:	7294573
Patent Number:	8230133
Patent Number:	7613956
Patent Number:	7284167
Patent Number:	7388438
Patent Number:	7091518
Patent Number:	7310507
Patent Number:	7141838
Patent Number:	7622760
Patent Number:	7863128
Patent Number:	7378682
Patent Number:	7692236
Patent Number:	7046043
Patent Number:	7068555
Patent Number:	7061816
Patent Number:	7320914
Patent Number:	7167398
Patent Number:	7238571
Patent Number:	7405602

Property Type	Number
Patent Number:	7154807
Patent Number:	7253046
Patent Number:	7309650
Patent Number:	7224606
Patent Number:	8012673
Patent Number:	7344912
Patent Number:	7295039
Patent Number:	7737019
Patent Number:	7126862
Patent Number:	7092226
Patent Number:	8274073
Patent Number:	7006936
Patent Number:	7471099
Patent Number:	7492001
Patent Number:	7145824
Patent Number:	7579631
Patent Number:	7280404
Patent Number:	7099204
Patent Number:	7307321
Patent Number:	7830015
Patent Number:	7158417
Patent Number:	8022468
Patent Number:	7927723
Patent Number:	7113431
Patent Number:	8098521
Patent Number:	7307002
Patent Number:	7042299
Patent Number:	7344913
Patent Number:	7341956
Patent Number:	7312495
Patent Number:	7323418
Patent Number:	7113041
Patent Number:	8367493
Patent Number:	7217660
Application Number:	11109965
Patent Number:	7352620
Patent Number:	7354826
Patent Number:	7414277

Property Type	Number
Patent Number:	7232724
Patent Number:	7238569
Patent Number:	7303964
Patent Number:	7335594
Patent Number:	7378310
Patent Number:	7163839
Patent Number:	7084458
Patent Number:	7224152
Patent Number:	7122995
Patent Number:	7373531
Patent Number:	8586413
Patent Number:	7372740
Patent Number:	7206241
Patent Number:	7113442
Patent Number:	7221587
Patent Number:	7285848
Patent Number:	7224602
Patent Number:	7285499
Patent Number:	7307894
Patent Number:	7450434
Patent Number:	7476604
Patent Number:	8503501
Patent Number:	7720138
Patent Number:	7352163
Application Number:	11133966
Patent Number:	7158442
Patent Number:	7256141
Patent Number:	7327186
Patent Number:	7786003
Patent Number:	7259983
Patent Number:	7482882
Patent Number:	7161337
Patent Number:	7262095
Patent Number:	7624205
Patent Number:	7269050
Application Number:	11147059
Patent Number:	7220643
Patent Number:	7300886

Property Type	Number
Patent Number:	7939440
Patent Number:	7309893
Patent Number:	8400841
Patent Number:	7339226
Patent Number:	7190630
Patent Number:	7488657
Patent Number:	7286388
Patent Number:	7206232
Patent Number:	8148770
Patent Number:	7289351
Patent Number:	7450460
Patent Number:	7908453
Patent Number:	7978750
Patent Number:	7361586
Patent Number:	7281180
Patent Number:	7227768
Patent Number:	7269067
Patent Number:	7108535
Patent Number:	7358946
Patent Number:	7345536
Patent Number:	7236843
Patent Number:	7876077
Patent Number:	7985687
Patent Number:	7558904
Patent Number:	8802537
Patent Number:	8133801
Patent Number:	7706183
Patent Number:	7490192
Patent Number:	7170796
Patent Number:	7842618
Patent Number:	7221594
Patent Number:	7221595
Patent Number:	7227778
Patent Number:	7415568
Patent Number:	7285827
Patent Number:	7053445
Patent Number:	7297592
Patent Number:	7446369

Property Type	Number
Patent Number:	7307027
Patent Number:	7355481
Patent Number:	7372760
Patent Number:	7678674
Patent Number:	7307878
Patent Number:	7489029
Application Number:	11215184
Patent Number:	7286219
Patent Number:	7280414
Patent Number:	7266019
Patent Number:	7301412
Patent Number:	7095260
Patent Number:	7253679
Patent Number:	7582893
Patent Number:	7462903
Patent Number:	7263007
Patent Number:	7307280
Patent Number:	7633129
Patent Number:	7307893
Patent Number:	7433228
Patent Number:	7443732
Patent Number:	8358543
Patent Number:	7196938
Patent Number:	7957204
Patent Number:	7479427
Patent Number:	7813459
Patent Number:	7273775
Patent Number:	7163862
Patent Number:	7415318
Patent Number:	7132332
Patent Number:	7260014
Patent Number:	7465956
Patent Number:	7443746
Patent Number:	7432178
Patent Number:	7888269
Patent Number:	7632706
Patent Number:	7465644
Patent Number:	7120050

Property Type	Number
Patent Number:	7236047
Patent Number:	7910974
Patent Number:	7286407
Patent Number:	7260019
Patent Number:	7244660
Patent Number:	7215165
Patent Number:	7462907
Patent Number:	7199745
Patent Number:	8803216
Patent Number:	7242170
Patent Number:	7994047
Patent Number:	7227780
Patent Number:	7307879
Patent Number:	7651826
Patent Number:	7736953
Patent Number:	7518437
Patent Number:	7434079
Patent Number:	7733995
Patent Number:	7266015
Patent Number:	7276944
Patent Number:	7321511
Patent Number:	7239548
Application Number:	11317083
Patent Number:	7239574
Patent Number:	7782144
Patent Number:	7675107
Patent Number:	7423915
Patent Number:	8912014
Patent Number:	7199653
Patent Number:	7635994
Patent Number:	8901637
Patent Number:	7696616
Patent Number:	7440333
Patent Number:	7433219
Application Number:	11341932
Patent Number:	7414305
Patent Number:	7239576
Patent Number:	7279870

Property Type	Number
Patent Number:	7274592
Patent Number:	7239553
Patent Number:	7515159
Patent Number:	8237210
Patent Number:	8572592
Patent Number:	8089110
Patent Number:	7423415
Patent Number:	7470614
Patent Number:	7534732
Patent Number:	7227784
Patent Number:	7466605
Patent Number:	7394125
Patent Number:	7968404
Patent Number:	7323744
Patent Number:	7573091
Patent Number:	7352638
Patent Number:	7298117
Patent Number:	7279990
Application Number:	11363792
Patent Number:	7233273
Patent Number:	7453116
Patent Number:	7268448
Patent Number:	7609039
Patent Number:	7381620
Patent Number:	7498222
Patent Number:	7193401
Patent Number:	7321515
Patent Number:	7859026
Patent Number:	7816203
Patent Number:	7462529
Patent Number:	7358191
Patent Number:	8039391
Patent Number:	7734896
Patent Number:	7595621
Patent Number:	7489175
Patent Number:	7321513
Patent Number:	8445972
Patent Number:	7489560

Property Type	Number
Patent Number:	7630253
Patent Number:	7336107
Patent Number:	7394702
Patent Number:	7671872
Patent Number:	7884030
Patent Number:	7915123
Patent Number:	7432156
Patent Number:	7696038
Patent Number:	7692253
Patent Number:	7495951
Patent Number:	7679150
Patent Number:	7626227
Patent Number:	7825457
Patent Number:	7645693
Patent Number:	7639768
Patent Number:	7339222
Patent Number:	7538383
Patent Number:	7416940
Patent Number:	8014199
Patent Number:	7345916
Patent Number:	7355904
Application Number:	11423649
Patent Number:	7378836
Patent Number:	8093646
Patent Number:	7456623
Patent Number:	7663923
Patent Number:	7729896
Patent Number:	7622067
Application Number:	11441771
Patent Number:	7783693
Patent Number:	7449926
Patent Number:	7376033
Patent Number:	7274602
Patent Number:	7943982
Patent Number:	7459960
Patent Number:	7518390
Patent Number:	7719136
Application Number:	11446611

Property Type	Number
Patent Number:	7545054
Patent Number:	7420404
Patent Number:	7663356
Patent Number:	7336124
Patent Number:	7554784
Patent Number:	7342443
Patent Number:	8587049
Patent Number:	7675104
Patent Number:	8809936
Application Number:	11461998
Application Number:	11462009
Patent Number:	7777218
Patent Number:	7561457
Patent Number:	8119477
Patent Number:	8156272
Patent Number:	7443712
Patent Number:	7880218
Patent Number:	7596032
Patent Number:	8076753
Patent Number:	8008778
Patent Number:	7436715
Patent Number:	8222147
Patent Number:	7358778
Patent Number:	7580020
Patent Number:	7456657
Patent Number:	7724071
Patent Number:	7915663
Patent Number:	7525364
Patent Number:	7512873
Patent Number:	7315158
Patent Number:	7385844
Patent Number:	8183622
Patent Number:	7606085
Application Number:	11501870
Patent Number:	7525853
Patent Number:	7505328
Patent Number:	8395959
Patent Number:	7706197

Property Type	Number
Patent Number:	7573970
Patent Number:	7215577
Patent Number:	7911003
Patent Number:	7663345
Patent Number:	7679214
Patent Number:	7589371
Patent Number:	7573743
Patent Number:	7781909
Patent Number:	7359251
Patent Number:	7250773
Patent Number:	8630511
Patent Number:	8232175
Application Number:	11521205
Patent Number:	7705483
Patent Number:	7675267
Patent Number:	7881142
Application Number:	11529805
Patent Number:	7632689
Patent Number:	7368347
Patent Number:	7382650
Patent Number:	8143661
Patent Number:	7683473
Patent Number:	8099540
Patent Number:	7558907
Patent Number:	8508047
Patent Number:	8564041
Patent Number:	7671403
Patent Number:	7646624
Patent Number:	8026169
Patent Number:	7501677
Patent Number:	7857505
Patent Number:	7245178
Patent Number:	8415734
Patent Number:	7902086
Patent Number:	8283718
Patent Number:	7750407
Patent Number:	7948052
Patent Number:	7778088

Property Type	Number
Patent Number:	7691668
Patent Number:	7619934
Patent Number:	7626882
Patent Number:	7767517
Patent Number:	7474579
Patent Number:	7666739
Patent Number:	7635627
Patent Number:	8445966
Patent Number:	8261091
Patent Number:	7745236
Patent Number:	7691737
Patent Number:	7863175
Patent Number:	8785268
Patent Number:	7463525
Patent Number:	7687360
Patent Number:	8486782
Patent Number:	7622373
Patent Number:	8110412
Patent Number:	7385851
Patent Number:	7550761
Patent Number:	7670959
Application Number:	11616385
Patent Number:	7879718
Patent Number:	7696094
Patent Number:	8076715
Patent Number:	8230154
Patent Number:	7355886
Patent Number:	7894243
Patent Number:	8093698
Patent Number:	7564708
Patent Number:	8089113
Patent Number:	7468525
Patent Number:	8077495
Patent Number:	7916523
Patent Number:	7384800
Patent Number:	7724075
Application Number:	11634777
Patent Number:	7908025

Property Type	Number
Patent Number:	7450419
Patent Number:	7468909
Patent Number:	8819326
Patent Number:	7372743
Application Number:	11639666
Patent Number:	8422668
Patent Number:	7746706
Patent Number:	7460415
Application Number:	11641506
Patent Number:	7989328
Patent Number:	7449742
Patent Number:	7977218
Patent Number:	7671405
Patent Number:	7414453
Application Number:	11652785
Patent Number:	7803680
Patent Number:	7566978
Patent Number:	7759745
Patent Number:	7482226
Patent Number:	7852669
Patent Number:	7835189
Patent Number:	8564042
Patent Number:	8742486
Patent Number:	8143664
Patent Number:	7405627
Patent Number:	7557587
Patent Number:	7561471
Application Number:	11724725
Patent Number:	7553727
Patent Number:	8085615
Patent Number:	7561465
Patent Number:	7888218
Patent Number:	7755922
Application Number:	11735241
Patent Number:	7505298
Patent Number:	7776696
Patent Number:	7807580
Patent Number:	7672161

Property Type	Number
Patent Number:	7626869
Patent Number:	7682905
Patent Number:	7713875
Patent Number:	8236693
Patent Number:	7645632
Patent Number:	7566628
Patent Number:	7915907
Patent Number:	7799612
Application Number:	11770239
Patent Number:	7652919
Patent Number:	7804125
Patent Number:	7876076
Patent Number:	7970129
Patent Number:	7502271
Application Number:	11790305
Patent Number:	7777474
Patent Number:	7596025
Patent Number:	7732276
Patent Number:	8367537
Application Number:	11804170
Patent Number:	7956586
Patent Number:	7554204
Patent Number:	7901955
Patent Number:	8079014
Patent Number:	7861235
Patent Number:	7656143
Patent Number:	7776688
Patent Number:	8012830
Patent Number:	7558123
Patent Number:	7558116
Patent Number:	7749855
Application Number:	11842655
Patent Number:	7981745
Patent Number:	8455268
Patent Number:	7573103
Patent Number:	7630250
Patent Number:	8560756
Patent Number:	7829936

Property Type	Number
Patent Number:	8017859
Patent Number:	8201258
Patent Number:	7656705
Patent Number:	7410857
Patent Number:	7368983
Patent Number:	8032794
Patent Number:	7873875
Patent Number:	8708710
Patent Number:	7884630
Patent Number:	7944190
Patent Number:	7791306
Patent Number:	7642637
Patent Number:	8274107
Patent Number:	7759171
Patent Number:	7679343
Patent Number:	7696738
Application Number:	11899575
Application Number:	11899597
Patent Number:	7948219
Patent Number:	7625118
Patent Number:	7883963
Patent Number:	7691751
Patent Number:	8638931
Patent Number:	8832408
Patent Number:	7768856
Patent Number:	7567457
Patent Number:	7995385
Patent Number:	7453724
Patent Number:	7915169
Patent Number:	7613042
Patent Number:	7808827
Patent Number:	7733074
Patent Number:	7843179
Patent Number:	7821236
Patent Number:	7679972
Patent Number:	8700830
Patent Number:	7979625
Patent Number:	7984284

Property Type	Number
Patent Number:	8898350
Patent Number:	7944746
Patent Number:	7842880
Patent Number:	7482217
Patent Number:	8239182
Application Number:	11950339
Patent Number:	7613044
Patent Number:	7948820
Patent Number:	7633815
Patent Number:	7659569
Patent Number:	7561484
Patent Number:	7746698
Patent Number:	7827359
Patent Number:	7558101
Patent Number:	7951675
Patent Number:	7602067
Patent Number:	8003306
Patent Number:	7692962
Application Number:	11958646
Patent Number:	7619932
Application Number:	11961772
Patent Number:	8656083
Patent Number:	8171627
Patent Number:	8788740
Patent Number:	7847340
Patent Number:	8895405
Application Number:	11963466
Patent Number:	7679967
Patent Number:	8694776
Patent Number:	7645993
Patent Number:	8239611
Patent Number:	8774400
Patent Number:	8202810
Patent Number:	7791947
Patent Number:	8064264
Patent Number:	7605616
Patent Number:	7683598
Patent Number:	7387936

Property Type	Number
Patent Number:	7706168
Patent Number:	8445913
Patent Number:	7724563
Patent Number:	7532071
Patent Number:	8008645
Patent Number:	7498849
Patent Number:	7835183
Patent Number:	8637997
Patent Number:	7639543
Patent Number:	7816724
Patent Number:	7880537
Patent Number:	8264029
Patent Number:	7790497
Patent Number:	7892984
Patent Number:	7902590
Patent Number:	8598717
Patent Number:	8531019
Patent Number:	8749012
Patent Number:	8357965
Application Number:	12005870
Patent Number:	7675805
Patent Number:	7846780
Patent Number:	7633824
Patent Number:	7934051
Patent Number:	8202790
Patent Number:	7760558
Patent Number:	8694714
Patent Number:	7606068
Patent Number:	7785973
Patent Number:	7894221
Patent Number:	7808830
Application Number:	12026421
Patent Number:	8801895
Patent Number:	7952234
Patent Number:	7986579
Patent Number:	7982431
Patent Number:	8003545
Patent Number:	7957165

Property Type	Number
Patent Number:	7960946
Application Number:	12032444
Patent Number:	7948035
Patent Number:	8406364
Patent Number:	7642945
Patent Number:	8423834
Patent Number:	8725485
Application Number:	12038059
Application Number:	12039511
Patent Number:	8650399
Patent Number:	8078887
Patent Number:	7964446
Patent Number:	7801178
Patent Number:	7811915
Patent Number:	7649391
Application Number:	12049089
Patent Number:	8492890
Patent Number:	8248046
Patent Number:	8139895
Patent Number:	8175528
Patent Number:	7705390
Patent Number:	7979658
Patent Number:	8072199
Patent Number:	7567076
Patent Number:	7916503
Patent Number:	7981825
Patent Number:	7714557
Patent Number:	7787313
Patent Number:	7859914
Patent Number:	8738840
Patent Number:	8560761
Patent Number:	8745311
Patent Number:	8527254
Patent Number:	8035099
Patent Number:	8228679
Patent Number:	8790751
Patent Number:	7932616
Patent Number:	8409952

Property Type	Number
Patent Number:	7781806
Patent Number:	8717833
Patent Number:	7940563
Application Number:	12110181
Application Number:	12110974
Patent Number:	8563441
Patent Number:	7867899
Patent Number:	7804715
Patent Number:	7990207
Patent Number:	8669597
Patent Number:	7816788
Application Number:	12126600
Patent Number:	7729169
Patent Number:	8464021
Patent Number:	7679968
Patent Number:	8370644
Patent Number:	7682974
Patent Number:	8815652
Patent Number:	7787312
Application Number:	12133689
Patent Number:	7871896
Patent Number:	7830716
Patent Number:	7838342
Patent Number:	7983089
Patent Number:	7936156
Patent Number:	7696017
Patent Number:	7892892
Patent Number:	7791946
Application Number:	12166290
Patent Number:	7846771
Patent Number:	8179153
Patent Number:	7821842
Patent Number:	7808808
Patent Number:	7820547
Application Number:	12180185
Application Number:	12180306
Patent Number:	8793992
Patent Number:	7932125

Property Type	Number
Patent Number:	8504862
Patent Number:	8507971
Patent Number:	8116151
Patent Number:	7956424
Patent Number:	7825448
Patent Number:	8076206
Patent Number:	7902056
Patent Number:	8003468
Patent Number:	8749039
Patent Number:	7846829
Patent Number:	7813154
Application Number:	12199690
Patent Number:	7564091
Patent Number:	7998846
Patent Number:	8367466
Application Number:	12213871
Patent Number:	7786587
Patent Number:	8581595
Application Number:	12231369
Patent Number:	7805650
Patent Number:	8064262
Patent Number:	8269343
Patent Number:	7907455
Patent Number:	7804713
Patent Number:	7791954
Patent Number:	8004888
Patent Number:	7864596
Patent Number:	7881105
Patent Number:	7910980
Patent Number:	8039943
Application Number:	12240627
Patent Number:	7901954
Patent Number:	7835172
Patent Number:	7907448
Application Number:	12249261
Patent Number:	7781320
Application Number:	12253207
Patent Number:	7894238

Property Type	Number
Patent Number:	8760133
Patent Number:	7848167
Patent Number:	8637986
Patent Number:	7777473
Patent Number:	7939925
Patent Number:	8421241
Patent Number:	8094509
Patent Number:	8404549
Patent Number:	8296626
Application Number:	12273289
Patent Number:	8237417
Patent Number:	8018767
Patent Number:	8732360
Patent Number:	8930593
Patent Number:	8601181
Patent Number:	8874810
Patent Number:	7821840
Patent Number:	7729170
Patent Number:	7821833
Patent Number:	8633074
Application Number:	12286149
Patent Number:	7679411
Patent Number:	7839671
Patent Number:	7985674
Patent Number:	8084770
Patent Number:	8735960
Application Number:	12315417
Patent Number:	7674653
Patent Number:	7750481
Patent Number:	8680671
Patent Number:	8391070
Patent Number:	8003436
Patent Number:	7851306
Patent Number:	8072802
Patent Number:	7872916
Patent Number:	7851260
Patent Number:	8352533
Patent Number:	7893681

Property Type	Number
Patent Number:	7902592
Patent Number:	8273627
Patent Number:	8174107
Patent Number:	7994007
Patent Number:	8386736
Patent Number:	7880221
Patent Number:	7902520
Patent Number:	8097961
Patent Number:	7981746
Patent Number:	8004901
Patent Number:	7889573
Patent Number:	7935596
Patent Number:	7943983
Patent Number:	8653581
Patent Number:	8486756
Patent Number:	7838406
Patent Number:	8040738
Patent Number:	7855114
Application Number:	12366519
Patent Number:	8692310
Patent Number:	8255777
Patent Number:	8233257
Patent Number:	8299765
Patent Number:	7916529
Patent Number:	8076199
Application Number:	12390550
Patent Number:	7990134
Patent Number:	8283934
Patent Number:	8772953
Patent Number:	7764546
Patent Number:	7791961
Patent Number:	7848146
Patent Number:	8582681
Patent Number:	8035367
Patent Number:	8067314
Application Number:	12428212
Patent Number:	8487373
Application Number:	12433159

Property Type	Number
Patent Number:	7840900
Patent Number:	8299439
Patent Number:	7981773
Patent Number:	8232515
Patent Number:	8379443
Patent Number:	8410767
Patent Number:	8314599
Patent Number:	8063667
Application Number:	12489226
Patent Number:	7834470
Patent Number:	7889577
Patent Number:	8228082
Patent Number:	8105098
Patent Number:	7940570
Patent Number:	7961519
Patent Number:	8234613
Patent Number:	7889568
Patent Number:	7977189
Patent Number:	8291360
Patent Number:	7903473
Patent Number:	7969787
Patent Number:	7978523
Patent Number:	7951704
Patent Number:	7977797
Patent Number:	7898860
Patent Number:	7915661
Patent Number:	7969816
Patent Number:	8516441
Patent Number:	8612805
Patent Number:	8067964
Application Number:	12556199
Patent Number:	8031528
Patent Number:	8436598
Application Number:	12569193
Patent Number:	7929353
Patent Number:	7957205
Patent Number:	7898879
Patent Number:	7888209

Property Type	Number
Patent Number:	8681558
Patent Number:	8832460
Patent Number:	8618781
Application Number:	12606870
Patent Number:	8462167
Patent Number:	7961055
Patent Number:	8248043
Patent Number:	8618783
Patent Number:	7948304
Patent Number:	8107299
Patent Number:	7952509
Patent Number:	8285902
Patent Number:	7965476
Patent Number:	8324873
Patent Number:	8134853
Patent Number:	8445372
Patent Number:	8877641
Patent Number:	7848154
Patent Number:	7986562
Patent Number:	8325531
Patent Number:	7972951
Patent Number:	8375262
Patent Number:	8825920
Patent Number:	8417874
Application Number:	12696409
Patent Number:	8476695
Patent Number:	8551858
Application Number:	12701391
Patent Number:	8790530
Patent Number:	8208296
Patent Number:	8742730
Patent Number:	7965574
Patent Number:	8319482
Patent Number:	8587265
Patent Number:	8324716
Patent Number:	8578216
Patent Number:	8686492
Application Number:	12723320

Property Type	Number
Application Number:	12723582
Application Number:	12723590
Patent Number:	8745446
Patent Number:	8107294
Patent Number:	8344711
Patent Number:	8605756
Patent Number:	8252676
Patent Number:	8638609
Patent Number:	8035153
Patent Number:	8404541
Application Number:	12791280
Application Number:	12792129
Patent Number:	8593447
Application Number:	12795462
Patent Number:	8570021
Patent Number:	8546936
Patent Number:	8045388
Patent Number:	8922181
Patent Number:	8718571
Patent Number:	8279674
Patent Number:	8149026
Patent Number:	8680686
Patent Number:	7906807
Patent Number:	8144522
Patent Number:	8659346
Patent Number:	8148771
Patent Number:	8440557
Patent Number:	8076712
Patent Number:	8295102
Patent Number:	8049334
Patent Number:	8310008
Patent Number:	8436289
Application Number:	12844928
Patent Number:	8114756
Patent Number:	8335110
Patent Number:	8818802
Patent Number:	8933682
Patent Number:	8357563

Property Type	Number
Patent Number:	8203178
Patent Number:	8031527
Patent Number:	8274158
Patent Number:	8094478
Application Number:	12879936
Application Number:	12879992
Patent Number:	8140778
Application Number:	12880021
Patent Number:	7972948
Patent Number:	8202779
Patent Number:	7906395
Patent Number:	7943980
Patent Number:	8345503
Patent Number:	7968464
Patent Number:	8097518
Patent Number:	8530282
Patent Number:	8264901
Patent Number:	8023341
Patent Number:	8130584
Patent Number:	8598645
Patent Number:	8304914
Patent Number:	8441041
Patent Number:	8493050
Application Number:	12960411
Patent Number:	8349685
Patent Number:	8354326
Application Number:	12961379
Application Number:	12962479
Application Number:	12964523
Patent Number:	8276104
Patent Number:	8283249
Patent Number:	8314454
Patent Number:	8461053
Patent Number:	8263458
Application Number:	12973730
Application Number:	12973756
Patent Number:	8530307
Patent Number:	8436687

Property Type	Number
Patent Number:	8605733
Application Number:	12979654
Patent Number:	8039891
Patent Number:	8441063
Patent Number:	8415256
Patent Number:	8031537
Patent Number:	8289750
Patent Number:	8598646
Patent Number:	8638082
Patent Number:	8345483
Patent Number:	8716082
Patent Number:	8595562
Patent Number:	8446015
Patent Number:	8385128
Patent Number:	8577494
Patent Number:	8514632
Patent Number:	8809206
Patent Number:	8379464
Patent Number:	8232209
Patent Number:	8369161
Application Number:	13028840
Patent Number:	8158534
Patent Number:	8928177
Patent Number:	8368577
Patent Number:	8786358
Patent Number:	8868822
Patent Number:	8344510
Patent Number:	8901720
Application Number:	13046433
Patent Number:	8219743
Patent Number:	8900993
Patent Number:	8389361
Patent Number:	8330209
Patent Number:	8652907
Application Number:	13073691
Patent Number:	8536011
Patent Number:	8183623
Patent Number:	8278171

Property Type	Number
Application Number:	13088328
Patent Number:	8462564
Patent Number:	8481366
Patent Number:	8319273
Patent Number:	8498162
Patent Number:	8542537
Patent Number:	8638633
Patent Number:	8522081
Patent Number:	8189421
Patent Number:	8705731
Application Number:	13117717
Application Number:	13123698
Patent Number:	8841874
Patent Number:	8329598
Patent Number:	8514631
Patent Number:	8379472
Patent Number:	8318566
Patent Number:	8264898
Patent Number:	8669606
Patent Number:	8440357
Patent Number:	8508307
Patent Number:	8611160
Patent Number:	8625353
Patent Number:	8309455
Application Number:	13165652
Patent Number:	8466552
Patent Number:	8698473
Application Number:	13183373
Patent Number:	8598005
Patent Number:	8878504
Application Number:	13190565
Patent Number:	8325523
Patent Number:	8552523
Patent Number:	8819401
Patent Number:	8537622
Application Number:	13217172
Patent Number:	8542051
Patent Number:	8718038

Property Type	Number
Patent Number:	8536908
Patent Number:	8351268
Application Number:	13269423
Patent Number:	8803120
Application Number:	13275989
Patent Number:	8409994
Patent Number:	8914554
Patent Number:	8368219
Application Number:	13289553
Patent Number:	8637918
Patent Number:	8791007
Patent Number:	8699549
Patent Number:	8339206
Application Number:	13313699
Patent Number:	8698280
Patent Number:	8642422
Patent Number:	8710628
Patent Number:	8621643
Patent Number:	8513938
Patent Number:	8361857
Application Number:	13323538
Application Number:	13324310
Patent Number:	8482959
Patent Number:	8536638
Patent Number:	8823344
Application Number:	13357252
Patent Number:	8806071
Patent Number:	8647899
Patent Number:	8674632
Patent Number:	8799598
Patent Number:	8386681
Patent Number:	8705303
Patent Number:	8384146
Application Number:	13435445
Patent Number:	8724388
Patent Number:	8643083
Patent Number:	8507969
Patent Number:	8593126

Property Type	Number
Application Number:	13471854
Patent Number:	8456941
Patent Number:	8842477
Application Number:	13489799
Application Number:	13490124
Patent Number:	8924453
Application Number:	13523568
Application Number:	13524584
Application Number:	13526321
Application Number:	13529284
Application Number:	13538646
Application Number:	13539688
Application Number:	13540373
Application Number:	13545469
Patent Number:	8803066
Patent Number:	8830097
Patent Number:	8699273
Patent Number:	8928397
Application Number:	13566187
Patent Number:	8329530
Patent Number:	8559255
Patent Number:	8691645
Application Number:	13589354
Patent Number:	8756376
Patent Number:	8520437
Patent Number:	8617983
Patent Number:	8611167
Patent Number:	8581203
Application Number:	13616379
Application Number:	13616719
Patent Number:	8658496
Patent Number:	8773885
Patent Number:	8815727
Application Number:	13644895
Patent Number:	8836012
Application Number:	13657047
Application Number:	13669633
Application Number:	13669907

Property Type	Number
Application Number:	13669926
Application Number:	13678025
Application Number:	13678255
Application Number:	13680507
Patent Number:	8835277
Application Number:	13682826
Application Number:	13685222
Application Number:	13685286
Patent Number:	8680832
Patent Number:	8787089
Application Number:	13715181
Application Number:	13715185
Patent Number:	8836006
Application Number:	13715577
Application Number:	13715582
Application Number:	13715673
Patent Number:	8816438
Application Number:	13715729
Patent Number:	8822289
Application Number:	13715828
Patent Number:	8901756
Application Number:	13725173
Application Number:	13725224
Application Number:	13725260
Application Number:	13725415
Application Number:	13725637
Application Number:	13725654
Patent Number:	8811107
Application Number:	13729153
Patent Number:	8614475
Application Number:	13735156
Application Number:	13735650
Application Number:	13736618
Application Number:	13737321
Patent Number:	8855298
Application Number:	13746477
Application Number:	13749246
Patent Number:	8866213

Property Type	Number
Application Number:	13756134
Application Number:	13761217
Application Number:	13764602
Patent Number:	8760930
Application Number:	13769403
Patent Number:	8699283
Patent Number:	8610199
Patent Number:	8669161
Application Number:	13781396
Patent Number:	8748800
Application Number:	13786252
Application Number:	13790979
Application Number:	13856313
Application Number:	13856614
Application Number:	13856671
Patent Number:	8848452
Application Number:	13860542
Patent Number:	8775853
Patent Number:	8912093
Patent Number:	8828837
Application Number:	13866915
Application Number:	13867618
Patent Number:	8874253
Application Number:	13901167
Application Number:	13913909
Application Number:	13917141
Patent Number:	8796864
Patent Number:	8742496
Patent Number:	8748972
Patent Number:	8586412
Patent Number:	8850257
Patent Number:	8922289
Application Number:	13942018
Patent Number:	8633083
Patent Number:	8759157
Patent Number:	8900923
Application Number:	13972008
Application Number:	14019192

Property Type	Number
Application Number:	14033170
Application Number:	14048527
Application Number:	14048863
Application Number:	14050490
Application Number:	14051584
Application Number:	14051828
Application Number:	14051859
Application Number:	14054265
Application Number:	14054312
Application Number:	14054880
Application Number:	14054884
Application Number:	14056547
Application Number:	14056577
Application Number:	14059077
Patent Number:	8765529
Application Number:	14068652
Application Number:	14069979
Application Number:	14076415
Application Number:	14076706
Application Number:	14080844
Application Number:	14081987
Application Number:	14085013
Application Number:	14089048
Application Number:	14091470
Application Number:	14092554
Application Number:	14093703
Application Number:	14095150
Application Number:	14099340
Application Number:	14100673
Application Number:	14102446
Application Number:	14102450
Application Number:	14107729
Application Number:	14108780
Application Number:	14109157
Application Number:	14109464
Application Number:	14132422
Application Number:	14132430
Application Number:	14135863

Property Type	Number
Application Number:	14136358
Application Number:	14136977
Application Number:	14137203
Application Number:	14143317
Application Number:	14149521
Application Number:	14149628
Application Number:	14153900
Application Number:	14167845
Application Number:	14169549
Patent Number:	8785275
Application Number:	14179316
Application Number:	14180444
Application Number:	14184191
Application Number:	14188048
Application Number:	14199837
Application Number:	14204373
Application Number:	14207303
Application Number:	14215468
Application Number:	14218169
Application Number:	14220628
Patent Number:	8897289
Application Number:	14222258
Application Number:	14222399
Application Number:	14222446
Application Number:	14250113
Application Number:	14251448
Application Number:	14253056
Application Number:	14254237
Application Number:	14258076
Application Number:	14269299
Application Number:	14270700
Application Number:	14271115
Application Number:	14278114
Application Number:	14284632
Application Number:	14284727
Application Number:	14284812
Application Number:	14297200
Application Number:	14313751

Property Type	Number
Application Number:	14315003
Application Number:	14315713
Application Number:	14319079
Application Number:	14339377
Application Number:	14340054
Application Number:	14446678
Application Number:	14447688
Application Number:	14448442
Application Number:	14450727
Application Number:	14453306
Application Number:	14458542
Application Number:	14460205
Application Number:	14464783
Application Number:	14472043
Application Number:	14484417
Application Number:	14486421
Application Number:	14501536
Application Number:	14503585
Application Number:	14513314
Application Number:	14513361
Application Number:	14517201
Application Number:	14517470
Application Number:	14518560
Application Number:	14520016
Application Number:	14521181
Application Number:	14527797
Application Number:	14532039
Application Number:	14536015
Application Number:	14539410
Application Number:	14540803
Application Number:	14551149
Application Number:	14562789
Application Number:	14566462
Application Number:	14570801
Application Number:	62040583
Application Number:	62044609
Application Number:	14598647
Application Number:	14612083

Property Type	Number
Application Number:	14619592
Application Number:	14626815
Application Number:	14628939
Application Number:	14630238
Application Number:	14635459

CORRESPONDENCE DATA

Fax Number: (212)735-2000

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: 2127353000

Email: justin.selle@skadden.com

Correspondent Name: SKADDEN, ARPS, SLATE, MEAGHER & FLOM LLP

Address Line 1: FOUR TIMES SQUARE

Address Line 2: KEN KUMAYAMA, ESQ.

Address Line 4: NEW YORK, NEW YORK 10036

ATTORNEY DOCKET NUMBER:	391000/1502
NAME OF SUBMITTER:	KEN KUMAYAMA
SIGNATURE:	/Ken Kumayama/
DATE SIGNED:	03/21/2015

Total Attachments: 175

- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page1.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page2.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page3.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page4.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page5.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page6.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page7.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page8.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page9.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page10.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page11.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page12.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page13.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page14.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page15.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page16.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page17.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page18.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page19.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page20.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page21.tif
- source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page22.tif

source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page167.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page168.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page169.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page170.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page171.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page172.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page173.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page174.tif
source=NYCSR03A-#1170056-v1-Executed_Patent_Security_Agreement#page175.tif

PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of March 12, 2015 (this "**Agreement**"), among Cypress Semiconductor Corporation, a Delaware corporation, Spansion LLC, a Delaware limited liability company, each Additional Grantor listed on the signature pages hereto, (all of the foregoing, each a "**Grantor**" and collectively, the "**Grantors**"), and MORGAN STANLEY SENIOR FUNDING, INC., as collateral agent for the Secured Parties (as defined in the Pledge and Security Agreement referred to below) (herein in such capacity, the "**Collateral Agent**").

RECITALS

- (A) CYPRESS SEMICONDUCTOR CORPORATION (the "**Borrower**"), the GUARANTORS as defined therein, the LENDERS from time to time party thereto, MORGAN STANLEY SENIOR FUNDING, INC., as administrative agent (in such capacity, the "**Administrative Agent**") and collateral agent for the Lenders and the other AGENTS from time to time party thereto, and MORGAN STANLEY BANK, N.A., as Issuing Bank, have entered into an Amended and Restated Credit and Guaranty Agreement, dated as of March 12, 2015 (as further amended and/or restated, supplemented or otherwise modified from time to time, the "**Credit Agreement**").
- (B) The Grantors are party to an Amended and Restated Pledge and Security Agreement, dated as of March 12, 2015, in favor of the Collateral Agent (as further amended and/or restated, supplemented or otherwise modified from time to time, the "**Pledge and Security Agreement**"), pursuant to which certain Grantors are required to execute and deliver this Agreement.
- (C) In consideration of the mutual conditions and agreements set forth in the Credit Agreement, the Pledge and Security Agreement and this Agreement, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

SECTION 1 Defined Terms

Unless otherwise defined herein, terms defined in the Pledge and Security Agreement and used herein have the meaning given to them in the Pledge and Security Agreement.

SECTION 2 Grant of Security Interest in Patent Collateral

As security for the prompt and complete payment and performance in full when due (whether at stated maturity, by required prepayment, declaration, acceleration, demand or otherwise, including the payment of amounts that would become due but for the operation of the automatic stay under Section 362(a) of the Bankruptcy Code) of all Secured Obligations, each Grantor hereby pledges and grants to the Collateral Agent, for its benefit and for the benefit of the Secured Parties, a continuing security interest in and Lien on all of its right, title and interest in,

to and under all Patent Collateral, whether now owned or existing or hereafter acquired or arising and wherever located.

"Patent Collateral" means each Grantor's right, title and interest in, to and under:

- (a) all Patents owned by such Grantor, including, without limitation, those referred to on Schedule I hereto;
- (b) all reissues, continuations or extensions of the foregoing; and
- (c) to the extent not already included in the foregoing, all Proceeds of the foregoing, including, without limitation, any claim by Grantor against third parties for past, present, future infringement, misappropriation, dilution or other violation of any Patent owned by such Grantor or Patent licensed to such Grantor under any Patent License.

SECTION 3 Certain Exclusions

Notwithstanding anything herein to the contrary, in no event shall the Collateral include and no Grantor shall be deemed to have granted a Security Interest in, any of its right, title or interest in any Patent if the grant of such Security Interest shall constitute or result in the abandonment of, invalidation of or rendering unenforceable any of its right, title or interest therein.

SECTION 4 Pledge and Security Agreement

The security interest granted pursuant to this Agreement is granted concurrently in conjunction with the security interest granted to the Collateral Agent pursuant to the Pledge and Security Agreement, and each Grantor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby is more fully set forth in the Pledge and Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

SECTION 5 Termination, Release

- (a) This Agreement, the Security Interest and all other security interests granted hereby shall terminate in accordance with Section 10.08(e) of the Credit Agreement.
- (b) A Grantor shall automatically be released from its obligations hereunder and the Security Interest in the Collateral of such Grantor shall be automatically released upon the consummation of any transaction permitted by the Credit Agreement as a result of which such Grantor ceases to be a Subsidiary of any Borrower; provided that the Requisite Lenders shall have consented to such transaction (to the extent required by the Credit Agreement) and the terms of such consent did not provide otherwise.

(c) Upon any sale or other transfer by any Grantor of any Collateral that is permitted under the Credit Agreement, or upon the effectiveness of any written consent to the release of the Security Interest granted hereby in any Collateral pursuant to the Credit Agreement or the Pledge and Security Agreement, the Security Interest in such Collateral shall be automatically released.

(d) In connection with any termination or release pursuant to paragraph (a), (b) or (c) of this Section 5, the Collateral Agent shall execute and deliver to any Grantor at such Grantor's expense, all UCC termination statements, releases and similar documents that such Grantor shall reasonably request to evidence such termination or release. Any execution and delivery of termination statements, releases, or other documents pursuant to this Section 5 shall be without recourse to or warranty by the Collateral Agent.

SECTION 6 Governing Law and Consent to Jurisdiction

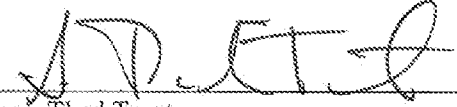
THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAW OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAW PRINCIPLES THAT WOULD RESULT IN THE APPLICATION OF ANY LAW OTHER THAN THE LAW OF THE STATE OF NEW YORK. THE TERMS AND PROVISIONS OF SECTION 9.13 OF THE PLEDGE AND SECURITY AGREEMENT ARE INCORPORATED BY REFERENCE HEREIN WITH RESPECT HERETO AS IF FULLY SET FORTH HEREIN.

[Signature Page Follows]

IN WITNESS WHEREOF, each Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

CYPRESS SEMICONDUCTOR CORPORATION

By: 

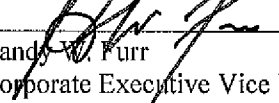
Name: Thad Trent

Title: Chief Financial Officer and
Secretary

[Signature Page to Patent Security Agreement]

PATENT
REEL: 035240 FRAME: 0562

SPANSION LLC

By: 
Name: Randy W. Furr
Title: Corporate Executive Vice President and
Chief Financial Officer

[Signature Page to Patent Security Agreement]

PATENT
REEL: 035240 FRAME: 0563

ACCEPTED AND AGREED:

MORGAN STANLEY SENIOR FUNDING, INC.,
as Collateral Agent

By: 
Name: Jonathon Rau
Title: Authorized Signatory

[Signature Page to Patent Security Agreement]

PATENT
REEL: 035240 FRAME: 0564

SCHEDULE I

PATENTS

Cypress Entities:

All Patents Below Held by Cypress Semiconductor Corporation

ApplicationNum	PatentNum	ApplicationNum	PatentNum	ApplicationNum	PatentNum
08/886,923	6,012,103	11/709,897		09/307,588	6,137,333
09/476,923	6,249,825	11/541,068	8,352,527	09/395,057	6,327,175
09/878,488	6,493,770	11/863,013	8,037,249	09/633,514	6,388,939
08/914,960	6,223,266	11/901,751	7,855,592	09/467,098	6,405,353
08/915,370	6,065,099	11/566,767	7,471,135	09/314,535	6,114,914
09/173,470	6,092,210	11/700,314	8,058,937	09/344,514	6,101,134
09/172,956	6,105,097	11/973,696	7,821,859	09/626,986	6,243,303
09/176,047	6,311,294	11/598,981	8,129,924	09/401,614	6,530,040
09/232,578	6,389,495	13/403,242	8,476,846	10/305,699	6,662,315
09/359,465	6,708,244	13/934,032		09/585,681	6,678,879
09/625,167	6,742,071	11/644,073	7,818,701	09/396,344	6,229,345
12/789,991	8,966,414	11/903,878	8,902,173	09/384,510	6,323,683
12/872,995		11/961,190	7,982,448	09/400,685	6,191,636
09/179,212	6,434,187	11/958,215	7,684,257	09/371,237	6,442,657
09/288,376	6,522,299	11/998,009	7,863,971	09/373,870	6,388,469
10/364,756	6,762,725	12/001,693	7,672,190	09/390,591	6,194,965
09/538,201	6,509,851	11/953,176	8,074,086	09/484,975	6,499,089
09/533,631	6,563,354	11/956,273	8,099,534	09/410,160	7,062,425
09/543,462	6,525,962	11/986,255	8,125,441	09/442,715	6,775,627
09/567,681	6,779,061	13/368,189	8,537,107	09/475,879	6,864,710
09/577,861	6,892,315	11/961,905	7,880,452	09/398,936	6,239,632
09/511,020	6,297,705	11/985,201	8,093,825	09/398,956	6,704,381
09/966,626	6,525,616	11/954,622	8,266,405	09/531,365	6,510,483
10/339,115	6,946,920	13/312,929		09/531,241	6,567,884
09/511,019	6,407,641	11/764,880	7,961,060	09/461,632	6,249,464
09/633,689	6,681,359	12/054,328	8,218,598	09/882,898	6,535,437
09/550,834	6,629,265	11/961,517	7,586,333	09/405,950	6,088,289
09/617,601	6,486,701	11/731,893	8,072,429	09/613,949	6,333,891
09/607,697	6,501,815	11/691,676	8,060,661	09/406,042	6,640,267
09/892,164	6,532,169	11/801,115	8,144,126	09/406,667	6,640,300
10/368,528	6,674,665	13/049,556		09/434,908	6,927,756
10/042,783	6,683,818	12/075,552	7,929,363	09/534,760	6,240,031

09/605,312	6,791,366	12/059,953	7,728,619	09/433,822	6,166,991
09/592,206	6,625,761	12/057,648		09/747,790	6,363,031
09/539,903	6,288,948	12/054,315	8,131,890	09/532,545	6,526,495
09/876,981	6,404,682	12/059,560	7,859,906	09/475,808	6,388,464
09/534,411	6,362,668	11/821,414	8,593,428	10/024,093	6,512,395
09/620,490	6,639,432	12/057,801	8,076,949	09/728,347	6,578,185
09/598,561	6,691,201	12/036,090		09/534,412	6,249,466
09/751,234	6,567,970	11/850,260	8,049,569	09/504,344	6,651,134
09/689,532	6,922,820	12/011,403	8,125,445	09/515,549	6,323,734
09/592,207	6,907,539	11/904,576		09/768,900	6,973,101
09/592,201	6,671,831	11/769,088	7,564,270	09/728,350	6,417,696
09/592,700	6,675,336	11/823,982	7,804,307	09/540,107	6,307,437
09/599,586	6,804,802	13/191,806		09/534,671	6,400,642
09/596,814	6,657,501	12/059,155	7,710,803	09/501,246	6,553,549
09/596,522	6,529,447	11/818,740	7,719,329	09/540,292	6,377,071
09/804,523	6,844,756	12/154,169	8,080,984	09/533,740	6,373,302
09/736,648	6,492,706	12/044,831	8,145,809	09/538,822	6,532,524
09/605,503	6,904,442	13/154,348	8,370,543	09/604,190	6,670,676
09/815,599	6,640,266	11/801,543	7,671,664	09/527,715	6,637,017
09/587,708	6,708,190	11/824,249	8,436,263	09/594,218	6,721,878
09/684,160	6,904,436	12/044,862	8,589,632	09/594,219	6,704,863
09/590,831	6,839,778	13/680,539	8,949,478	09/532,582	6,388,479
09/631,427	7,047,173	11/904,644	8,316,158	09/534,663	6,353,336
09/602,938	6,839,873	11/904,643	8,125,243	09/541,322	6,351,139
09/703,151	6,469,930	13/229,139	8,766,662	09/541,320	6,351,146
09/597,099	6,556,048	12/075,632	8,769,177	09/567,455	6,369,609
09/808,488	6,542,004	14/319,041		09/589,840	6,687,864
09/589,919	6,848,068	12/075,633	8,108,529	09/540,106	6,384,628
09/605,311	6,957,278	12/075,748	8,280,060	09/537,376	6,651,181
09/629,916	6,538,468	13/633,696	8,761,397	09/539,943	6,608,500
09/649,551	6,996,727	14/311,889		08/887,779	5,867,693
09/891,768	6,615,393	12/151,282	7,995,397	08/800,195	5,864,252
09/608,279	6,400,188	13/206,378	8,279,677	10/067,411	6,683,805
09/650,133	6,559,686	13/627,258	8,699,275	10/708,379	6,967,861
09/745,660	6,366,145	11/906,033	8,315,269	11/116,589	7,092,281
09/747,281	6,417,698	11/807,687	8,810,260	11/164,556	7,313,032
09/747,257	6,993,105	11/823,904	7,915,838	11/985,961	8,099,688
09/747,262	6,711,226	11/823,361	8,860,683	11/998,948	7,466,604
09/746,802	6,535,023	12/483,181	8,878,811	08/593,748	5,606,294

09/747,188	6,950,484	12/004,831		09/436,522	6,850,554
09/609,192	6,675,312	11/880,963	7,667,468	09/436,155	6,553,057
09/677,062	6,748,456	12/195,912	8,237,418	09/428,624	6,369,660
09/696,714	6,757,844	13/569,109	8,604,760	09/416,599	6,557,059
10/229,527	6,854,102	12/129,497	8,085,252	09/715,437	8,014,993
09/650,437	6,593,769	12/156,384		09/919,673	6,601,936
09/893,161	6,690,224	11/865,672	8,092,083	09/076,754	6,362,898
09/972,131	6,665,847	11/965,520	8,686,985	10/001,458	6,882,443
09/790,372	6,384,621	11/864,137	8,902,131	09/273,310	6,233,640
09/672,397	6,388,942	11/855,281		09/812,475	6,505,267
09/676,171	6,578,118	11/843,216	8,164,365	09/205,558	6,279,060
09/676,706	7,016,349	13/100,876	8,570,073	09/372,344	6,218,969
09/676,705	6,631,455	14/066,263		09/626,368	6,252,375
09/676,170	6,581,144	11/768,677	8,035,401	08/974,736	6,040,792
09/672,122	6,507,242	11/965,485	8,564,605	10/028,029	6,996,655
09/676,169	6,816,955	11/857,970	8,082,373	10/061,914	6,792,499
09/661,869	6,622,204	13/332,178	8,661,168	10/061,906	7,155,664
09/659,527	6,745,338	12/238,893	8,543,628	08/715,569	5,789,776
10/858,023	7,080,276	12/239,450		08/846,558	5,892,712
09/668,801	7,093,151	12/006,352	8,814,713	09/136,694	6,122,191
09/703,181	7,024,653	14/467,511		09/626,267	6,363,011
09/677,255	6,563,437	11/857,947	8,111,577	08/772,970	5,774,400
09/652,806	6,611,935	13/303,112	8,462,576	09/051,700	6,163,048
09/658,597	6,959,257	13/915,464	8,705,309	09/613,874	6,614,070
09/740,193	6,580,291	11/903,271	8,090,894	09/198,747	6,137,720
09/672,396	6,249,177	12/058,586	8,788,959	09/082,167	6,140,676
09/716,526	6,445,211	12/058,534		09/689,442	6,750,102
09/730,315	6,373,231	12/004,833	8,266,575	09/561,292	6,350,665
09/740,106	6,486,712	13/586,648	8,661,400	09/571,826	7,231,374
09/723,494	6,404,270	12/058,569	8,065,653	09/609,387	7,084,066
09/675,895	6,473,357	13/171,061	8,499,270	11/476,037	7,605,088
09/894,220	6,466,050	11/965,291	7,737,724	09/635,507	6,817,903
09/714,441	6,625,711	13/099,334	8,482,313	09/982,525	6,681,376
09/732,685	6,629,226	13/930,756		09/621,717	6,808,944
09/732,686	6,810,098	11/965,677	8,026,739	09/661,666	6,803,318
09/732,687	6,715,021	13/197,624	8,476,928	09/672,836	6,756,315
09/676,539	6,483,386	13/914,308		09/617,454	6,841,008
09/732,487	6,857,088	11/968,145		09/774,323	6,844,237
09/750,608	6,467,042	12/104,391	8,516,025	10/765,072	7,183,222

09/772,718	6,480,052	12/060,176	8,572,297	09/823,839	6,852,649
09/747,734	6,850,075	12/104,672	8,130,025	09/752,539	6,693,042
09/753,066	6,392,941	12/104,678	8,106,637	09/768,873	6,780,771
09/791,355	6,813,672	12/060,128	8,040,266	10/662,636	7,157,792
09/775,372	6,816,979	12/057,149	8,078,894	09/823,530	6,509,270
09/790,159	6,904,551	13/178,504	8,909,960	09/783,716	6,593,208
09/745,658	6,577,163	12/058,591	7,966,345	09/849,047	6,831,346
09/819,592	6,970,908	11/985,206	7,821,866	09/753,011	7,172,914
09/793,359	7,023,259	11/904,758	7,895,387	09/846,119	6,969,684
09/825,899	6,590,417	12/079,866	8,525,799	09/823,446	6,786,809
10/150,179	6,710,623	12/006,491	8,766,910	09/916,533	6,630,643
09/855,411	6,501,696	12/207,104	7,808,842	09/920,374	6,844,235
10/305,625	6,707,741	12/286,321	8,040,164	09/829,510	6,534,805
09/816,963	6,541,879	11/966,927	8,103,223	09/877,905	6,492,710
09/813,605	6,777,969	13/356,941	8,565,693	10/194,270	6,537,893
09/924,734	6,724,220	14/047,635		10/151,127	6,770,566
10/803,030	7,221,187	12/167,552	8,086,417	09/846,666	6,586,296
11/799,439	7,825,688	13/156,297	8,315,832	09/904,328	6,531,366
12/902,137	8,358,150	12/167,494	8,508,244	09/920,378	6,709,928
13/328,385	8,736,303	13/965,587		09/929,829	6,667,224
14/283,888		12/009,529	8,581,853	10/739,674	6,833,330
09/909,045	6,507,214	12/218,021	8,400,409	09/902,837	6,761,619
10/272,231	6,765,407	12/195,374	8,024,491	10/112,572	6,979,640
09/909,109	6,603,330	12/228,787	8,037,228	10/056,242	6,853,202
09/909,047	6,941,336	12/258,276	8,040,175	11/042,419	7,391,104
09/930,021	6,910,126	12/327,751	7,893,772	10/085,757	6,931,298
09/969,311	6,967,511	11/963,446	7,719,908	11/087,484	7,698,015
09/972,003	6,823,282	12/072,935		09/927,863	6,890,859
09/972,133	7,127,630	11/968,119		10/085,716	6,730,545
09/972,319	6,892,322	12/040,387	8,525,798	10/838,791	7,045,387
09/875,599	7,185,162	13/671,389		10/085,752	6,901,984
09/855,868	6,952,778	12/060,203	8,487,912	11/042,701	7,818,085
09/975,104	7,188,063	12/288,984	8,149,643	10/054,515	6,828,201
09/975,105	7,206,733	13/245,856	8,358,557	10/097,674	7,151,048
09/975,030	7,076,420	12/079,845	8,063,603	10/163,970	7,078,334
09/953,423	6,825,689	13/166,134	8,482,241	09/899,871	7,014,552
09/909,527	6,573,753	11/963,661		09/932,159	6,562,675
10/000,383	6,614,320	12/267,487	8,446,158	10/393,032	6,921,948
09/826,397	6,859,884	12/151,858		10/039,469	6,841,491

10/011,214	6,950,954	12/569,855	8,806,229	10/010,837	6,713,831
09/923,461	6,957,242	12/509,249	8,271,810	10/099,841	6,699,795
09/973,535	6,611,220	13/622,132		10/791,657	7,112,834
09/935,454	6,525,593	12/395,462	8,358,142	09/975,256	6,803,330
09/842,966	6,563,391	13/720,861	8,692,563	09/944,234	6,844,262
09/964,991	6,608,472	14/203,145		10/023,065	6,664,120
09/887,955	6,868,500	12/395,969		10/289,020	6,905,893
09/922,419	6,542,025	12/395,304	8,564,546	10/010,833	6,777,307
09/893,050	6,981,090	12/395,188	8,797,277	10/074,888	7,129,178
09/912,768	7,005,933	12/396,374	8,902,174	10/184,715	6,969,689
09/957,084	6,798,299	12/395,546	8,154,310	10/185,470	6,818,558
09/977,111	7,180,342	13/443,718		10/086,051	7,031,791
09/778,233	7,058,732	12/239,610	8,624,845	10/824,006	7,105,377
09/846,146	6,975,695	12/239,692	8,321,174	10/142,963	7,094,707
09/844,785	6,617,901	13/670,671		10/033,556	6,687,648
09/861,026	6,948,084	12/238,758	8,179,056	10/025,511	6,863,595
10/151,669	6,971,045	12/413,579		10/094,108	6,677,213
09/809,242	6,507,213	12/621,311	8,063,805	10/740,205	7,042,054
09/801,409	6,980,575	12/287,604	7,723,659	10/074,884	7,365,403
09/788,838	6,466,051	12/238,918	8,860,684	12/046,073	7,867,918
09/894,172	6,421,408	12/239,532	8,095,747	10/059,823	6,835,616
09/790,749	6,593,725	12/819,794	8,856,434	11/021,220	7,227,212
09/821,680	6,577,297	12/238,383	7,898,299	10/191,546	6,866,986
10/430,991	6,999,063	13/038,048	8,143,920	10/072,164	7,026,235
09/929,891	7,092,980	12/339,317	8,217,909	10/119,574	6,838,392
09/969,313	7,023,257	12/337,411	8,184,102	10/256,746	6,859,312
09/943,062	8,149,048	13/449,179	8,629,851	10/152,590	6,866,571
09/887,923	6,854,067	14/153,996		10/402,774	6,885,955
09/922,579	6,892,310	12/413,580	8,174,510	10/184,697	6,803,289
11/125,554	7,386,740	13/445,747	8,638,310	10/137,244	6,964,929
12/136,710	8,484,487	14/152,882		10/235,160	6,893,974
09/893,048	7,149,316	12/200,623	8,248,081	10/184,336	7,192,867
10/033,027	8,176,296	13/588,477		10/241,236	6,903,002
13/169,656	8,555,032	12/195,989		10/324,989	6,794,269
13/966,028		12/201,910	8,674,950	10/185,646	7,256,083
09/848,568	6,466,505	12/508,487	8,482,536	10/186,453	8,080,453
09/772,716	6,411,150	13/933,506		10/314,380	7,229,929
09/823,414	6,931,465	13/598,464	8,866,795	10/313,267	6,680,516
09/881,354	6,469,548	12/509,384	8,145,812	10/313,283	7,396,773

10/150,677	7,155,196	12/509,394	8,250,249	10/313,048	7,189,652
10/147,827	6,914,566	12/496,612	8,063,665	10/313,049	6,803,321
10/147,839	7,221,926	13/303,105	8,941,410	10/326,525	6,869,850
10/150,731	7,103,108	12/496,603	8,339,188	10/326,707	6,773,975
10/147,828	7,230,971	12/496,580	8,143,934	10/314,381	6,943,126
09/925,721	6,910,164	13/431,801	8,441,303	10/231,551	6,753,944
09/812,109	6,760,872	12/496,579	8,441,298	10/321,965	6,774,452
09/826,998	7,346,849	13/893,201	8,890,600	10/848,638	7,192,839
09/895,114	6,782,467	12/533,772	7,940,202	10/232,586	6,881,634
09/821,006	6,816,976	13/103,862	8,299,951	10/320,012	6,857,938
09/789,052	6,441,642	12/496,590	8,217,700	10/308,410	6,977,217
09/966,838	6,789,180	12/695,935	8,266,361	10/323,002	6,869,853
09/834,219	6,452,417	12/413,354	8,711,096	10/290,841	6,774,012
10/229,432	6,961,807	12/166,228	8,169,238	10/256,831	7,092,153
10/057,196	7,173,469	13/301,764	8,536,902	10/256,964	7,072,103
09/904,750	7,020,728	12/167,100	8,089,289	10/353,553	6,764,890
09/884,330	6,531,782	12/380,141	8,570,053	10/375,534	6,833,622
09/828,772	6,418,040	13/612,803	8,564,313	11/158,513	7,352,444
09/915,794	6,944,691	14/058,464		10/898,532	7,112,790
09/864,051	6,657,506	13/342,942		10/402,750	6,902,993
09/849,164	6,466,078	12/217,143	8,258,986	11/018,422	7,256,087
09/957,587	7,116,599	12/260,843	8,395,589	11/827,765	7,629,653
09/957,015	6,525,980	12/262,640	8,245,579	10/947,563	7,323,411
09/895,305	6,445,635	12/332,980	8,093,914	10/936,275	7,268,052
09/895,306	6,970,392	13/345,504	8,890,547	10/950,362	7,071,124
09/877,657	6,498,513	12/604,380	8,519,722	10/950,332	7,371,637
09/877,659	6,826,642	12/842,338		11/961,750	8,445,381
09/877,660	6,674,306	12/605,683		10/927,365	7,659,180
10/742,179	6,853,218	12/606,147	8,319,505	11/169,172	7,320,944
09/877,658	6,515,517	13/664,421	8,570,052	11/016,077	7,197,737
09/849,214	6,772,251	14/037,098		10/993,031	7,253,094
09/966,979	6,700,807	12/838,035	8,464,145	11/087,924	7,390,750
09/951,684	6,990,508	13/114,153	8,780,073	11/089,732	7,323,377
09/951,685	7,003,545	14/316,600		11/089,921	7,750,420
09/875,708	6,594,816	12/618,661		11/069,501	7,105,413
09/850,468	6,754,725	12/623,661	8,487,639	10/877,313	7,773,442
09/916,925	6,566,952	13/739,991	8,575,947	12/434,084	8,045,410
09/939,076	6,918,057	14/071,107		13/280,937	8,493,804
09/916,453	7,043,495	12/634,511		13/949,116	8,837,245

09/928,818	6,768,362	12/508,349	8,112,571	14/229,908	
10/833,357	6,956,419	12/636,596	8,283,727	11/169,176	7,351,663
09/928,817	6,625,782	13/620,161	8,841,727	11/169,152	7,915,175
09/935,283	6,892,337	12/321,452	8,112,897	11/097,665	8,513,753
09/992,652	7,043,502	12/684,791	8,462,135	11/282,422	7,425,489
09/944,874	6,649,832	13/915,328		11/252,933	7,361,602
09/918,583	6,628,154	12/767,722	8,633,904	11/281,098	8,093,719
09/987,628	6,768,384	14/140,909		11/362,278	7,446,063
09/935,017	6,820,160	12/767,424	8,773,390	11/352,437	7,394,075
09/981,079	6,566,923	12/321,661	8,405,622	11/169,986	7,277,347
10/396,005	7,015,734	12/753,681	8,102,292	11/233,959	7,659,558
10/032,248	7,013,359	12/577,695	8,572,320	11/238,814	7,253,496
10/222,155	7,689,724	14/066,522		11/238,763	7,206,247
09/973,260	6,925,554	12/702,930		11/489,047	7,592,661
09/963,572	6,574,158	13/619,807		11/452,649	7,678,640
09/943,149	6,744,323	13/569,048		11/483,686	8,063,655
09/951,369	6,549,050	12/792,664	8,730,187	11/234,255	7,838,937
09/916,978	6,628,217	12/507,614	8,866,500	11/509,932	7,981,800
09/933,254	6,819,539	14/514,204		11/643,198	7,474,979
09/955,865	6,472,915	12/752,946	8,375,258	11/599,926	8,399,360
10/260,054	7,395,366	13/765,524		11/350,160	7,384,833
09/960,596	6,781,418	12/720,517	8,595,398	11/656,072	8,129,788
09/940,749	7,010,772	12/422,226	8,441,452	11/711,382	7,906,982
09/941,352	6,609,243	12/699,741		11/803,474	7,901,976
09/943,947	7,139,292	12/757,614		11/860,990	7,667,241
10/022,880	6,492,853	12/767,690	8,355,887	11/758,451	7,768,068
10/306,364	6,657,470	13/734,590	8,892,397	11/803,475	8,017,445
09/992,651	6,643,833	12/685,628	8,219,729	11/644,535	7,944,020
10/011,936	6,646,466	14/512,944		13/046,640	8,607,424
10/005,823	6,671,868	12/476,240	8,830,181	11/861,013	7,936,023
10/011,696	6,747,479	12/772,948	8,598,908	11/555,905	8,252,640
10/037,247	6,633,189	12/759,426	8,601,254	11/860,245	8,154,088
09/999,743	6,559,726	12/765,400		11/731,218	7,939,372
10/117,428	6,734,504	12/773,590	8,135,884	11/731,056	8,283,772
09/967,260	6,580,623	13/415,671	8,838,852	11/731,088	7,939,371
09/997,130	6,538,485	12/773,801		12/154,775	8,106,489
10/353,375	6,724,232	12/773,691	8,284,084	13/917,500	
09/998,675	6,654,941	12/774,680	8,487,655	13/007,533	8,643,124
10/013,869	6,771,136	13/916,386		14/172,775	

10/190,916	6,736,474	12/753,657	8,179,161	13/436,872	
10/102,256	6,826,734	13/427,264	8,558,578	11/836,683	8,119,538
10/136,111	6,710,618	14/054,657		13/401,712	8,822,349
10/008,548	6,959,421	13/740,022	8,752,033	14/562,462	
10/010,591	7,080,327	14/272,376		11/954,514	8,278,684
09/989,574	6,701,508	14/035,836		11/966,631	7,903,458
09/989,816	6,715,132	12/776,324	8,112,551	12/005,803	7,898,852
09/989,815	6,785,881	13/364,629	8,639,850	12/005,813	8,637,921
09/989,570	6,966,039	12/776,323		14/166,608	
09/989,571	7,010,773	12/762,207	8,111,097	11/894,513	8,436,460
09/989,808	7,086,014	13/367,690	8,299,850	12/006,961	8,067,284
10/002,726	7,406,674	12/748,085	8,089,383	11/904,475	8,680,601
11/818,005	8,069,428	12/754,431	8,089,384	14/225,152	
13/305,680	8,793,635	12/777,090		13/539,459	
14/445,364		12/777,130	8,832,475	11/904,506	8,614,124
10/032,986	7,143,360	12/776,565	8,125,360	13/539,461	
09/994,600	7,770,113	13/367,212	8,643,519	12/154,585	7,881,118
09/989,762	7,844,437	14/150,627		12/154,584	8,269,287
12/132,527	8,370,791	12/455,413	8,816,986	11/904,112	7,706,180
10/164,465	7,073,134	12/476,245		12/234,528	7,859,904
09/998,848	8,042,093	12/753,757	8,698,760	12/154,547	7,787,303
13/211,329		14/201,520		12/413,359	8,670,278
09/989,761	6,901,563	12/818,304	8,725,983	12/124,855	8,283,261
09/989,781	6,637,015	14/275,491		12/197,466	8,318,608
09/989,819	6,898,703	12/869,649	8,386,885	13/620,071	
10/113,580	6,654,934	13/089,464	8,861,158	13/539,458	8,940,645
10/109,743	7,035,886	13/091,067	8,786,295	13/168,711	8,691,648
10/113,586	7,231,339	13/076,733	8,364,870	13/539,463	8,592,891
10/113,581	8,103,497	13/617,161	8,645,598	12/152,518	8,063,434
10/112,237	7,103,530	12/844,798		13/288,919	8,859,374
10/112,236	7,379,860	13/950,672		14/307,858	
12/125,766	8,473,275	13/250,379	8,723,825	13/539,466	8,633,537
09/989,817	6,971,004	13/591,145	8,723,827	14/159,315	
10/327,207	7,287,112	14/275,387		11/904,470	7,880,219
10/256,829	8,533,677	12/870,706	8,547,135	13/114,889	8,860,122
13/182,431	8,527,949	14/042,268		13/436,875	
09/989,765	8,069,405	12/871,718		12/080,166	8,088,683
09/989,775	6,701,487	12/871,754		12/080,175	7,799,670
10/137,497	7,308,608	12/879,643	8,254,200	11/904,474	8,536,640

11/986,338	8,402,313	12/899,437		14/029,500	
09/994,599	7,337,407	12/900,283		14/229,069	
13/204,608	8,935,623	12/896,520		11/904,513	7,670,963
09/999,609	7,003,732	12/917,076		12/240,184	8,045,373
10/113,064	7,185,321	12/907,989	8,947,373	12/413,389	8,163,660
10/226,778	7,111,012	12/917,454	8,447,890	14/105,041	
10/001,477	8,103,496	12/902,958		12/135,335	8,737,027
10/118,682	7,100,139	13/007,014	8,773,420	12/079,802	7,859,899
10/002,217	7,765,095	13/755,709	8,704,818	12/125,864	8,093,128
09/989,777	7,774,190	14/258,905		12/185,747	8,143,129
09/998,859	6,922,821	13/008,014		12/185,751	8,679,927
09/992,076	7,526,422	13/198,717	8,901,944	13/436,878	8,871,595
12/136,557	8,112,267	13/247,922		12/242,285	8,542,514
10/109,979	7,150,002	12/981,265		12/343,617	7,969,804
10/008,096	8,078,970	13/075,762	8,773,146	12/343,658	8,125,835
10/001,478	8,160,864	14/325,582		13/407,660	8,542,541
10/001,568	7,089,175	13/037,157	8,472,276	14/035,728	
10/113,065	7,099,818	13/079,788		12/767,105	8,222,688
09/989,812	7,047,181	13/072,634	8,810,543	13/551,237	8,710,579
10/004,197	7,236,921	14/463,240		14/265,129	
09/998,834	6,957,180	13/026,434	8,825,925	13/431,069	8,710,578
10/004,039	7,162,410	13/172,749	8,482,546	12/608,886	8,071,453
10/306,381	7,046,039	13/923,037		13/312,964	
09/997,357	6,731,152	13/179,307		13/434,347	
10/029,371	6,654,309	13/180,337		12/435,320	8,143,673
10/029,530	7,012,456	13/340,667		13/892,585	
10/329,162	7,299,307	13/183,263		12/888,737	8,467,243
10/304,389	7,096,340	14/044,387		13/921,056	8,724,386
10/172,670	6,661,724	13/191,708		13/107,853	8,772,057
10/653,050	6,829,190	13/035,061		13/430,631	8,772,059
10/260,129	8,046,206	13/215,941	8,749,504	08/914,980	
10/186,466	6,727,765	12/981,332		08/587,417	6,579,777
10/238,966	7,761,845	12/974,991	8,717,331	08/515,433	5,751,507
10/054,329	7,103,381	12/983,245	8,576,189	09/017,125	6,011,420
10/113,107	7,068,739	13/185,447	8,729,913	08/539,645	5,701,024
10/073,434	7,000,057	13/073,141	8,593,431	08/581,061	5,652,182
10/306,414	7,115,462	13/216,556	8,866,493	08/581,347	6,786,998
11/543,580	7,569,449	13/217,147	8,692,795	08/666,754	6,091,129
10/124,773	7,146,454	14/137,020		08/672,050	6,004,874

10/107,687	7,142,400	13/213,430	8,965,014	08/799,200	5,821,623
10/083,442	6,680,632	13/213,895		08/799,833	5,907,784
10/132,857	6,657,472	13/213,981		08/657,718	5,770,521
10/144,676	6,847,218	13/218,090	8,941,393	08/664,252	5,610,104
10/113,180	6,912,605	13/214,048	8,493,359	08/642,777	5,872,802
10/176,976	7,131,033	13/947,596		08/615,718	5,661,418
10/134,764	7,170,179	13/548,125	8,436,627	08/897,773	5,955,897
10/328,265	6,822,899	13/549,379	8,410,795	08/649,302	5,898,315
10/146,524	6,933,786	13/233,600	8,587,546	10/160,101	6,707,112
10/146,560	7,280,574	14/035,245		08/784,207	6,004,399
10/177,818	7,085,873	13/091,132		08/744,248	6,016,012
10/112,383	6,753,988	13/247,590		08/754,521	5,977,638
10/112,013	6,801,212	13/223,702		08/683,407	5,911,887
10/196,106	6,745,264	13/247,727		08/768,885	5,897,354
10/198,508	6,757,776	13/360,296		08/693,978	6,309,971
10/179,813	7,047,460	13/277,654	8,847,911	09/866,957	6,627,547
10/177,545	7,159,065	13/249,514		08/766,608	5,763,021
10/186,910	7,346,724	13/309,674		08/769,766	5,897,371
12/031,558	7,660,936	13/436,535		08/758,223	5,861,676
12/689,857	8,041,872	13/341,285		08/740,290	6,156,645
10/160,442	7,080,189	13/238,242	8,947,377	08/933,562	6,359,316
10/177,802	6,963,986	13/246,467		08/845,302	5,825,600
11/872,499	8,078,973	13/341,596		08/820,893	5,968,851
13/324,952		13/227,149	8,558,497	08/923,103	6,689,264
10/186,465	6,959,350	13/340,246	8,570,790	08/935,705	6,165,375
10/183,141	7,107,365	13/859,669	8,630,111	09/546,714	6,406,640
11/464,472	7,275,119	14/486,137		08/911,471	6,015,718
10/325,398	6,891,429	13/247,867	8,638,316	08/871,428	5,931,173
10/260,109	7,293,118	13/246,589	8,525,609	08/939,838	6,033,991
11/983,049	7,765,344	13/801,492	8,947,142	08/885,046	6,399,462
10/260,108	7,194,638	13/248,705		08/878,728	6,555,484
10/260,081	7,069,347	13/247,951		08/852,695	5,851,892
11/279,927	7,409,027	13/431,832		08/929,308	6,586,806
10/301,768	6,798,297	13/241,514	8,903,679	08/926,611	5,914,895
10/210,279	6,768,618	13/248,355		08/885,156	5,986,932
10/154,089	7,112,974	13/231,176		08/920,539	6,036,780
10/256,502	7,055,121	13/250,336		09/036,598	6,169,322
10/197,152	6,738,834	13/248,241	8,576,633	08/998,258	5,959,889
10/229,481	6,784,717	13/247,544		08/988,942	6,097,618

10/228,436	6,801,064	13/247,248		09/253,991	6,403,488
10/218,504	7,392,495	13/430,648		08/993,036	6,054,710
10/230,184	7,340,627	13/235,714	8,576,524	08/970,107	6,140,228
12/039,624	8,732,486	13/248,326		09/688,817	6,756,302
10/256,830	8,112,615	13/632,084	8,843,664	09/006,958	6,906,421
10/327,571	7,064,596	14/491,809		09/045,269	6,207,991
10/325,204	8,156,539	13/247,779		09/052,770	6,114,724
10/330,589	7,024,506	13/629,437	8,729,911	08/986,371	5,976,900
10/184,419	6,943,560	13/247,331	8,681,122	09/022,222	6,069,382
10/198,418	7,089,338	13/247,550	8,487,909	09/045,294	6,124,157
10/233,696	6,784,700	13/940,516		09/370,411	6,161,507
10/209,088	6,759,865	13/246,565		09/052,219	6,171,180
10/251,091	6,800,495	13/538,122		09/057,783	5,952,670
10/356,449	6,825,728	13/242,703		09/565,292	6,255,180
10/269,391	6,791,898	13/240,938		09/073,033	6,221,776
10/256,680	6,842,320	13/431,425	8,878,823	09/099,655	6,187,667
10/225,658	7,511,590	14/095,930		09/759,925	6,534,398
10/251,623	7,080,222	13/434,571	8,493,360	09/057,798	6,065,128
10/234,680	6,948,030	13/336,862		09/143,899	6,534,378
10/325,011	7,433,439	13/337,438		09/151,475	6,638,856
10/295,662	7,107,036	13/428,201	8,685,813	09/144,353	5,972,124
10/294,808	6,819,185	14/201,456		09/394,819	6,302,766
10/253,960	7,017,097	13/339,822	8,692,799	09/162,107	6,316,821
10/232,920	6,737,877	13/341,847		09/965,214	6,649,447
10/277,541	6,981,238	13/340,418		09/608,158	6,834,262
10/299,429	7,024,501	13/340,453		09/259,482	6,331,728
10/324,308	6,957,309	13/340,439	8,559,262	09/964,716	6,576,491
10/309,664	6,990,618	13/340,091	8,570,809	09/207,713	6,825,544
10/324,990	7,257,147	14/066,431	8,908,438	09/491,044	6,596,466
11/827,718	7,636,382	13/340,248	8,750,051	09/281,672	6,436,848
10/327,221	6,876,563	14/286,497		10/175,139	6,887,784
10/327,217	6,836,169	13/432,038		09/326,432	6,214,743
10/328,904	7,187,705	13/340,362	8,773,913	09/300,817	6,303,496
10/305,589	6,911,857	13/432,053		09/954,382	6,822,333
11/011,626	7,352,255	13/339,099		09/345,173	6,890,860
10/335,457	6,856,181	13/326,773	8,531,235	09/385,187	6,322,716
10/318,543	6,781,465	13/331,405	8,780,640	09/426,100	6,172,907
10/376,056	7,068,091	13/339,755	8,599,618	09/421,333	6,344,281
10/773,948	7,738,496	13/430,348		09/753,137	6,562,638

10/796,859	7,394,308	13/307,350	8,896,553	09/668,604	6,911,395
10/798,657	7,176,720	13/725,822		09/405,945	6,734,108
10/773,816	7,084,662	13/429,878		09/476,669	6,969,448
10/774,180	7,233,183	13/341,857		09/593,967	6,635,566
10/778,504	7,053,662	13/338,665		09/489,256	6,305,076
10/796,872	7,162,565	13/340,971		09/904,745	6,665,929
10/786,204	7,190,191	13/421,871	8,922,527	09/593,968	6,399,512
10/809,238	7,030,662	13/421,873	8,797,301	09/871,172	6,556,487
10/784,566	7,112,975	14/332,727		09/505,737	6,727,161
10/802,977	7,642,833	13/342,096		10/436,411	8,030,172
10/796,873	7,109,763	13/340,990	8,674,672	09/670,089	6,436,799
10/804,988	7,019,576	13/427,853		10/200,396	6,624,052
10/785,599	6,970,032	13/340,349		09/714,879	6,275,425
10/808,883	7,019,585	13/975,197		09/614,157	6,362,675
10/797,147	7,173,475	13/693,905		09/556,255	6,682,772
10/801,432	7,158,429	13/427,845		09/816,425	6,376,259
10/807,909	7,033,900	13/428,721		09/864,858	6,430,093
11/411,064	8,264,043	13/536,661	8,861,271	09/864,851	6,535,446
10/823,529	7,355,880	14/512,647		10/022,119	6,459,609
10/834,950	7,057,434	13/459,206	8,675,434	09/950,560	6,445,608
10/839,817	7,334,072	13/428,320		10/233,276	6,661,696
10/839,822	7,388,350	13/424,336	8,823,664	09/797,394	6,495,413
12/118,622	8,093,864	13/429,869		09/873,772	6,597,028
12/770,601	8,310,201	13/629,281		10/076,058	6,650,158
14/529,707		13/434,642	8,294,687	10/613,427	6,894,549
10/815,057	7,068,077	13/658,761	8,766,944	10/114,535	6,538,914
10/877,932	7,535,772	13/424,361		10/190,351	6,728,093
10/847,531	8,397,034	13/435,195		10/190,350	6,853,535
10/871,582	7,088,166	13/436,015	8,779,780	10/404,941	6,717,839
10/852,272	7,301,370	13/435,890		10/719,108	7,176,824
11/986,980	7,777,521	13/802,665	8,907,738	11/611,053	7,271,744
10/876,396	7,254,792	13/431,401		10/984,065	7,116,572
10/862,737	7,796,464	13/535,541	8,875,002	11/426,165	7,313,010
10/876,944	7,274,209	13/741,145		11/021,394	7,120,220
10/850,286	7,072,989	13/741,090		11/082,526	7,142,627
10/876,990	7,409,616	13/537,877		11/875,922	7,652,909
10/871,328	7,502,878	13/591,136	8,791,753	11/929,326	7,570,090
10/875,561	7,864,157	13/599,167	8,411,062	12/415,918	8,081,500
12/470,274		13/536,238	8,432,170	12/833,817	

10/875,889	7,126,869	13/612,696		12/833,836	8,686,985
12/239,602	8,140,013	13/536,255		12/833,845	8,957,763
10/877,291	8,032,107	13/534,299	8,384,467	12/833,861	8,723,654
10/861,714	7,369,090	13/776,244		13/355,145	8,583,942
12/062,482	8,791,862	14/021,521	8,854,056	14/077,971	
14/445,494		13/628,307	8,837,657	13/490,163	8,729,874
10/877,296	7,215,246	13/431,648		13/490,254	8,665,007
10/860,856	7,728,461	13/405,071		13/490,115	8,584,959
12/790,742	8,093,765	13/528,644	8,484,838	13/490,236	8,823,267
10/857,039	7,078,944	13/528,739		13/490,285	8,729,960
10/844,719	7,135,899	14/229,524		13/490,296	8,841,890
10/847,930	7,123,065	14/318,354		13/467,831	8,949,514
10/964,040	7,276,953	13/630,876	8,416,113	13/467,849	8,934,279
10/877,909	7,046,580	13/859,621	8,816,890	13/467,874	
10/852,954	7,205,797	13/536,844	8,760,195	13/467,816	
10/889,245	7,126,391	14/137,635	8,854,081	13/569,735	8,552,515
10/943,367	7,245,162	13/538,997	8,659,317	14/026,118	
10/941,753	7,215,170	13/731,865		13/569,755	8,518,791
10/947,519	7,126,436	14/040,525	8,760,203	14/010,134	8,728,901
10/947,518	7,119,630	13/538,991		13/569,785	8,518,792
10/911,840	7,752,471	13/631,369		14/010,174	
10/942,523	7,089,133	13/564,099		13/490,267	8,669,801
10/927,979	7,183,822	13/538,291	8,842,482	13/470,117	8,916,434
10/891,339	7,752,506	13/605,092		14/514,008	
10/940,184	7,199,646	13/628,033		13/685,331	8,842,460
10/933,183	7,417,485	13/693,927		07/443,018	7,924,599
12/190,757	8,300,683	13/836,566		07/377,168	7,672,151
13/560,141	8,526,487	13/829,734		08/212,495	5,438,023
10/940,161	7,202,699	14/018,596		08/394,467	5,578,867
10/919,665	7,349,515	13/727,944		08/306,686	5,572,459
10/934,290	7,202,696	13/631,600	8,773,386	08/525,497	5,608,246
10/940,475	7,264,975	13/888,148	8,640,081	08/544,470	5,909,624
10/923,409	7,151,418	13/783,954	8,767,867	08/255,088	5,434,572
10/949,093	7,701,908	13/801,791		08/420,752	5,530,668
11/286,764	7,394,293	13/912,028		08/468,861	5,889,428
10/890,005	7,215,214	13/671,246		08/515,558	5,598,366
11/743,727	7,616,073	13/895,110		08/420,293	5,592,410
10/948,006	7,113,445	13/630,645		08/691,132	5,815,430
10/949,902	7,187,245	13/629,432		08/616,913	6,008,659

11/006,944	8,199,110	13/722,766	8,534,555	08/702,363	5,852,376
11/003,996	7,388,440	13/723,020	8,816,985	08/616,856	5,969,935
11/015,059	7,173,453	14/463,015		08/861,674	5,800,683
11/001,992	7,173,493	13/902,805	8,810,546	08/723,367	5,818,771
11/004,564	7,106,042	14/035,240	8,773,405	09/356,534	6,190,926
11/012,610	7,126,398	13/678,146	8,780,065	08/700,076	5,920,453
11/019,731	7,343,510	14/299,136		08/728,740	5,864,932
11/003,292	7,184,359	14/134,406	8,874,396	08/828,157	6,027,947
11/006,934	7,519,101	13/724,516	8,547,118	09/505,106	6,150,184
12/403,929	8,325,782	13/727,505	8,705,310	09/085,280	6,211,542
10/775,668	7,729,408	14/258,950		08/853,527	5,902,131
13/204,522	8,488,651	13/717,637	8,527,802	08/915,054	5,854,568
11/014,578	7,138,841	13/795,134	8,873,264	08/970,453	5,880,989
11/015,959	7,421,559	13/918,252	8,754,662	08/970,454	5,892,728
12/191,102	8,060,721	14/303,881		08/970,452	5,956,266
13/297,171	8,555,011	14/018,360		08/970,519	5,969,980
13/340,602	8,527,729	14/023,342		08/970,522	5,978,251
10/996,018	7,173,865	14/137,426		08/970,518	5,986,919
11/015,105	7,474,687	13/920,352	8,675,405	08/970,448	5,995,406
10/888,470	7,219,252	14/216,589		08/970,520	6,028,783
10/811,361	7,447,254	14/018,026	8,796,098	09/465,724	6,185,123
11/007,072	7,629,963	14/451,341		09/663,121	6,252,793
12/607,282	8,384,670	14/305,122		09/764,223	6,560,137
11/136,873	8,818,784	13/791,758		10/389,276	6,856,573
10/984,104	7,737,734	13/795,036	8,897,067	09/427,644	6,287,637
10/965,445	7,026,802	13/827,607	8,947,122	09/177,392	6,174,735
10/978,045	7,173,477	14/108,967		09/588,153	6,201,726
11/006,998	7,787,829	14/224,854	8,823,399	09/641,091	6,358,755
13/149,672	8,521,097	14/468,630		09/061,362	6,203,608
11/009,816	7,196,586	13/928,695		09/021,132	6,263,398
11/020,972	7,349,190	14/040,293		09/164,952	6,249,014
10/827,785	7,227,804	14/095,902	8,692,802	09/783,496	6,613,586
10/810,038	7,006,404	13/801,094		09/283,166	6,242,299
10/803,011	7,149,114	13/800,468	8,866,490	09/351,563	6,141,237
11/079,960	7,516,280	14/038,423	8,866,491	09/340,506	6,222,454
11/073,178	7,362,163	14/514,654		09/681,317	6,414,873
12/107,538	7,701,281	14/204,440	8,839,184	09/681,314	6,512,694
11/068,419	7,362,079	14/567,863		11/647,017	7,710,776
11/089,630	7,653,118	13/918,756	8,773,396	12/782,699	8,222,111

12/641,179	8,121,172	13/904,481		13/551,407	
11/075,632	7,221,200	13/930,303	8,577,644	14/599,157	
10/875,888	8,174,291	14/059,200		11/644,789	7,760,540
11/040,441	7,038,482	13/916,485	8,674,958	11/644,819	7,518,916
11/083,534	7,761,769	14/226,660		11/644,641	7,539,054
11/090,935	7,239,178	13/929,638	8,717,070	11/644,447	7,505,303
11/069,500	7,660,611	14/037,687		13/216,546	8,315,096
11/084,671	7,332,921	14/037,023	8,902,554	11/644,196	7,385,857
12/008,483	7,685,705	13/929,350	8,614,587	11/906,153	7,890,804
11/069,499	7,406,572	14/107,871		12/006,226	8,064,255
10/927,583	7,196,925	14/262,614		12/006,228	8,817,536
10/866,510	7,123,113	14/097,138	8,836,669	11/999,684	7,675,775
10/875,667	7,432,749	14/475,034		12/006,225	7,957,192
10/871,825	7,142,477	13/895,115	8,610,443	12/006,224	7,778,098
10/877,242	7,702,369	14/096,978	8,866,494	12/006,227	8,059,458
10/888,666	7,158,056	13/917,163	8,779,783	08/692,571	5,828,599
11/613,946	7,612,690	14/023,083	8,810,263	09/137,914	6,026,018
11/234,647	7,430,140	14/015,720		09/164,531	6,097,629
10/874,779	7,068,205	14/097,126		09/219,663	6,346,826
10/876,864	7,346,823	14/024,299	8,860,682	09/306,306	6,185,124
10/898,501	6,967,869	14/512,598		11/129,967	7,285,766
10/949,176	7,221,233	14/050,105	8,739,103	11/123,326	7,268,341
10/886,228	7,888,962	14/222,904		11/124,858	7,773,070
11/139,346	7,405,683	13/924,292		12/843,864	8,345,003
11/137,175	7,447,922	14/040,616	8,963,343	11/128,988	7,042,575
11/154,097	8,019,299	14/098,057	8,872,526	11/261,316	7,138,620
11/165,726	7,259,547	14/297,115		11/582,776	7,459,671
11/201,985	7,221,202	14/303,014		11/292,470	7,435,942
11/132,894	7,265,633	14/497,170		11/268,898	7,248,345
11/152,980	7,424,650	14/109,045		11/280,830	7,405,389
11/256,807	7,730,437	14/317,696		11/303,365	8,471,191
11/222,546	7,356,635	14/227,021		13/069,835	8,558,163
12/027,837	7,765,354	14/133,359	8,943,256	11/271,039	7,250,893
10/945,709	7,123,033	14/293,762		11/223,389	7,247,832
11/206,373	7,623,565	14/513,179		11/303,363	7,765,251
12/581,824	8,483,259	14/316,615	8,953,380	11/324,424	7,298,460
10/949,537	7,132,854	14/494,917		11/355,551	7,884,801
10/943,611	7,212,076	14/229,594	8,883,624	13/023,533	8,547,336
11/138,823	7,746,096	14/228,899		11/313,133	7,737,948

11/234,429	7,342,836	14/229,765		11/301,833	7,567,235
10/962,929	7,170,319	14/560,135		11/403,409	7,608,914
11/233,963	7,327,199	14/493,635		12/568,599	8,318,547
11/273,825	8,018,268	14/580,753		11/446,694	7,492,445
11/201,627	8,082,531	14/490,514		11/389,903	7,297,912
11/201,922	8,286,125	14/305,137	8,916,432	11/710,034	7,816,697
12/789,399	8,539,398	14/494,097		11/361,429	7,746,477
11/200,619	8,069,436	14/479,193		11/432,987	7,809,035
11/220,141	7,996,368	14/495,547		11/455,921	7,755,604
11/215,278	7,428,678	14/494,218	8,942,315	11/484,057	7,728,816
11/207,399	7,484,027	14/491,807		11/591,015	7,742,514
11/038,903	7,149,840	14/513,189		11/824,216	7,649,622
11/246,361	7,405,474	08/835,586	5,740,106	11/890,651	8,263,921
11/274,645	7,826,998	08/538,519	5,635,856	11/825,887	8,314,774
11/245,272	7,433,348	08/549,915	5,684,434	12/009,863	8,031,176
11/235,900	7,818,640	08/865,342	5,877,656	13/252,768	8,669,940
11/313,342	7,319,314	09/048,905	6,433,645	12/008,527	8,259,069
11/060,451	7,721,115	08/550,165	5,638,008	12/072,787	
12/754,580	8,819,811	08/578,094	5,848,285	12/009,877	7,859,240
11/027,005	7,848,703	08/576,451	5,898,701	12/413,559	7,755,348
13/287,521	8,442,437	08/624,182	5,715,205	12/317,521	8,217,334
11/262,412	7,616,513	08/609,852	5,768,196	12/286,584	8,541,727
11/247,945	7,379,375	08/635,551	5,765,214	13/171,186	8,541,728
11/193,220	7,653,123	08/596,463	5,929,671	10/112,833	6,828,678
11/303,067	7,408,827	08/594,256	5,617,057	10/113,309	6,740,588
11/340,103	7,405,987	08/627,946	5,986,489	10/850,247	7,329,934
11/095,909	7,262,586	08/669,715	5,926,035	10/325,008	7,095,647
11/329,787	7,746,181	09/324,375	6,118,299	10/122,737	6,972,265
11/346,092	7,330,389	08/584,530	5,682,356	10/184,232	6,798,691
11/384,748	7,383,370	08/852,992	5,828,617	10/241,040	6,822,278
11/347,189	7,332,976	08/911,209	5,973,545	10/180,695	6,683,815
12/070,547	8,085,100	08/592,868	6,510,487	10/281,601	6,862,215
11/510,347	8,072,834	08/605,924	5,705,937	10/277,340	6,775,191
11/348,756	7,770,096	08/762,871	5,801,934	10/321,035	6,639,831
11/153,773	7,295,051	09/007,393	5,892,670	10/319,318	6,759,339
11/097,527	7,454,645	09/276,947	5,999,425	10/786,440	7,199,055
11/365,703	7,279,925	08/594,318	5,796,289	10/699,155	7,057,919
11/380,127	7,595,674	09/067,107	6,118,321	10/809,134	7,283,384
11/415,694	7,426,142	08/625,332	5,710,778	10/745,725	7,082,053

11/408,687	7,365,569	08/658,671	5,736,867	11/039,301	7,205,164
11/391,535	7,660,167	08/635,022	5,705,921		
11/153,759	7,368,960	08/624,925	5,856,753		
11/380,333	7,956,641	08/627,250	5,745,354		
11/166,622	8,089,461	08/680,288	5,781,034		
11/415,588	7,400,183	08/723,076	5,894,241		
12/218,404	8,120,408	08/672,723	5,789,944		
11/445,957	7,636,019	08/774,293	5,936,973		
12/641,121	8,174,332	08/672,730	5,767,701		
11/277,185	7,859,355	08/671,671	5,675,542		
11/420,948	7,560,987	08/662,054	6,148,390		
11/172,691	7,405,629	09/556,772	6,347,378		
11/395,417	7,504,833	08/641,538	5,789,952		
12/367,279	8,072,230	08/669,713	5,943,488		
13/278,478	8,816,704	08/777,304	5,949,799		
11/241,078	7,583,154	08/780,167	5,850,556		
11/425,634	7,492,195	09/200,373	6,081,866		
11/403,647	7,813,213	08/711,419	6,338,109		
11/425,004	7,958,430	08/868,079	6,211,739		
11/230,719	7,375,535	08/700,249	5,764,714		
11/351,987	7,355,489	08/693,735	5,886,582		
11/509,864	7,372,321	08/746,645	5,857,085		
11/465,698	7,730,268	08/720,116	5,777,944		
12/790,712	8,060,708	08/992,199	6,005,821		
11/654,445	7,612,585	08/712,372	6,023,777		
11/427,712	7,805,113	08/730,824	6,006,305		
11/237,378	7,403,446	09/465,067	6,668,302		
11/523,122	7,518,434	08/691,357	5,812,465		
11/523,503	7,962,698	08/768,407	5,860,160		
11/261,166	7,564,923	08/939,196	6,066,963		
11/588,380	7,716,609	09/451,958	6,246,263		
11/468,195	7,609,799	09/867,132	6,426,653		
12/577,477	7,899,145	08/746,320	5,737,274		
13/038,028	8,290,109	08/754,177	5,748,021		
11/489,795	7,813,410	08/742,449	5,793,682		
11/240,936	8,044,928	08/764,027	5,821,799		
11/527,898	7,692,419	08/764,329	5,774,413		
11/281,661	7,809,973	08/766,389	5,748,048		
11/240,908	7,657,691	09/050,521	5,896,068		

11/468,569	7,853,749	08/756,634	5,751,644
12/966,338	8,417,881	08/769,241	5,864,507
11/467,346	8,112,054	09/094,786	5,936,894
11/532,592	7,660,563	08/850,511	5,953,190
11/465,439	7,439,820	08/837,782	5,917,335
11/524,615	7,501,803	08/799,835	5,881,121
11/540,831	7,479,800	09/226,748	6,088,422
11/531,886	7,660,567	08/827,271	5,923,194
11/297,505	7,746,922	08/828,434	5,923,195
11/467,067	7,642,845	08/828,325	5,912,573
11/714,951	7,994,848	08/825,359	5,912,572
11/273,708	7,307,485	08/825,484	5,920,213
11/616,779	7,893,925	08/828,319	6,084,447
13/032,640	8,462,121	08/868,062	5,923,582
11/294,913	8,063,881	08/824,369	5,907,255
11/536,108	7,439,812	08/874,006	5,848,014
12/690,067	8,222,929	08/804,025	6,041,388
11/653,533	7,755,419	08/788,524	5,900,752
11/653,532	7,830,200	08/825,482	5,929,676
11/711,966	7,656,127	08/825,489	5,917,350
11/705,986	7,705,600	08/834,942	5,828,614
11/709,866	8,067,948	08/915,984	6,058,052
13/306,840	8,717,042	08/878,904	5,852,579
14/222,227		08/932,637	6,006,347
11/729,818	8,040,142	08/828,537	5,872,473
13/047,620	8,248,084	08/877,683	5,910,742
13/590,390		08/821,617	5,841,305
11/385,235	7,586,795	08/883,971	5,903,142
12/539,503	7,952,942	08/865,667	6,111,269
13/118,353	8,325,540	08/816,877	5,864,509
11/698,660		08/855,040	5,825,715
11/712,069	7,747,911	08/971,627	6,157,582
11/343,841	7,555,664	08/991,232	6,898,101
11/703,873	7,479,913	11/103,416	7,480,165
11/704,589	7,679,422	08/839,981	6,073,193
12/724,378	7,961,029	08/990,126	5,940,345
13/109,215	8,248,143	08/884,561	5,880,999
13/312,398	8,436,672	08/884,581	6,016,277
11/411,258	7,627,838	08/881,487	6,006,172

11/321,854	7,683,701	08/933,139	5,952,868
11/337,272	7,312,616	08/991,231	5,963,487
11/983,291	7,884,621	08/934,933	5,912,569
11/339,053	7,385,793	08/908,861	6,130,842
12/130,507	7,969,698	08/920,200	5,848,265
11/339,016	7,791,851	08/934,805	5,905,389
11/699,951	7,518,420	08/935,350	5,929,664
11/567,144	7,761,232	08/879,287	5,926,041
12/815,377	8,027,789	08/949,863	5,914,844
13/245,739		08/937,597	6,060,921
11/343,341	7,339,848	08/932,315	5,936,977
11/644,100	8,085,067	09/120,678	6,286,118
11/701,215	7,777,541	08/932,638	5,953,285
11/726,525	7,859,925	08/931,989	6,115,836
11/324,111	7,756,194	08/940,682	6,545,505
11/324,110	7,796,694	08/946,030	6,201,407
11/359,205	8,239,658	08/940,437	5,966,027
11/367,139	7,265,595	09/357,716	6,696,855
11/540,216	8,035,455	08/985,890	6,111,800
11/394,982	7,721,609	09/639,454	6,324,107
11/590,385	7,932,787	08/982,730	6,061,817
11/512,544	8,683,358	09/099,915	6,360,307
11/518,482	8,112,739	09/049,823	6,023,176
11/707,201	8,813,021	08/949,861	6,049,242
11/707,202	8,701,023	09/544,962	6,265,931
11/707,178	8,387,019	08/991,845	6,366,979
11/707,200	8,028,258	08/995,381	6,023,435
13/245,662	8,661,401	09/021,719	6,081,475
11/512,545	7,503,019	08/962,860	6,147,908
11/518,002	8,176,468	08/986,440	6,054,879
13/328,881		08/998,090	6,148,435
11/344,745	8,031,270	09/058,549	6,657,241
13/243,987		08/963,843	5,968,178
11/375,852	7,835,697	08/989,707	6,107,859
11/731,605	7,495,977	08/958,464	6,097,222
11/590,361	8,174,326	08/995,494	6,124,750
11/590,287	7,741,918	09/021,461	6,278,295
11/590,362	7,961,059	09/915,823	6,538,466
11/590,433	7,912,109	09/040,033	6,225,819

11/590,149	7,813,411	09/326,804	6,496,033
11/590,483	7,701,297	09/054,654	6,005,814
11/590,078	7,948,327	09/038,552	6,118,727
11/731,606	7,728,675	09/018,758	5,963,499
11/437,507	8,121,283	09/049,952	6,119,249
13/304,301	8,873,743	09/049,887	6,028,448
11/332,676	7,184,253	09/087,656	6,211,696
11/590,481	8,072,277	09/050,242	6,209,110
11/365,066	7,141,950	09/050,243	6,181,615
11/559,599	7,327,114	09/046,962	6,057,696
11/422,926	7,660,086	09/046,757	6,160,410
11/460,444	7,809,052	09/339,602	6,181,628
11/692,887	7,902,933	09/694,397	6,314,040
11/440,924	8,059,015	09/050,548	6,466,072
13/297,046	8,482,437	09/046,960	6,198,305
13/932,672		09/106,808	6,094,095
11/726,612	7,855,862	09/086,870	6,134,686
11/394,505	8,135,880	09/153,941	6,191,607
11/396,179	8,144,125	09/128,901	6,385,265
13/047,035	8,493,351	09/104,643	6,172,553
13/948,885		09/104,919	6,166,982
11/395,674	8,111,243	09/086,124	6,084,479
13/367,720	8,610,686	09/238,953	6,262,936
14/109,571		09/878,434	6,445,645
11/442,044	8,089,472	09/238,954	6,262,937
11/442,212	8,537,121	09/878,433	6,385,128
11/432,130	8,803,813	09/238,270	6,069,839
11/437,517	8,004,497	09/521,190	6,292,403
13/204,543	8,174,507	09/179,280	6,222,387
13/442,716	8,519,973	09/105,724	6,055,177
13/975,078		09/458,552	6,329,840
13/633,845		09/093,651	6,034,546
11/437,518	7,876,309	09/499,816	6,201,409
13/012,750	8,436,824	09/322,946	6,236,230
11/479,498	8,717,302	09/275,373	6,172,571
11/484,085	8,040,321	09/347,074	6,507,932
11/983,578	8,564,252	09/276,321	6,157,178
11/757,905	7,808,275	09/370,669	6,204,685
11/818,172	7,598,812	09/087,654	6,201,408

11/756,832	7,746,159	09/805,518	6,417,693
11/506,317	7,870,508	09/104,557	6,320,881
11/477,179	8,068,097	09/246,981	6,175,259
11/478,006	7,504,876	09/689,492	6,373,306
12/380,492	7,746,160	09/161,821	6,188,255
12/825,330	8,085,085	09/782,482	6,388,478
13/324,194	8,283,972	09/105,329	6,271,702
13/648,199	8,587,365	09/208,889	6,320,811
11/904,901	7,876,133	09/167,799	6,237,107
13/013,725	8,373,455	09/192,715	6,172,542
11/497,024	8,599,144	09/107,000	6,122,203
11/839,632	7,545,694	09/106,806	5,986,970
11/471,100	8,169,421	09/126,832	5,946,255
11/480,036	7,679,302	09/103,960	6,087,858
12/723,070	8,217,609	09/132,100	5,978,280
11/541,128	7,453,230	09/150,551	6,100,739
11/636,347	7,659,776	09/392,890	6,782,064
11/493,350		09/252,123	6,122,221
11/512,042		09/456,801	6,144,580
11/489,944	7,253,643	09/706,984	6,349,055
11/600,896	8,159,462	09/441,649	6,489,805
11/601,465	8,089,288	09/398,736	6,526,470
11/645,071	8,120,584	09/396,024	6,292,013
13/401,683	8,537,119	09/159,908	6,140,880
14/029,381		09/275,336	6,191,660
11/999,676	8,026,703	09/721,316	6,515,551
11/636,116	7,821,331	10/324,455	6,753,739
11/705,288	8,089,822	09/200,219	6,378,008
11/636,060	8,902,172	09/222,578	6,323,701
11/904,246	7,598,794	09/442,851	6,215,689
11/592,075	7,884,672	09/216,460	6,275,117
11/600,255	8,547,114	09/231,211	6,405,228
13/049,798		09/277,616	6,100,560
13/917,528		09/451,959	6,467,073
11/975,967	8,217,713	09/538,989	6,625,765
11/904,642	7,852,144	09/262,430	6,181,121
11/642,025	8,373,664	09/257,468	6,134,181
11/853,144	8,610,478	09/690,294	6,298,005
		09/525,955	6,320,410

Spansion Entities:**U.S. PATENTS AND PATENT APPLICATIONS**

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	POWER-ON-RESET	07/964806 10/22/1992	5376835 12/27/1994
SPANSION LLC	FLASH EEPROM ARRAY WITH HIGH ENDURANCE	08/057583 05/06/1993	5335198 08/02/1994
SPANSION LLC	OUTPUT BUFFER CIRCUIT FOR LOW VOLTAGE EPROM	08/078711 06/17/1993	5367206 11/22/1994
SPANSION LLC	A SYSTEM FOR ALLOWING A CONTENT ADDRESSABLE MEMORY TO OPERATE WITH MULTIPLE POWER VOLTAGE LEVELS	08/083736 06/25/1993	5357458 10/18/1994
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE FOR OPTIONALLY SELECTING THE CORRESPONDENCE BETWEEN A CHIP-SELECT SIGNAL AND ADDRESS SPACE	08/087460 07/08/1993	5530818 06/25/1996
SPANSION LLC	DISTRIBUTED NEGATIVE GATE POWER SUPPLY	08/109881 08/23/1993	5406517 04/11/1995
SPANSION LLC	INDEPENDENT ARRAY GROUNDS FOR FLASH EEPROM WITH PAGED ERASE ARCHITECTURE	08/109887 08/23/1993	5365484 11/15/1994
SPANSION LLC	SECTOR-BASED REDUNDANCY ARCHITECTURE	08/112033 08/26/1993	5349558 09/20/1994
SPANSION LLC	MEMORY ARCHITECTURE FOR A THREE VOLT FLASH EEPROM	08/135224 10/13/1993	5477499 12/19/1995
SPANSION LLC	PROGRAMMED REFERENCE	08/160582 12/01/1993	5828601 10/27/1998
SPANSION LLC	FLASH EPROM DEVICE UTILIZING A SINGLE MASKING STEP FOR ETCHING AND IMPLANTING SOURCE REGIONS WITHIN THE EPROM CORE AND REDUNDANCY AREAS	08/165445 12/10/1993	5376573 12/27/1994
SPANSION LLC	NON-VOLATILE MEMORY ARRAY CONTROLLER CAPABLE OF CONTROLLING MEMORY BANKS HAVING VARIABLE BIT WIDTHS	08/166124 12/10/1993	5630099 05/13/1997
SPANSION LLC	MEMORY DEVICES AND METHOD FOR CONTROLLING THE PROGRAMMING OF SUCH MEMORY DEVICE	08/227755 04/14/1994	5530803 06/25/1996
SPANSION LLC	METHOD PROTECTING A STACKED GATE EDGE IN A SEMICONDUCTOR DEVICE FROM SELF ALIGNED SOURCE (SAS) ETCH	08/233174 04/25/1994	5470773 11/28/1995
SPANSION LLC	SUPPLY VOLTAGE-INDEPENDENT REFERENCE VOLTAGE CIRCUIT	08/265583 06/23/1994	5955874 09/21/1999

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR MANUFACTURING A NON-VOLATILE, VIRTUAL GROUND MEMORY ELEMENT	08/266744 06/28/1994	5384272 01/24/1995
SPANSION LLC	HIGH ENERGY BURIED LAYER IMPLANT TO PROVIDE A LOW RESISTANCE P-WELL IN A FLASH EPROM ARRAY	08/269478 07/01/1994	5541875 07/30/1996
SPANSION LLC	MULTISTEPPEED TRESHOLD CONVERGENCE FOR A FLASH MEMORY ARRAY	08/269540 07/01/1994	5576991 11/19/1996
SPANSION LLC	A SELF-ALIGNED BURIED CHANNEL/JUNCTION STACKED GATE FLASH MEMORY CELL	08/299868 09/01/1994	5468981 11/21/1995
SPANSION LLC	A Self-Aligned Buried Channel/Junction Stacked Gate Flash Memory Cell	08/299876 09/01/1994	5574685 11/12/1996
SPANSION LLC	ECL-TO-CMOS SIGNAL LEVEL CONVERTER	08/307466 09/19/1994	5528171 06/18/1996
SPANSION LLC	METHOD FOR ELIMINATION OF CYCLING INDUCED ELECTRON TRAPPING IN THE TUNNELING OXIDE OF 5V ONLY FLASH EPROMS	08/320368 10/11/1994	5485423 01/16/1996
SPANSION LLC	NON-VOLATILE MEMORY STRUCTURE INCLUDING PROTECTION AND STRUCTURE FOR MAINTAINING THRESHOLD STABILITY	08/322811 10/13/1994	5457336 10/10/1995
SPANSION LLC	LAYERED LOW DIELECTRIC CONSTANT TECHNOLOGY	08/330871 10/28/1994	5534731 07/09/1996
SPANSION LLC	NOVEL PROCESSING TECHNIQUES FOR ACHIEVING PRODUCTION WORTHY LOW DIELECTRIC LOW INTERCONNECT RESISTANCE AND HIGH PERFORMANCE	08/360856 12/21/1994	5550405 08/27/1996
SPANSION LLC	TIGHTENING VT DISTRIBUTION OF 5V ONLY FLASH EPROM BY RECONSTRUCTING CONSTANT ERASE BIAS CONDITION	08/362346 12/22/1994	5481494 01/02/1996
SPANSION LLC	SUPPLY VOLTAGE GENERATOR	08/365432 12/28/1994	5488327 01/30/1996
SPANSION LLC	METHOD OF ERASING UPROM TRANSISTORS	08/371704 01/12/1995	5656521 08/12/1997
SPANSION LLC	METHOD OF MAKING NON-VOLATILE MEMORY DEVICE HAVING A FLOATING GATE WITH ENHANCED CHARGE RETENTION	08/393138 02/21/1995	5801076 09/01/1998
SPANSION LLC	METHODS FOR BULK (OR BYTE) CHARGING & DISCHARGING AN ARRAY OF FLASH EEPROM MEMORY CELLS	08/393636 02/24/1995	5491657 02/13/1996
SPANSION LLC	FLASH EEPROM MEMORY WITH REDUCED COLUMN LEAKAGE CURRENT AND METHOD THEREFOR	08/403460 03/14/1995	5482881 01/09/1996

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MULTIPLE OPERATION MODE MICROCONTROLLER	08/405016 03/16/1995	5617310 04/01/1997
SPANSION LLC	CACHE MEMORY SYSTEM AND METHOD THEREOF FOR STORING A STAGED MEMORY ITEM AND A CACHE TAG WITHIN A SINGLE CACHE ARRAY STRUCTURE	08/406305 03/17/1995	5617347 04/01/1997
SPANSION LLC	CONSTANT VOLTAGE CIRCUIT	08/407248 03/20/1995	5594382 01/14/1997
SPANSION LLC	FLASH EEPROM MEMORY WITH IMPROVED DISCHARGE SPEED USING SUBSTRATE BIAS AND METHOD THEREFOR	08/420989 04/07/1995	5617357 04/01/1997
SPANSION LLC	REDUCED COLUMN LEAKAGE DURING PROGRAMMING FOR A FLASH MEMORY ARRAY	08/426716 04/21/1995	5579261 11/26/1996
SPANSION LLC	METHOD FOR READING A NON-VOLATILE MEMORY ARRAY	08/432623 05/02/1995	5581502 12/03/1996
SPANSION LLC	METHOD PROTECTING A STACKED GATE EDGE IN A SEMICONDUCTOR DEVICE FROM SELF ALIGNED SOURCE (SAS) ETCH	08/433267 05/02/1995	5534455 07/09/1996
SPANSION LLC	A METHOD FOR DECREASING THE DISCHARGE TIME OF A FLASH EPROM CELL NORDHEIM DISCHARGED OPERATION	08/450167 05/25/1995	5596531 01/21/1997
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE HAVING BIT LINE PRECHARGER	08/457588 06/01/1995	5671186 09/23/1997
SPANSION LLC	LAYERED LOW DIELECTRIC CONSTANT TECHNOLOGY	08/459957 06/02/1995	5693566 12/02/1997
SPANSION LLC	METHOD & SYSTEM FOR PROTECTING A STACKED GATE EDGE IN A SEMICONDUCTOR DEVICE FROM SELF ALIGNED SOURCE (SAS) ETCH IN A SEMI-CONDUCTOR DEVICE	08/460603 06/01/1995	5517443 05/14/1996
SPANSION LLC	NOVEL PROCESSING TECHNIQUES FOR ACHIEVING PRODUCTION WORTHY LOW DIELECTRIC LOW INTERCONNECT RESISTANCE AND HIGH PERFORMANCE	08/463448 06/05/1995	5679608 10/21/1997
SPANSION LLC	FLASH EEPROM MEMORY WITH IMPROVED DISCHARGED SPEED USING SUBSTRATE BIAS AND METHOD THEREFOR	08/464024 06/05/1995	5708588 01/13/1998
SPANSION LLC	NONVOLATILE MEMORY CELL WITH VERTICAL GATE OVERLAP AND ZERO BIRDS BEAK	08/469953 06/06/1995	5680345 10/21/1997
SPANSION LLC	METHOD OF MAKING NONVOLATILE MEMORY CELL WITH VERTICAL GATE OVERLAP AND ZERO BIRD'S BEAKS	08/474610 06/07/1995	5661055 08/26/1997

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NONVOLATILE MEMORY CELL FORMED USING SELF-ALIGNED SOURCE IMPLANT	08/474879 06/07/1995	5656513 08/12/1997
SPANSION LLC	MEMORY ARCHITECTURE FOR THREE VOLT FLASH EPROM	08/483038 06/06/1995	5579274 11/26/1996
SPANSION LLC	FLASH EEPROM ARRAY WITH FLOATING SUBSTRATE ERASE OPERATION	08/484252 06/07/1995	5598369 01/28/1997
SPANSION LLC	NON VOLATILE MEMORY CELL FORMED USING SELF ALIGNED SOURCE IMPLANT	08/484580 06/07/1995	5553018 09/03/1996
SPANSION LLC	METHOD OF INHIBITING DEGRADATION OF ULTRA SHORT CHANNEL CHARGE-CARRYING DEVICES DURING DISCHARGE	08/486192 06/07/1995	5650964 07/22/1997
SPANSION LLC	NON-VOLATILE MEMORY ARRAY WITH OVER-ERASE CORRECTION	08/487252 06/13/1995	5546340 08/13/1996
SPANSION LLC	CHANNEL HOT CARRIER PAGE WRITE	08/493138 06/21/1995	5590076 12/31/1996
SPANSION LLC	ISOLATION USING SELF ALIGNED TRENCH FORMATION AND CONVENTIONAL LOCOS	08/493640 06/22/1995	5679599 10/21/1997
SPANSION LLC	PROCESS FOR SELF-ALIGNED SOURCE FOR HIGH DENSITY MEMORY	08/500648 07/11/1995	5552331 09/03/1996
SPANSION LLC	FLASH EEPROM ARRAY WITH FLOATING SUBSTRATE ERASE OPERATION	08/508425 07/31/1995	5561620 10/01/1996
SPANSION LLC	THREE-DIMENSIONAL NON-VOLATILE MEMORY	08/510118 08/01/1995	5945705 08/31/1999
SPANSION LLC	CLOCK SIGNAL GENERATING DEVICE	08/512222 08/07/1995	5565797 10/15/1996
SPANSION LLC	INFORMATION PROCESSING DEVICE WITH DECISION CIRCUITS AND PARTITIONED ADDRESS AREAS	08/533965 09/26/1995	5822762 10/13/1998
SPANSION LLC	CORRECTION METHOD LEADING TO A UNIFORM THRESHOLD VOLTAGE DISTRIBUTION FOR A FLASH EPROM	08/534141 09/26/1995	5608672 03/04/1997
SPANSION LLC	WATCHDOG SYSTEM OF HAVING DIFFERENTIATING MEANS FOR USE IN MONITORING OF SEMICONDUCTOR WAFER TESTING LINE	08/537116 09/29/1995	5726920 03/10/1998
SPANSION LLC	A FLASH EEPROM MEMORY WITH SEPARATE REFERENCE ARRAY	08/543684 10/16/1995	5629892 05/13/1997
SPANSION LLC	A PROGRAM ERASE ALGORITHM THAT GREATLY REDUCES UNDER ERASE IN FLASH MEMORIES	08/547494 10/24/1995	5642311 06/24/1997
SPANSION LLC	TEMPERATURE COMPENSATED REFERENCE FOR OVER ERASE CORRECTION CIRCUITRY	08/551422 11/01/1995	5650966 07/22/1997

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	A NEW PROGRAM ALGORITHM FOR LOW VOLTAGE (3V) SINGLE POWER SUPPLY FLASH MEMORIES	08/551705 11/01/1995	5644531 07/01/1997
SPANSION LLC	METHOD OF ELIMINATING OR REDUCING POLY 1 OXIDATION AT STACKED GATE EDGE IN FLASH EPROM PROCESS	08/559082 11/17/1995	5789295 08/04/1998
SPANSION LLC	A FAST 3 STATE BOOSTER CIRCUIT	08/560459 11/17/1995	5708387 01/13/1998
SPANSION LLC	POWER SUPPLY INDEPENDENT CURRENT SOURCE FOR FLASH EPROM ERASE	08/566204 12/01/1995	5680348 10/21/1997
SPANSION LLC	METHOD OF FORMING A SILICON GATE TO PRODUCE SILICON DEVICES WITH IMPROVED PERFORMANCE	08/568195 09/30/1998	5981364 11/09/1999
SPANSION LLC	SELECTIVELY OXIDIZED FIELD OXIDE REGION	08/569704 12/08/1995	5869385 02/09/1999
SPANSION LLC	WAFER CLEANING PROCEDURE USEFUL IN MANUFACTURE OF A NON-VOLATILE MEMORY DEVICE	08/578178 12/29/1995	5811334 09/22/1998
SPANSION LLC	CONTROL SYSTEM FOR CHARGING BATTERIES AND ELECTRONIC APPARATUS USING SAME	08/578805 12/26/1995	5739667 04/14/1998
SPANSION LLC	SIMPLIFIED PROCESS FOR FABRICATING FLASH EEPROM CELLS	08/582720 01/04/1996	5776811 07/07/1998
SPANSION LLC	SOURCELESS FLOATING GATE MEMORY DEVICE AND METHOD OF STORING DATA	08/589750 01/22/1996	5814853 09/29/1998
SPANSION LLC	E2PROM DEVICE HAVING ERASE GATE IN OXIDE ISOLATION REGION IN SHALLOW TRENCH AND METHOD OF MANUFACTURE THEREOF	08/610688 03/04/1996	5818082 10/06/1998
SPANSION LLC	PARALLEL PAGE BUFFER VERIFY OR READ OF CELLS ON A WORD LINE USING A SIGNAL FROM A REFERENCE CELL IN A FLASH MEMORY DEVICE	08/630919 04/05/1996	5638326 06/10/1997
SPANSION LLC	TRANSIMPEDANCE AMPLIFIER	08/630994 04/12/1996	5606282 02/25/1997
SPANSION LLC	SYSTEM FOR A CONSTANT FIELD ERASURE IN A FLASH EPROM	08/634512 04/18/1996	5629893 05/13/1997
SPANSION LLC	A METHOD FOR PAGE MODE PROGRAMMING MUTI-DENSITY FLASH EPROM	08/635995 04/22/1996	5712815 01/27/1998
SPANSION LLC	SIMPLIFIED FILE MANAGEMENT SCHEME FOR FLASH MEMORY	08/651261 05/23/1996	5896393 04/20/1999

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF SCREENING MEMORY CELLS AT ROOM TEMPERATURE THAT WOULD BE REJECTED DURING HOT TEMPERATURE PROGRAMMING TESTS	08/653211 05/24/1996	5870407 02/09/1999
SPANSION LLC	METHOD OF SCREENING HOT TEMPERATURE ERASE REJECTS AT ROOM TEMPERATURE	08/655357 05/24/1996	5751633 05/12/1998
SPANSION LLC	A METHOD AND SYSTEM FOR PROVIDING A DOUBLE DIFFUSE IMPLANT JUNCTION IN A VERY SHORT CHANNEL FLASH DEVICE	08/658038 06/04/1996	5854108 12/29/1998
SPANSION LLC	USING FLOATING GATE DEVICES AS SELECT GATE DEVICES FOR NAND FLASH MEMORY AND ITS BIAS SCHEME	08/668632 06/17/1996	5793677 08/11/1998
SPANSION LLC	A MULTI-LEVEL FLASH SHIFT REGISTER PAGE BUFFER	08/669116 06/24/1996	5724284 03/03/1998
SPANSION LLC	NOVEL PROCESSING TECHNIQUES FOR ACHIEVING PRODUCTION WORTHY, LOW DIELECTRIC, LOW INTERCONNECT RESISTANCE AND HIGH PERFORMANCE ICS	08/681141 07/22/1996	5965934 10/12/1999
SPANSION LLC	FLASH EEPROM MEMORY WITH REDUCED COLUMN LEAKAGE CURRENT AND METHOD THEREFOR	08/684920 07/22/1996	5652447 07/29/1997
SPANSION LLC	BIAS SCHEME OF PROGRAM INHIBIT FOR RANDOM PROGRAMMING IN NAND FLASH MEMORY	08/686641 07/24/1996	5715194 02/03/1998
SPANSION LLC	ERASE METHOD FOR PAGE MODE MULTIPLE-BITS-PER-CELL FLASH EEPROM	08/701288 08/22/1996	5675537 10/07/1997
SPANSION LLC	AN IMPROVED ULTRATHIN OXYNITRIDE STRUCTURE AND PROCESS FOR VLSI APPLICATIONS	08/708428 09/05/1996	5939763 08/17/1999
SPANSION LLC	METHODS AND SORT FLOW TO ACHIEVE TIGHT FLASH MEMORY ARRAY PROGRAM/ERASE SPEED AND INSENSITIVE TO PROCESS VARIATIONS	08/723558 09/30/1996	5793249 08/11/1998
SPANSION LLC	METHOD OF PREVENTING TUNGSTEN SILICIDE LIFTING FROM UNDERNEATH POLYSILICON FILM	08/744962 11/07/1996	5747882 05/05/1998
SPANSION LLC	A BLOCK SELECT TRANSISTOR AND METHOD OF FABRICATION	08/745278 11/08/1996	5763307 06/09/1998
SPANSION LLC	A METHOD OF PROGRAMMING A MEMORY CELL TO CONTAIN MULTIPLE VALUES	08/745596 11/08/1996	5831901 11/03/1998
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT INCLUDING PLURALITY OF PHASE-LOCKED LOOPS	08/749672 11/15/1996	6118316 09/12/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	AN ELECTRICALLY ERASABLE REFERENCE CELL FOR ACCURATELY DETERMINING THRESHOLD VOLTAGE OF A NON-VOLATILE MEMORY AT A PLURALITY OF THRESHOLD VOLTAGE LEVELS	08/757987 11/27/1996	5774395 06/30/1998
SPANSION LLC	APPARATUS AND METHOD FOR MULTIPLE-LEVEL STORAGE IN NON-VOLATILE MEMORIES	08/757988 11/27/1996	5717632 02/10/1998
SPANSION LLC	CHARGING APPARATUS AND CURRENT/VOLTAGE DETECTOR FOR USE THEREIN	08/758890 12/02/1996	5850137 12/15/1998
SPANSION LLC	METHOD PROTECTING A STACKED GATE EDGE IN A SEMICONDUCTOR DEVICE FROM SELF ALIGNED SOURCE (SAS) ETCH	08/769178 12/18/1996	5693972 12/02/1997
SPANSION LLC	BANK ARCHITECTURE FOR A NON-VOLATILE MEMORY ENABLING SIMULTANEOUS READING AND WRITING	08/772131 12/20/1996	5867430 02/02/1999
SPANSION LLC	LOW SUPPLY VOLTAGE NEGATIVE CHARGE PUMP	08/774307 12/26/1996	5973979 10/26/1999
SPANSION LLC	OSCILLATOR HAVING SWITCHING CAPACITORS AND PHASE-LOCKED LOOP EMPLOYING SAME	08/778781 01/06/1997	5793257 08/11/1998
SPANSION LLC	CHARGING-AND-DISCHARGING DEVICE, CONSTANT-VOLTAGE AND CONSTANT-CURRENT CONTROL CIRCUIT, AND ELECTRONIC DEVICE	08/786363 08/31/1995	5905361 05/18/1999
SPANSION LLC	CHARGING-AND-DISCHARGING CONTROL DEVICE, A BATTERY PACK, AND AN ELECTRONIC APPARATUS WITH IMPROVED CHARGE AND DISCHARGE CONTROL	08/786364 01/17/1997	5801514 09/01/1998
SPANSION LLC	TRI-STATE OUTPUT CIRCUIT FOR SEMICONDUCTOR DEVICE	08/789797 01/28/1997	5883527 03/16/1999
SPANSION LLC	SYSTEM FOR A CONSTANT FIELD ERASURE IN A FLASH EPROM	08/795024 02/04/1997	5805502 09/08/1998
SPANSION LLC	HIGH VOLTAGE CMOS LEVEL SHIFTER	08/799074 02/11/1997	5821800 10/13/1998
SPANSION LLC	METHOD FOR ANNEALING DAMAGES SEMICONDUCTOR REGIONS ALLOWING FOR ENHANCED OXIDE GROWTH	08/799236 02/14/1997	5795627 08/18/1998
SPANSION LLC	NON-VOLATILE STORAGE DEVICE REFRESH TIME DETECTOR	08/801305 02/18/1997	5852582 12/22/1998
SPANSION LLC	OSCILLATION CIRCUIT AND PLL CIRCUIT USING SAME	08/805365 02/24/1997	5870000 02/09/1999

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	HIGH VOLTAGE NMOS PASS GATE FOR INTEGRATED CIRCUIT WITH HIGH VOLTAGE GENERATOR	08/808237 02/28/1997	5801579 09/01/1998
SPANSION LLC	CHANNEL HOT-CARRIER PAGE WRITE FOR NAND APPLICATIONS	08/810164 02/28/1997	5805499 09/08/1998
SPANSION LLC	METHOD OF SPACER FORMATION AND SOURCE PROTECTION AFTER SELF-ALIGNED SOURCE FORMED AND A DEVICE PROVIDED BY SUCH A METHOD	08/813562 03/07/1997	5933730 08/03/1999
SPANSION LLC	A NON-VOLATILE MEMORY DEVICES HAVING A FLOATING GATE WITH ENHANCED CHARGE RETENTION	08/815835 03/12/1997	5805013 09/08/1998
SPANSION LLC	MEMORY CELL PROGRAMMING WITH CONTROLLED CURRENT INJECTION	08/831571 06/17/1998	5856946 01/05/1999
SPANSION LLC	MULTILAYER FLOATING GATE FIELD EFFECT TRANSISTOR STRUCTURE	08/837556 04/21/1997	5889302 03/30/1999
SPANSION LLC	CHARGING-AND-DISCHARGING DEVICE, BATTERY PACK AND ELECTRONIC APPARATUS INCLUDING THEM	08/838532 04/09/1997	5808444 09/15/1998
SPANSION LLC	MULTIPLE BITS-PER-CELL FLASH EPROM MEMORY CELL WITH WIDE PROGRAM AND ERASE VT WINDOW	08/853185 05/09/1997	5790456 08/04/1998
SPANSION LLC	LEVEL CONVERTER AND SEMICONDUCTOR DEVICE	08/857269 05/16/1997	6163170 12/19/2000
SPANSION LLC	A MEMORY DEVICE USING A REDUCED WORD LINE VOLTAGE DURING READ OPERATIONS AND A METHOD OF ACCESSING SUCH A MEMORY DEVICE	08/858589 05/19/1997	5796651 08/18/1998
SPANSION LLC	TUBE FOR FLASH MINIATURE CARD	08/870045 06/05/1997	5979660 11/09/1999
SPANSION LLC	MANUFACTURING METHOD OF SEMICONDUCTOR DEVICE	08/878119 06/18/1997	5950086 09/07/1999
SPANSION LLC	A BIT LINE DISCHARGE METHOD FOR READING A MULTIPLE BITS-PER-CELL FLASH EPROM	08/884547 06/27/1997	5754475 05/19/1998
SPANSION LLC	METHOD AND APPARATUS FOR CONTROLLING THE THICKNESS OF A GATE OXIDE IN A SEMICONDUCTOR MANUFACTURING PROCESS	08/885140 06/30/1997	6271151 08/07/2001
SPANSION LLC	METHOD AND APPARATUS FOR A SEMICONDUCTOR DEVICE WITH ADJUSTABLE THRESHOLD VOLTAGE	08/891422 07/09/1997	5963824 10/05/1999

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	VOLTAGE BOOSTER CIRCUIT AND A VOLTAGE DROP CIRCUIT WITH CHANGEABLE OPERATING LEVELS	08/899565 07/24/1997	5917366 06/29/1999
SPANSION LLC	FRACTIONAL N-FREQUENCY SYNTHESIZER AND SPURIOUS SIGNAL CANCEL CIRCUIT	08/899762 07/24/1997	5818303 10/06/1998
SPANSION LLC	HIGH VOLTAGE NMOS PASS GATE HAVING SUPPLY RANGE, AREA, AND SPEED ADVANTAGES	08/914543 08/19/1997	5844840 12/01/1998
SPANSION LLC	REDUCTION OF CHARGE LOSS IN NONVOLATILE MEMORY CELLS BY PHOSPHOROUS IMPLANTATION INTO PECVD NITRIDE/OXYNITRIDE FILMS	08/917149 08/25/1997	5940735 08/17/1999
SPANSION LLC	MEMORY BLOCK SELECT USING MULTIPLE WORD LINES TO ADDRESS A SINGLE MEMORY CELL ROW	08/938048 09/26/1997	5883826 03/16/1999
SPANSION LLC	SELECTIVE BIT LINE RECOVERY IN A MEMORY ARRAY	08/938292 09/26/1997	5883841 03/16/1999
SPANSION LLC	A DUAL SOURCE SIDE POLYSILICON SELECT GATE STRUCTURE AND PROGRAMMING METHOD UTILIZING SINGLE TUNNEL OXIDE FOR NAND ARRAY FLASH MEMORY	08/940674 09/30/1997	5912489 06/15/1999
SPANSION LLC	HIGH VOLTAGE NMOS PASS GATE FOR INTEGRATED CIRCUIT WITH HIGH VOLTAGE GENERATOR AND FLASH NON-VOLATILE MEMORY DEVICE HAVING THE PASS GATE	08/944904 10/06/1997	5852576 12/22/1998
SPANSION LLC	MEMORY CELL FOR STORING AT LEAST THREE LOGIC STATES	08/947123 10/08/1997	5889697 03/30/1999
SPANSION LLC	MEMORY CELL FABRICATION EMPLOYING AN INTERPOLY GATE DIELECTRIC ARRANGED UPON A POLISHED FLOATING GATE	08/955794 10/22/1997	5888870 03/30/1999
SPANSION LLC	SKEW-REDUCTION CIRCUIT	08/967658 11/10/1997	6114890 09/05/2000
SPANSION LLC	A NON-VOLATILE MEMORY SYSTEM HAVING A PROGRAMMABLY SELECTABLE BOOT CODE SECTION SIZE	08/974971 11/20/1997	6823435 11/23/2004
SPANSION LLC	METHOD OF FABRICATING A HIGH DIELECTRIC CONSTANT INTERPOLYSILICON DIELECTRIC STRUCTURE FOR A LOW VOLTAGE NON-VOLATILE MEMORY	08/978107 11/25/1997	6020238 02/01/2000
SPANSION LLC	METHOD OF FABRICATING AN OXYNITRIDE CAPPED-HIGH DIELECTRIC CONSTANT INTERPOLYSILICON DIELECTRIC STRUCTURE FOR A LOW VOLTAGE NON-VOLATILE	08/978398 11/25/1997	6025228 02/15/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	MEMORY		
SPANSION LLC	METHOD FOR FORMING A LOW BARRIER HEIGHT OXIDE LAYER ON A SILICON SUBSTRATE	08/982186 12/17/1997	6017786 01/25/2000
SPANSION LLC	SIDEWALL SPACER FOR PROTECTING TUNNEL OXIDE DURING ISOLATION TRENCH FORMATION IN SELF ALIGNED FLASH	08/986160 12/05/1997	5981341 11/09/1999
SPANSION LLC	POLY STRINGER CLEAN-UP FOR FLASH MEMORY STRUCTURES	08/986860 12/08/1997	6001688 12/14/1999
SPANSION LLC	ELIMINATION OF POLY STRINGER WITH STRAIGHT POLY PROFILE	08/986951 12/08/1997	6046085 04/04/2000
SPANSION LLC	REDUCTION OF ONO FENCE DURING SELF-ALIGNED ETCH TO ELIMINATE POLY STRINGERS	08/986953 12/08/1997	5933729 08/03/1999
SPANSION LLC	CHARGING-AND-DISCHARGING DEVICE FOR AN ELECTRONIC APPARATUS, AND AN ELECTRONIC APPARATUS INCLUDING THE SAME, UTILIZING A CHARGING DEVICE PROVIDING A CONSTANT CHARGING CURRENT	08/989517 12/12/1997	6008629 12/28/1999
SPANSION LLC	A SEMICONDUCTOR ISOLATION PROCESS TO MINIMIZE WEAK OXIDE PROBLEMS	08/989820 12/12/1997	6002160 12/14/1999
SPANSION LLC	SEMICONDUCTOR DEVICE WITH MULTIPLE CONTACT SIZES	08/991052 12/16/1997	5994780 11/30/1999
SPANSION LLC	INTERLEVEL DIELECTRIC THICKNESS MONITOR FOR COMPLEX SEMICONDUCTOR CHIPS	08/991299 12/16/1997	6072191 06/06/2000
SPANSION LLC	PROGRAMMING OF MEMORY CELLS USING CONNECTED FLOATING GATE ANALOG REFERENCE CELL	08/991466 12/16/1997	5859796 01/12/1999
SPANSION LLC	NON-SELF-ALIGNED SIDE CHANNEL IMPLANTS FOR FLASH MEMORY CELLS	08/991687 12/16/1997	6127222 10/03/2000
SPANSION LLC	METHOD TO IMPROVE TESTING SPEED OF MEMORY	08/992077 12/17/1997	5907561 05/25/1999
SPANSION LLC	METHOD FOR FULLY PLANARIZED CONDUCTIVE LINE FOR A STACK GATE	08/992536 12/17/1997	6027998 02/22/2000
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING LOCALIZED GATE-EDGE ROUNDING WITH MINIMAL ENCROACHMENT AND GATE LIFTING	08/992616 12/17/1997	6387755 05/14/2002
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING A DRAIN SIDE POCKET IMPLANT	08/992618 12/17/1997	6103602 08/15/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR SELECTED SOURCE DURING READ AND PROGRAMMING OF FLASH MEMORY	08/992622 12/17/1997	5949718 09/07/1999
SPANSION LLC	METHODS AND ARRANGEMENTS FOR FORMING A FLATING GATE IN NON-VOLATILE MEMORY SEMICONDUCTOR DEVICES	08/992950 12/18/1997	6034394 03/07/2000
SPANSION LLC	METHODS AND ARRANGEMENTS FOR FORMING A TAPERED FLOATING GATE IN NON-VOLATILE MEMORY SEMICONDUCTOR DEVICES	08/992951 12/18/1997	5973353 10/26/1999
SPANSION LLC	METHODS AND ARRANGEMENTS FOR IMPROVED FORMATION OF CONTROL AND FLOATING GATES IN NON-VOLATILE MEMORY SEMICONDUCTOR DEVICES	08/992960 12/18/1997	6258669 07/10/2001
SPANSION LLC	NON-VOLATILE TRENCH SEMICONDUCTOR DEVICE HAVING A SHALLOW DRAIN REGION	08/992961 12/18/1997	6124608 09/26/2000
SPANSION LLC	DEVICE INTIALIZING SYSTEM WITH PROGRAMMABLE ARRAY LOGIC CONFIGURED TO CAUSE NON-VOLATILE MEMORY TO OUTPUT ADDRESS AND DATA INFORMATION TO THE DEVICE IN A PRESCRIBED SEQUENCE	08/993062 12/18/1997	6185630 02/06/2001
SPANSION LLC	METHODOLOGY FOR ACHIEVING DUAL FIELD OXIDE THICKNESS	08/993149 12/18/1997	6228746 05/08/2001
SPANSION LLC	MANUFACTURING PROCESS TO ELIMINATE POLYSTRINGERS IN HIGH DENSITY NAND-TYPE FLASH MEMORY DEVICE	08/993343 12/18/1997	5994239 11/30/1999
SPANSION LLC	MANUFACTURING PROCESS TO ELIMINATE ONO FENCE MATERIAL IN HIGH DENSITY NAND-TYPE FLASH MEMORY DEVICES	08/993344 12/18/1997	6281078 08/28/2001
SPANSION LLC	NOVEL NAND TYPE CORE CELL STRUCTURE AND CORRESPONDING PROCESS FOR HIGH DENSITY AND HIGH PERFORMANCE FLASH MEMORY DEVICE	08/993368 12/18/1997	6667511 12/23/2003
SPANSION LLC	METHODS FOR FORMING A CONTROL GATE APPARATUS IN NON-VOLATILE MEMORY SEMICONDUCTOR DEVICES	08/993409 12/18/1997	6063662 05/16/2000
SPANSION LLC	NITROGEN ION IMPLANTED AMORPHOUS SILICON TO PRODUCE OXIDATION RESISTANT AND FINER GRAIN POLYSILICON BASED FLOATING GATES	08/993443 12/18/1997	6114230 09/05/2000
SPANSION LLC	IN SITU P DOPED AMORPHOUS SILICON BY NH3 TO FORM OXIDATION RESISTANT AND FINER GRAIN FLOATING GATES	08/993444 12/18/1997	6140246 10/31/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR SOURCE-ONLY REOXIDATION AFTER JUNCTION IMPLANT FOR FLASH- MEMORY DEVICES	08/993599 12/18/1997	5940709 08/17/1999
SPANSION LLC	METHOD AND SYSTEM FOR USING A SPACER TO OFFSET IMPLANT DAMAGE AND REDUCE LATERAL DIFFUSION IN FLASH MEMORY DEVICES	08/993600 12/18/1997	6025240 02/15/2000
SPANSION LLC	SPLIT VOLTAGE FOR NAND FLASH	08/993634 12/18/1997	6005804 12/21/1999
SPANSION LLC	METHODOLOGY FOR ACHIEVING DUAL GATE OXIDE THICKNESSES	08/993716 12/18/1997	6080682 06/27/2000
SPANSION LLC	METHOD AND SYSTEM FOR GATE STACK REOXIDATION CONTROL	08/993787 12/19/1997	6015736 01/18/2000
SPANSION LLC	NON-VOLATILE TRENCH SEMICONDUCTOR DEVICE	08/993890 12/18/1997	6002151 12/14/1999
SPANSION LLC	METHOD FOR LATERALLY PEAKED SOURCE DURING PROFILES FOR BETTER ERASE CONTROL IN FLASH MEMORY DEVICES	08/994140 12/19/1997	6329257 12/11/2001
SPANSION LLC	A LOW DIELECTRIC CONSTANT MATERIAL AND METHOD OF APPLICATION TO ISOLATE CONDUCTIVE LINES	09/000739 12/30/1997	6166439 12/26/2000
SPANSION LLC	METHOD AND APPARATUS FOR PREVENTING P1 PUNCHTHROUGH	09/002783 01/05/1998	5972749 10/26/1999
SPANSION LLC	TUNGSTEN PLUG FORMATION	09/006495 01/13/1998	6235632 05/22/2001
SPANSION LLC	FLASH EPROM CELL WITH REDUCED SHORT CHANNEL EFFECT AND METHOD FOR PROVIDING SAME	09/006757 01/14/1998	6188101 02/13/2001
SPANSION LLC	FLASH MEMORY ARRAY WITH DUAL FUNCTION CONTROL LINES AND ASYMMETRICAL SOURCE AND DRAIN JUNCTIONS	09/008162 01/16/1998	6492675 12/10/2002
SPANSION LLC	PROCESS FOR FABRICATING A FLASH MEMORY WITH DUAL FUNCTION CONTROL LINES	09/008415 01/16/1998	6001689 12/14/1999
SPANSION LLC	LOW POWER PRESCALER FOR A PLL CIRCUIT	09/014250 01/27/1998	6031425 02/29/2000
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	09/015912 01/30/1998	5914903 06/22/1999
SPANSION LLC	NON-UNIFORM THRESHOLD VOLTAGE ADJUSTMENT IN FLASH EPROMS THROUGH GATE WORK FUNCTION ALTERATION	09/023241 02/13/1998	5888867 03/30/1999
SPANSION LLC	FLOATING GATE CAPACITOR FOR USE IN VOLTAGE REGULATORS	09/023497 02/13/1998	6137153 10/24/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	DOUBLE DENSITY V NONVOLATILE MEMORY CELL	09/026358 02/19/1998	5923063 07/13/1999
SPANSION LLC	MULTIPLE CHIP HYBRID PACKAGE USING BUMP TECHNOLOGY	09/032362 02/27/1998	6100593 08/08/2000
SPANSION LLC	MULTI-CHIP PACKAGING USING BUMP TECHNOLOGY	09/032398 02/27/1998	6091138 07/18/2000
SPANSION LLC	METHOD AND APPARATUS FOR CONTROLLING THE THICKNESS OF A GATE OXIDE IN A SEMICONDUCTOR MANUFACTURING PROCESS	09/033642 03/03/1998	6187092 02/13/2001
SPANSION LLC	ELIMINATION OF OXYNITRIDE (ONO) ETCH RESIDUE AND POLYSILICON STRINGERS THROUGH ISOLATION OF FLOATING GATES ON ADJACENT BITLINES BY POLYSILICON OXIDATION	09/033723 03/03/1998	6043120 03/28/2000
SPANSION LLC	ELIMINATION OF OXYNITRIDE (ONO) ETCH RESIDUE AND POLYSILICON STRINGERS THROUGH ISOLATION OF FLOATING GATES ON ADJACENT BITLINES BY POLYSILICON OXIDATION	09/033836 03/03/1998	6110833 08/29/2000
SPANSION LLC	ELIMINATION OF OXYNITRIDE (ONO) ETCH RESIDUE AND POLYSILICON STRINGERS THROUGH ISOLATION OF FLOATING GATES ON ADJACENT BITLINES BY POLYSILICON OXIDATION	09/033916 03/03/1998	6030868 02/29/2000
SPANSION LLC	NEW APPROACH FOR THE FORMATION OF SEMICONDUCTOR DEVICES WHICH REDUCES BAND-TO-BAND TUNNELING CURRENT AND SHORT-CHANNEL EFFECTS	09/040107 03/17/1998	6153487 11/28/2000
SPANSION LLC	PROCESS FOR FABRICATING A FLASH MEMORY DEVICE	09/040823 03/18/1998	6248629 06/19/2001
SPANSION LLC	NARROWER ERASE DISTRIBUTION FOR FLASH MEMORY BY SMALLER POLY GRAIN SIZE	09/045013 03/20/1998	5981339 11/09/1999
SPANSION LLC	CAPACITOR FOR USE IN A CAPACITOR DIVIDER THAT HAS A FLOATING GATE TRANSISTOR AS A CORRESPONDING CAPACITOR	09/047237 03/25/1998	6262469 07/17/2001
SPANSION LLC	TRENCHED GATE NON-VOLATILE SEMICONDUCTOR DEVICE WITH THE SOURCE/DRAIN REGIONS SPACED FROM THE TRENCH BY SIDEWALL DOPINGS	09/052057 03/30/1998	6285054 09/04/2001
SPANSION LLC	TRENCHED GATE SEMICONDUCTOR DEVICE AND METHOD FOR LOW POWER APPLICATIONS	09/052058 03/30/1998	6225659 05/01/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FULLY RECESSED SEMICONDUCTOR DEVICE	09/052061 03/30/1998	6147377 11/14/2000
SPANSION LLC	A TRENCHED GATE NON-VOLATILE SEMICONDUCTOR DEVICE AND METHOD WITH CORNER DOPING AND SIDEWALL DOPING	09/052062 03/30/1998	5990515 11/23/1999
SPANSION LLC	A DUAL SOURCE SIDE POLYSILICON SELECT GATE STUCTURE AND PROGRAMMING METHOD UTILIZING SINGLE TUNNEL OXIDE FOR NAND ARRAY FLASH MEMORY	09/063688 04/21/1998	5999452 12/07/1999
SPANSION LLC	PARTITIONED CACHE MEMORY WITH SWITCHABLE ACCESS PATHS	09/074317 05/08/1998	6535960 03/18/2003
SPANSION LLC	METHODS AND ARRANGEMENTS FOR REDUCING STRESS AND PREVENTING CRACKING IN A SILICIDE LAYER	09/076584 05/12/1998	6211074 03/15/2001
SPANSION LLC	METHODS FOR REMOVING SILICIDE RESIDUE IN A SEMICONDUCTOR DEVICE	09/076662 05/12/1998	6159794 12/12/2000
SPANSION LLC	METHODS FOR PREVENTING SILICIDE RESIDUE FORMATION IN A SEMICONDUCTOR DEVICE	09/076663 05/12/1998	6074956 06/13/2000
SPANSION LLC	DIFFERENTIAL AMPLIFIER CIRCUIT	09/076919 05/13/1998	5990742 11/23/1999
SPANSION LLC	METHOD FOR ERASING FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/085552 05/27/1998	5901090 05/04/1999
SPANSION LLC	METHOD FOR ERASING FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/085680 05/27/1998	6157572 12/05/2000
SPANSION LLC	METHOD FOR PROGRAMMING FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/085705 05/27/1998	5875130 02/23/1999
SPANSION LLC	METHODS AND ARRANGEMENTS FOR REDUCING THE STEP HEIGHT IN STACKED GATE STUCTURE WITHIN A SEMICONDUCTOR DEVICE	09/092352 06/05/1998	6034395 03/07/2000
SPANSION LLC	METHOD OF SELF-LANDING GATE ETCHING TO PREVENT GATE OXIDE DAMAGE	09/092924 06/08/1998	5948703 09/07/1999
SPANSION LLC	RTCVD OXIDE AND N2O ANNEAL FOR TOP OXIDE OF ONO FILM	09/098292 06/12/1998	6063666 05/16/2000
SPANSION LLC	A PAGE BUFFER FOR A MULTI-LEVEL FLASH MEMORY WITH A LIMITED NUMBER OF LATCHES PER MEMORY CELL	09/103041 06/23/1998	5930172 07/27/1999
SPANSION LLC	AN INTERLACED STORAGE AND SENSE TECHNIQUE FOR FLASH MULTI-LEVEL DEVICES	09/103046 06/23/1998	5973958 10/26/1999

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	EEPROM HAVING STACKED DIELECTRIC TO INCREASE PROGRAMMING SPEED	09/106177 06/29/1998	6369421 04/09/2002
SPANSION LLC	PLL FREQUENCY SYNTHESIZER WITH LOCK DETECTION CIRCUIT	09/106715 06/29/1998	6757349 06/29/2004
SPANSION LLC	A PROGRAM/VERIFY TECHNIQUE FOR MULTI-LEVEL FLASH CELLS ENABLING DIFFERENT THRESHOLD LEVELS TO BE SIMULTANEOUSLY PROGRAMMED	09/108529 07/01/1998	6091631 07/18/2000
SPANSION LLC	LOW VOLTAGE JUNCTION AND HIGH VOLTAGE JUNCTION OPTIMIZATION FOR FLASH MEMORY	09/109664 07/02/1998	6159795 12/12/2000
SPANSION LLC	SHALLOW TRENCH ISOLATION PROCESS PARTICULARLY SUITED FOR HIGH VOLTAGE CIRCUITS	09/109755 07/02/1998	6346737 02/12/2002
SPANSION LLC	DOUBLE DENSITY NON-VOLATILE MEMORY CELLS	09/110446 07/07/1998	6118147 09/12/2000
SPANSION LLC	METHOD FOR ETCHING LAYERS ON A SEMICONDUCTOR WAFER IN A SINGLE ETCHING CHAMBER	09/118375 07/17/1998	6159860 12/12/2000
SPANSION LLC	METHOD FOR ETCHING MEMORY GATE STACK USING THIN RESIST LAYER	09/118377 07/17/1998	5977601 11/02/1999
SPANSION LLC	METHOD AND STRUCTURE OF ETCHING A MEMORY CELL POLYSILICON GATE LAYER USING RESIST MASK AND ETCHED SILICON OXYNITRIDE	09/118382 07/17/1998	6110779 08/29/2000
SPANSION LLC	LOW TEMPERATURE PHOTORESIST REMOVAL FOR REWORK DURING METAL MASK FORMATION	09/119777 07/21/1998	6174819 01/16/2001
SPANSION LLC	VOLTAGE SELECTOR FOR A D/A CONVERTER	09/122646 07/27/1998	6075477 06/13/2000
SPANSION LLC	HIGH VOLTAGE NMOS PASS GATE HAVING SUPPLY RANGE, AREA, AND SPEED ADVANTAGES	09/127991 08/03/1998	5909396 06/01/1999
SPANSION LLC	VT REFERENCE VOLTAGE FOR EXTREMELY LOW POWER-SUPPLY	09/128024 08/03/1998	6100754 08/08/2000
SPANSION LLC	HIGH DENSITY MEMORY CELL ASSEMBLY AND METHODS	09/128864 08/04/1998	6417539 07/09/2002
SPANSION LLC	SEMICONDUCTOR DEVICE INCLUDING A BOOST CIRCUIT	09/131778 08/10/1998	6060914 05/09/2000
SPANSION LLC	METHOD FOR SENSING STATE OF ERASURE OF FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/132347 08/12/1998	6011721 01/04/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR TIGHTENING ERASE THRESHOLD VOLTAGE DISTRIBUTION IN FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/132981 08/12/1998	6052310 04/18/2000
SPANSION LLC	METHOD FOR FABRICATING A DOPED POLYSILICON FEATURE IN A SEMICONDUCTOR DEVICE	09/134526 08/14/1998	6107169 08/22/2000
SPANSION LLC	METHODS AND ARRANGEMENTS FOR INTRODUCING NITROGEN INTO A TUNNEL OXIDE IN A NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE	09/143090 08/28/1998	5972751 10/26/1999
SPANSION LLC	SCALABLE AND RELIABLE INTEGRATED CIRCUIT INTER-LEVEL DIELECTRIC	09/144506 08/31/1998	6124640 09/26/2000
SPANSION LLC	REDUCTION OF SILICON OXYNITRIDE FILM DELAMINATION IN INTEGRATED CIRCUIT INTER-LEVEL DIELECTRICS	09/144521 08/31/1998	6133619 10/17/2000
SPANSION LLC	METHOD FOR MANUFACTURING MEMORY DEVICE	09/146032 09/02/1998	6146795 11/14/2000
SPANSION LLC	STACKED GATE STRUCTURE FOR FLASH MEMORY APPLICATION	09/154072 09/16/1998	6060741 05/09/2000
SPANSION LLC	METAL OXIDE STACK FOR FLASH MEMORY APPLICATION	09/154073 09/16/1998	6011289 01/04/2000
SPANSION LLC	METHODS FOR FORMING NITROGEN-RICH REGIONS IN A FLOATING GATE AND INTERPOLY DIELECTRIC LAYER IN A NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE	09/154074 09/16/1998	6001713 12/14/1999
SPANSION LLC	METHOD OF MAKING FLEXIBLY PARTITIONED METAL LINE SEGMENTS FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE WITH A FLEXIBLE BANK PARTITION ARCHITECTURE	09/159023 09/23/1998	6033955 03/07/2000
SPANSION LLC	SIMULTANEOUS OPERATION FLASH MEMORY DEVICE WITH A FLEXIBLE DEVICE WITH A FLEXIBLE BANK PARTITION ARCHITECTURE	09/159142 09/23/1998	5995415 11/30/1999
SPANSION LLC	MEMORY ADDRESS DECODING CIRCUIT FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE WITH A FLEXIBLE BANK PARTITION ARCHITECTURE	09/159342 09/23/1998	6005803 12/21/1999
SPANSION LLC	BANK SELECTOR CIRCUIT FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE WITH A FLEXIBLE BANK PARTITION ARCHITECTURE	09/159489 09/23/1998	6275894 08/14/2001
SPANSION LLC	FLASH MEMORY DEVICE AND A FABRICATION PROCESS THEREOF	09/160046 09/25/1998	6507068 01/14/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SECONDARY STORAGE DEVICE USING NONVOLATILE SEMICONDUCTOR MEMORY	09/160858 09/25/1998	5963474 10/05/1999
SPANSION LLC	METHOD FOR REDUCING PROGRAM DISTURB DURING SELF-BOOSTING IN A NAND FLASH MEMORY	09/161423 09/24/1998	5991202 11/23/1999
SPANSION LLC	SELF-ALIGNING POLY 1 ONO DIELECTRIC	09/163310 09/30/1998	6242773 06/05/2001
SPANSION LLC	VIALE MEMORY CELL FORMED USING RAPID THERMAL ANNEALING	09/163315 09/30/1998	6251717 06/26/2001
SPANSION LLC	METHOD FOR ERASING FLASH ELECTRICALLY ERASABLE PROGRAMMABLE READ-ONLY MEMORY (EEPROM)	09/166384 10/05/1998	6205059 03/20/2001
SPANSION LLC	METHOD OF FORMING A COMPOSITE INTERPOLY GATE DIELECTRIC	09/170061 10/13/1998	6163049 12/19/2000
SPANSION LLC	FLASH MEMORY DEVICE HAVING HIGH PERMITTIVITY STACKED DIELECTRIC AND FABRICATION THEREOF	09/172410 10/14/1998	6048766 04/11/2000
SPANSION LLC	BIT LINE BIASING METHOD TO ELIMINATE PROGRAM DISTURBANCE IN A NON-VOLATILE MEMORY DEVICE AND MEMORY DEVICE EMPLOYING THE SAME	09/175647 10/20/1998	5978267 11/02/1999
SPANSION LLC	PROCESS FOR FABRICATING A COMMON SOURCE REGION IN MEMORY DEVICES	09/177294 10/22/1998	6211020 04/03/2001
SPANSION LLC	HIGH VOLTAGE TRANSISTOR WITH HIGH GATED DIODE BREAKDOWN VOLTAGE	09/177817 10/23/1998	6177322 01/23/2001
SPANSION LLC	HIGH VOLTAGE TRANSISTOR WITH LOW BODY EFFECT AND LOW LEAKAGE	09/182525 10/30/1998	6369433 04/09/2002
SPANSION LLC	LPCVD OXIDE AND RTA FOR TOP OXIDE OF ONO FILM TO IMPROVE RELIABILITY FOR FLASH MEMORY DEVICES	09/189227 11/11/1998	6074917 06/13/2000
SPANSION LLC	METHOD FOR FABRICATING A HIGH-DENSITY AND HIGH-RELIABILITY EEPROM DEVICE	09/198654 11/24/1998	6218245 04/17/2001
SPANSION LLC	SEMICONDUCTOR DEVICE CONTAINING P-HDP INTERDIELECTRIC LAYER	09/199265 11/25/1998	6080639 06/27/2000
SPANSION LLC	METHOD FOR IMPROVING ELECTROSTATIC DISCHARGE (ESD) ROBUSTNESS	09/199772 11/25/1998	6238975 05/29/2001
SPANSION LLC	METHOD OF FORMING ONO STACKED FILMS AND DCS TUNGSTEN SILICIDE GATE TO IMPROVE POLYCIDAL GATE PERFORMANCE FOR FLASH MEMORY DEVICES	09/205899 12/04/1998	6380029 04/30/2002
SPANSION LLC	TRANSISTOR OUTPUT CIRCUIT	09/221989 12/29/1998	6249169 06/19/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE AND METHOD OF REPRODUCING DATA OF NONVOLATILE SEMICONDUCTOR MEMORY DEVICE	09/223281 12/30/1998	5999448 12/07/1999
SPANSION LLC	EEPROM DECODER BLOCK HAVING A P-WELL COUPLED TO A CHARGE PUMP FOR CHARGING THE P-WELL AND METHOD OF PROGRAMMING WITH THE EEPROM DECODER BLOCK	09/232023 01/14/1999	6081455 06/27/2000
SPANSION LLC	SYSTEM LSI HAVING COMMUNICATION FUNCTION	09/241082 02/01/1999	6321280 11/20/2001
SPANSION LLC	METHOD FOR ETCHING SILICON LAYERS ON A SEMICONDUCTOR SUBSTRATE IN A SINGLE STEP	09/244429 02/04/1999	6515328 02/04/2003
SPANSION LLC	MEMORY DEVICE	09/247546 02/10/1999	5982661 11/09/1999
SPANSION LLC	LOW DIELECTRIC SEMICONDUCTOR DEVICE WITH RIGID, CONDUCTIVELY LINED INTERCONNECTION SYSTEM	09/252185 02/18/1999	6246118 06/12/2001
SPANSION LLC	LOW DIELECTRIC METAL SILICIDE LINED INTERCONNECTION SYSTEM	09/252186 02/18/1999	6667552 12/23/2003
SPANSION LLC	NOVEL PROCESS FOR RELIABLE ULTRATHIN OXYNITRIDE FORMATION	09/252854 09/08/1998	6245689 06/12/2001
SPANSION LLC	IN-LINE YIELD PREDICTION USING ADC DETERMINED KILL RATIOS, DIE HEALTH STATISTICS AND DIE STACKING	09/255108 02/22/1999	6338001 01/08/2002
SPANSION LLC	SHARED MEMORY ACCESS DEVICE AND METHOD	09/257040 02/25/1999	6286070 09/04/2001
SPANSION LLC	USE OF IMPLANTED IONS TO REDUCE OXIDE-NITRIDE-OXIDE (ONO) ETCH RESIDUE AND POLYSTRINGERS	09/257733 02/25/1999	6221768 04/24/2001
SPANSION LLC	EFFECT OF DOPED AMORPHOUS SI THICKNESS ON BETTER POLY 1 CONTACT RESISTANCE PERFORMANCE FOR NAND TYPE FLASH MEMORY DEVICES	09/263699 03/05/1999	6355522 03/12/2002
SPANSION LLC	METHOD TO ELIMINATE SILICIDE CRACKING FOR NAND TYPE FLASH MEMORY DEVICES BY IMPLANTING A POLISH RATE IMPROVER INTO THE SECOND POLYSILICON LAYER AND POLISHING IT	09/263701 03/05/1999	6184084 02/06/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF FORMING HIGH K TANTALUM PENTOXIDE TA205 INSTEAD OF ONO STACKED FILMS TO INCREASE COUPLING RATIO AND IMPROVE RELIABILITY FOR FLASH MEMORY DEVICES	09/263983 03/05/1999	6309927 10/30/2001
SPANSION LLC	MICROCONTROLLER HAVING PREFETCH FUNCTION	09/266869 03/12/1999	6895496 05/17/2005
SPANSION LLC	METHOD AND APPARATUS FOR PREVENTING P1 PUNCHTHROUGH	09/271330 03/18/1999	6066873 05/23/2000
SPANSION LLC	OPTICAL COMMUNICATION DEVICE AND RECEIVING CIRCUIT THEREOF	09/272298 03/19/1999	6476954 11/05/2002
SPANSION LLC	BARRIER LAYER DECREASES NITROGEN CONTAMINATION OF PERIPHERAL GATE REGIONS DURING TUNNEL OXIDE NITRIDATION	09/283308 03/31/1999	6143608 11/07/2000
SPANSION LLC	METHOD FOR TRIMMING A PHOTORESIST PATTERN LINE FOR MEMORY GATE ETCHING	09/286464 04/06/1999	6372651 04/16/2002
SPANSION LLC	RAMPED OR STEPPED GATE CHANNEL ERASE FOR FLASH MEMORY APPLICATION	09/307259 05/06/1999	6188609 02/13/2001
SPANSION LLC	LOCAL OSCILLATION CIRCUIT AND A RECEIVING CIRCUIT INCLUDING THE LOCAL OSCILLATION CIRCUIT	09/309710 05/11/1999	6366767 04/02/2002
SPANSION LLC	IMPROVED CORE FIELD ISOLATION FOR A NAND FLASH MEMORY	09/309994 05/11/1999	6228782 05/08/2001
SPANSION LLC	METHOD OF DUAL USE OF NON-VOLATILE MEMORY FOR ERROR CORRECTION	09/314575 05/18/1999	6438726 08/20/2002
SPANSION LLC	METHOD OF UTILIZING FAST CHIP ERASE TO SCREEN ENDURANCE REJECTS	09/322195 05/28/1999	6381550 04/30/2002
SPANSION LLC	THREE-DIMENSIONAL NON-VOLATILE MEMORY	09/334393 08/01/1995	6043122 03/28/2000
SPANSION LLC	METHOD OF SPACER FORMATION AND SOURCE PROTECTION AFTER SELF-ALIGNED SOURCE FORMED AND A DEVICE PROVIDED BY SUCH A METHOD	09/336057 06/18/1999	6160317 12/12/2000
SPANSION LLC	VOLTAGE BOOSTING CIRCUIT	09/343404 06/30/1999	6147923 11/14/2000
SPANSION LLC	LIGHT FLOATING GATE DOPING TO IMPORVE TUNNEL OXIDE RELIABILITY	09/348583 07/07/1999	6232630 05/15/2001
SPANSION LLC	NEW METHOD OF FORMING SELECT GATE TO IMPROVE RELIABILITY AND PERFORMANCE FOR NAND-TYPE FLASH MEMORY DEVICES	09/349603 07/09/1999	6204159 03/20/2001
SPANSION LLC	THIN FLOATING GATE AND CONDUCTIVE SELECT GATE IN SITU	09/352801 07/13/1999	6235586 05/22/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	REDUCTION OF VOLTAGE STRESS ACROSS A GATE OXIDE AND ACROSS A JUNCTION WITHIN A HIGH VOLTAGE TRANSISTOR FOR AN ERASABLE MEMORY DEVICE	09/353267 07/14/1999	6240017 05/29/2001
SPANSION LLC	SEMICONDUCTOR DEVICE WITH MULTIPLE CONTACT SIZES	09/353781 07/15/1999	6211058 04/03/2001
SPANSION LLC	METHODS AND ARRANGEMENTS FOR FORMING A SINGLE INTERPOLY DIELECTRIC LAYER IN A SEMICONDUCTOR DEVICE	09/357333 07/20/1999	6433383 08/13/2002
SPANSION LLC	DEVICE MODELING AND CHARACTERIZATION STRUCTURE WITH MULTIPLEXED PADS	09/366369 08/03/1999	6530068 03/04/2003
SPANSION LLC	METHOD FOR REDUCED GATE ASPECT RATIO TO IMPROVE GAP-FILL AFTER SPACER ETCH	09/368073 08/03/1999	6300658 10/09/2001
SPANSION LLC	METHOD FOR MONITORING SECOND GATE OVER-ETCH IN A SEMICONDUCTOR DEVICE	09/368247 08/03/1999	6323047 11/27/2001
SPANSION LLC	MULTI-STATE SENSING OF NAND MEMORY CELLS BY VARYING SOURCE BIAS	09/369600 08/06/1999	6188606 02/13/2001
SPANSION LLC	METHOD FOR PROVIDING A DOPANT LEVEL FOR POLYSILICON FOR FLASH MEMORY DEVICES	09/369638 08/06/1999	6218689 04/17/2001
SPANSION LLC	MULTI STATE SENSING OF NAND MEMORY CELLS BY APPLYING REVERSE-BIAS VOLTAGE	09/370010 08/06/1999	6166951 12/26/2000
SPANSION LLC	RAMPED GATE TECHNIQUE FOR SOFT PROGRAMMING TO TIGHTEN THE V_t DISTRIBUTION	09/370380 08/09/1999	6172909 01/09/2001
SPANSION LLC	METHOD FOR ETCHING MEMORY GATE STACK USING THIN RESIST LAYER	09/375504 08/17/1999	6383939 05/07/2002
SPANSION LLC	METHOD FOR PROTECTING GATE EDGES FROM CHARGE GAIN/LOSS IN SEMICONDUCTOR DEVICE	09/376658 08/18/1999	6248627 06/19/2001
SPANSION LLC	METHOD FOR PROTECTING GATE EDGES FROM CHARGE GAIN/LOSS IN SEMICONDUCTOR DEVICE	09/376659 08/18/1999	6808996 10/26/2004
SPANSION LLC	NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE INCLUDING ASSYMETRICALLY NITROGEN DOPED GATE OXIDE	09/377183 08/19/1999	6252276 06/26/2001
SPANSION LLC	FLASH MEMORY ARCHITECTURE EMPLOYING THREE LAYER METAL INTERCONNECT	09/379479 08/23/1999	6088287 07/11/2000
SPANSION LLC	USING POLYSILICON FUSE FOR IC PROGRAMMING	09/385550 08/30/1999	6242790 06/05/2001
SPANSION LLC	CONTINUOUS CAPACITOR DIVIDER SAMPLED REGULATION SCHEME	09/387018 08/31/1999	6411069 06/25/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	EMBEDDED METHODOLOGY TO PROGRAM/ERASE REFERENCE CELLS USED IN SENSING FLASH CELLS	09/387421 08/31/1999	6418054 07/09/2002
SPANSION LLC	MULTI LEVEL SENSING OF NAND MEMORY CELLS BY EXTERNAL BIAS CURRENT	09/388696 09/02/1999	6141244 10/31/2000
SPANSION LLC	1 TRANSISTOR FOR EEPROM APPLICATION	09/389161 09/02/1999	6141255 10/31/2000
SPANSION LLC	A FLASH MEMORY DEVICE AND FABRICATION METHOD HAVING A HIGH COUPLING RATIO	09/390052 09/03/1999	6323516 11/27/2001
SPANSION LLC	PROCESS FOR FABRICATING AN MNOS FLASH MEMORY DEVICE	09/392675 09/08/1999	6287917 09/11/2001
SPANSION LLC	PROCESS TO IMPROVE READ DISTURB FOR NAND FLASH MEMORY DEVICES	09/399414 09/20/1999	6380033 04/30/2002
SPANSION LLC	PROCESS TO REDUCE POST CYCLING PROGRAM VT DISPERSION FOR NAND FLASH MEMORY DEVICES	09/399526 09/20/1999	6284602 09/04/2001
SPANSION LLC	CONCURRENT ERASE VERIFY SCHEME FOR FLASH MEMORY APPLICATIONS	09/404078 09/23/1999	6172914 01/09/2001
SPANSION LLC	OPERATIONAL APPROACH FOR THE SUPPRESSION OF BI-DIRECTIONAL TUNNEL OXIDE OF A FLASH CELL	09/404080 09/23/1999	6049479 04/11/2000
SPANSION LLC	SEMICONDUCTOR DEVICE WITH CONTACTS HAVING A SLOPED PROFILE	09/404394 09/23/1999	6369416 04/09/2002
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING REDUCED-SIZED CONTACTS IN A SEMICONDUCTOR DEVICE	09/404395 09/23/1999	6342415 01/29/2002
SPANSION LLC	A DUAL SOURCE SIDE POLYSILICON SELECT GATE STRUCTURE AND PROGRAMMING METHOD UTILIZING SINGLE TUNNEL OXIDE FOR NAND ARRAY FLASH MEMORY	09/410512 09/30/1999	6266275 07/24/2001
SPANSION LLC	LOW THRESHOLD VOLTAGE DEVICE WITH CHARGE PUMP FOR REDUCING STANDBY CURRENT IN AN INTEGRATED CIRCUIT HAVING REDUCED SUPPLY VOLTAGE	09/411169 10/01/1999	6452441 09/17/2002
SPANSION LLC	POST BARRIER METAL CONTACT IMPLANTATION TO MINIMIZE OUT DIFFUSION FOR NAND DEVICE	09/412278 10/07/1999	6177316 01/23/2001
SPANSION LLC	METHOD AND SYSTEM FOR REDUCING SHORT CHANNEL EFFECTS IN A MEMORY DEVICE	09/412544 10/05/1999	6235584 05/22/2001
SPANSION LLC	BIT BY BIT APDE VERIFY FOR FLASH MEMORY APPLICATIONS	09/413182 10/05/1999	6122198 09/19/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	IN-SITU PROCESS FOR FABRICATING A SEMICONDUCTOR DEVICE WITH INTEGRAL REMOVAL OF ANTIREFLECTION AND ETCH STOP LAYERS	09/413621 10/06/1999	6506683 01/14/2003
SPANSION LLC	METHOD FOR REMOVING ANTI-REFLECTIVE COATING LAYER USING PLASMA ETCH PROCESS BEFORE CONTACT CMP	09/416382 10/12/1999	6291296 09/18/2001
SPANSION LLC	METHOD FOR REMOVING ANTI-REFLECTIVE COATING LAYER USING PLASMA ETCH PROCESS AFTER CONTACT CMP	09/416389 10/12/1999	6136649 10/24/2000
SPANSION LLC	MULTIPLE BYTE CHANNEL HOT ELECTRON PORGRAMMING USING RAMPED GATE WITH SOURCE BIAS	09/416563 10/11/1999	6275415 08/14/2001
SPANSION LLC	METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE WITH REDUCED MASKING AND WITHOUT ARC LOSS IN PERIPHERAL CIRCUITRY REGION	09/417130 10/13/1999	6197635 03/06/2001
SPANSION LLC	METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE WITH REDUCED ARC LOSS IN PERIPHERAL CIRCUITRY REGION	09/417131 10/13/1999	6235587 05/22/2001
SPANSION LLC	METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE WITHOUT REDUCED ARC LOSS IN PERIPHERAL CIRCUITRY REGION	09/417132 10/13/1999	6200857 03/13/2001
SPANSION LLC	CIRCUIT IMPLEMENTATION TO QUENCH BIT LINE LEAKAGE CURRENT IN PROGRAM AND AUTO PROGRAM DISTURB MODE IN FLASH EPROM USING RESISTOR SOURCE LOAD	09/417273 10/13/1999	6046932 04/04/2000
SPANSION LLC	DISTRIBUTING CFI DEVICES IN EXISTING DECODERS	09/417731 10/14/1999	6118694 09/12/2000
SPANSION LLC	METHOD AND SYSTEM FOR BI-DIRECTIONAL VOLTAGE REGULATION DETECTION	09/417732 10/14/1999	6144606 11/07/2000
SPANSION LLC	METHOD AND SYSTEM FOR SAVING OVERHEAD PROGRAM TIME IN A MEMORY DEVICE	09/419695 10/14/1999	6147906 11/14/2000
SPANSION LLC	PROGRAMMABLE CURRENT SOURCE	09/420209 10/18/1999	6185130 02/06/2001
SPANSION LLC	NITRIDE PLUG TO REDUCE GATE EDGE LIFTING	09/420220 10/18/1999	6255165 07/03/2001
SPANSION LLC	OTP SECTOR DOUBLE PROTECTION FOR A SIMULTANEOUS OPERATION FLASH MEMORY	09/420535 10/19/1999	6662262 12/09/2003
GLOBALFOUNDRIES INC. AND SPANSION LLC	SECTOR WRITE PROTECT CAMS FOR A SIMULTANEOUS OPERATION FLASH MEMORY	09/421105 10/19/1999	6125055 09/26/2000

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	LATCH CAM DATA IN A FLASH MEMORY DEVICE	09/421142 10/19/1999	6201753 03/13/2001
SPANSION LLC	SOURCE BIAS COMPENSATION FOR PAGE MODE READ OPERATION IN A FLASH MEMORY DEVICE	09/421151 10/19/1999	6118702 09/12/2000
SPANSION LLC	OUTPUT SWITCHING IMPLEMENTATION FOR A FLASH MEMORY DEVICE	09/421471 10/19/1999	6285585 09/04/2001
SPANSION LLC	WRITE PROTECT INPUT IMPLEMENTATION FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421757 10/19/1999	6331950 12/18/2001
SPANSION LLC	COMMON FLASH INTERFACE IMPLEMENTATION FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421774 10/19/1999	6163478 12/19/2000
SPANSION LLC	REFERENCE CELL BITLINE PATH ARCHITECTURE FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421775 10/19/1999	6327181 12/04/2001
SPANSION LLC	ADDRESS TRANSITION DETECT TIMING ARCHITECTURE FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421776 10/19/1999	6111787 08/29/2000
SPANSION LLC	REFERENCE CELL FOUR-WAY SWITCH FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421984 10/19/1999	6185128 02/06/2001
SPANSION LLC	LOW VOLTAGE READ CASCODE FOR 2V/3V AND DIFFERENT BANK COMBINATIONS WITHOUT METAL OPTIONS FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/421985 10/19/1999	6359808 03/19/2002
SPANSION LLC	SENSE AMPLIFIER ARCHITECTURE FOR SLIDING BANKS FOR A SIMULTANEOUS OPERATION FLASH MEMORY	09/422198 10/19/1999	6259633 07/10/2001
SPANSION LLC	OUTPUT MULTIPLEXING IMPLEMENTATION FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/422199 10/19/1999	6118698 09/12/2000
SPANSION LLC	A METHOD FOR ACHIEVING A HIGH-COUPLING RATIO IN FLASH MEMORY DEVICES	09/422282 10/21/1999	
SPANSION LLC	PROCESS FOR FABRICATING A BIT-LINE IN MONOS DEVICE USING A DUAL LAYER HARD MASK	09/426205 10/25/1999	6248635 06/19/2001
SPANSION LLC	A METHOD TO GENERATE A MONOS TYPE FLASH CELL USING POLYCRYSTALLINE SILICON AS AN ONO TOP LAYER	09/426239 10/25/1999	6218227 04/17/2001
SPANSION LLC	METHOD OF USING SOURCE/DRAIN NITRIDE FOR PERIPHERY FIELD OXIDE AND BIT-LINE OXIDE	09/426255 10/25/1999	6207502 03/27/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF FABRICATING A MONOS FLASH CELL USING SHALLOW TRENCH ISOLATION	09/426427 10/25/1999	6326268 12/04/2001
SPANSION LLC	METHOD FOR FABRICATING AN ONO DIELETRIC BY NITRIDATION FOR MNOS MEMORY CELLS	09/426430 10/25/1999	6248628 06/19/2001
SPANSION LLC	HIGH TEMPERATURE OXIDE DEPOSITION PROCESS FOR FABRICATING AN ONO FLOATING-GATE ELECTRODE IN A TWO BIT EEPROM DEVICE	09/426672 10/25/1999	6265268 07/24/2001
SPANSION LLC	PROCESS FOR FORMING A BIT-LINE IN A MONOS DEVICE	09/426743 10/25/1999	6297143 10/02/2001
SPANSION LLC	MICROPROCESSOR FOR CONTROLLING BUSSES	09/426757 10/26/1999	6516378 02/04/2003
SPANSION LLC	INTEGRATED METHOD BY USING HTO FOR TOP OXIDE AND PERIPHERY GATE OXIDE	09/427402 10/25/1999	6117730 09/12/2000
SPANSION LLC	PROCESS FOR FABRICATING A BIT-LINE USING BURIED DIFFUSION ISOLATION	09/427404 10/25/1999	6242305 06/05/2001
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING A POLYSILICON STRINGER MONITOR	09/429244 10/28/1999	6448609 09/10/2002
SPANSION LLC	PROCESS FOR FABRICATING HIGH DENSITY MEMORY CELLS USING A METALLIC HARD MASK	09/429722 10/29/1999	6399446 06/04/2002
SPANSION LLC	BIASING SCHEME TO REDUCE STRESS ON NON-SELECTED CELLS DURING READ	09/430336 10/29/1999	6147907 11/14/2000
SPANSION LLC	POLISHED FLASH PROCESS WITH METAL GATES AND IMPROVED PLANARITY	09/430366 10/28/1999	6867097 03/15/2005
SPANSION LLC	SOLID-SOURCE DOPING FOR SOURCE/DRAIN TO ELIMINATE IMPLANT DAMAGE	09/430410 10/29/1999	6329273 12/11/2001
SPANSION LLC	PROCESS FOR FABRICATING HIGH DENSITY MEMORY CELLS USING A POLYSILICON HARD MASK	09/430493 10/29/1999	6436766 08/20/2002
SPANSION LLC	METHOD FOR FORMING FLASH MEMORY DEVICES	09/430765 10/29/1999	6180454 01/30/2001
SPANSION LLC	SPACER NARROWED, DUAL WIDTH CONTACT FOR CHARGE GAIN REDUCTION	09/430848 11/01/1999	6441418 08/27/2002
SPANSION LLC	WORD LINE TRACKING IN WHOLE CHIP	09/431296 10/29/1999	6163481 12/19/2000
SPANSION LLC	NITRIDATION PROCESS FOR FABRICATING AN ONO FLOATING GATE ELECTRODE IN A TWO-BIT EEPROM DEVICE	09/433037 10/25/1999	6319775 11/20/2001
SPANSION LLC	PROCESS FOR FABRICATING AN ONO STRUCTURE HAVING A SILICON-RICH SILICON NITRIDE LAYER	09/433041 10/25/1999	6406960 06/18/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	PROCESS FOR FABRICATING AN ONO STRUCTURE	09/433186 10/25/1999	6458677 10/01/2002
SPANSION LLC	DOUBLE DENSITY NON-VOLATILE MEMORY CELLS	09/436503 11/09/1999	6232632 05/15/2001
SPANSION LLC	SEMICONDUCTOR ISOLATION PROCESS TO MINIMIZE WEAK OXIDE PROBLEMS	09/440934 11/16/1999	6309949 10/30/2001
SPANSION LLC	SELECTOR AND MULTILAYER INTERCONNECTION WITH REDUCED OCCUPIED AREA ON SUBSTRATE	09/441134 11/17/1999	6608612 08/19/2003
SPANSION LLC	BIASING METHOD AND STRUCTURE FOR REDUCING BAND-TO-BAND AND/OR AVALANCHE CURRENTS DURING THE ERASE OF FLASH MEMORY DEVICES	09/461376 12/15/1999	6236596 05/22/2001
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING CURRENT AUXILIARY CIRCUIT FOR OUTPUT CIRCUIT	09/468938 12/22/1999	6181610 01/30/2001
SPANSION LLC	FULLY RECESSED SEMICONDUCTOR DEVICE AND METHOD FOR LOW POWER APPLICATIONS WITH SINGLE WRAP AROUND BURIED DRAIN REGION	09/470568 12/22/1999	6225161 05/01/2001
SPANSION LLC	APPARATUS FOR ESTIMATING MICROCONTROLLER AND METHOD THEREOF	09/472005 12/27/1999	6598176 07/22/2003
SPANSION LLC	METHODS AND ARRANGEMENTS FOR FORMING A FLATING GATE IN NON-VOLATILE MEMORY SEMICONDUCTOR DEVICES	09/476121 01/03/2000	6274433 08/14/2001
SPANSION LLC	USE OF ETCH TO BLUNT GATE CORNERS	09/476584 01/03/2000	6238978 05/29/2001
SPANSION LLC	DEPOSITED SCREEN OXIDE FOR REDUCING GATE EDGE LIFTING	09/476906 01/03/2000	6518072 02/11/2003
SPANSION LLC	METHOD AND SYSTEM FOR USING A SPACER TO OFFSET IMPLANT DAMAGE AND REDUCE LATERAL DIFFUSION IN FLASH MEMORY DEVICES	09/478864 01/07/2000	6410956 06/25/2002
SPANSION LLC	METHOD AND SYSTEM FOR PROCESSING A SEMICONDUCTOR DEVICE	09/483176 01/13/2000	6638358 10/28/2003
SPANSION LLC	INTEGRATED CIRCUIT INCORPORATING A MEMORY CELL AND A TRANSISTOR ELEVATED ABOVE AN INSULATING BASE	09/483557 01/14/2000	6225646 05/01/2001
SPANSION LLC	PROCESS FOR FABRICATING AN EEPROM DEVICE HAVING A POCKET SUBSTRATE REGION	09/487073 01/19/2000	6376308 04/23/2002
SPANSION LLC	PROCESS FOR FABRICATING A SEMICONDUCTOR DEVICE HAVING A GRADED JUNCTION	09/487922 01/19/2000	6168993 01/02/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CHARGE GAIN/CHARGE LOSS JUNCTION LEAKAGE PREVENTION FOR FLASH TECHNOLOGY BY USING ISOLATION/CAPPING LAYER BETWEEN LIGHTLY DOPED DRAIN AND GATE	09/487964 01/18/2000	6465835 10/15/2002
SPANSION LLC	HIGH SPEED CHARGING OF CORE CELL DRAIN LINES IN A MEMORY DEVICE	09/489232 01/21/2000	6236603 05/22/2001
SPANSION LLC	DISTRIBUTED VOLTAGE CHARGE CIRCUITS TO REDUCE SENSING TIME IN A MEMORY DEVICE	09/490340 01/24/2000	6212108 04/03/2001
SPANSION LLC	METHOD TO PROVIDE A REDUCED CONSTANT E-FIELD DURING ERASE OF EEPROMS FOR RELIABILITY IMPROVEMENT	09/490351 01/24/2000	6160740 12/12/2000
SPANSION LLC	BACKGROUND CORRECTION FOR CHARGE GAIN AND LOSS	09/490352 01/24/2000	6178117 01/23/2001
SPANSION LLC	REDUCTION OF OXIDE STRESS THROUGH THE USE OF FORWARD BIASED BODY VOLTAGE	09/490353 01/24/2000	6137727 10/24/2000
SPANSION LLC	NITRADATION BARRIERS FOR NITRIDATED TUNNEL OXIDE FOR CIRCUITRY FOR FLASH TECHNOLOGY AND FOR LOCOS/STI ISOLATION	09/491457 01/26/2000	6509604 01/21/2003
SPANSION LLC	METHOD AND APPARATUS FOR IMPROVED PERFORMANCE OF FLASH MEMORY CELL DEVICES	09/492243 01/27/2000	6812521 11/02/2004
SPANSION LLC	TWO-BIT FLASH CELL WITH TWO FLOATING GATE REGIONS	09/492353 01/27/2000	6329687 12/11/2001
SPANSION LLC	NITRIDATED TUNNEL OXIDE BARRIERS FOR FLASH MEMORY TECHNOLOGY CIRCUITRY	09/492931 01/27/2000	6787840 09/07/2004
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS AND INTERCONNECTION LINES USING DUAL DAMASCENE TECHNIQUES	09/493436 01/29/2000	6359307 03/19/2002
SPANSION LLC	NITRIDIZATION OF THE PRE-DDI SCREEN OXIDE	09/495213 01/31/2000	6294430 09/25/2001
SPANSION LLC	METHOD TO REDUCE READ GATE DISTURB FOR FLASH EEPROM APPLICATION	09/495214 01/31/2000	6240016 05/29/2001
SPANSION LLC	APDE SCHEME FOR FLASH MEMORY APPLICATION	09/495215 01/31/2000	6198664 03/06/2001
SPANSION LLC	ERASE SCHEME TO TIGHTEN THE THRESHOLD VOLTAGE DISTRIBUTION OF EEPROM FLASH MEMORY CELLS	09/495216 01/31/2000	6285588 09/04/2001
SPANSION LLC	NOISE REDUCTION DURING SIMULTANEOUS OPERATION FOR FLASH MEMORY DEVICE	09/498205 02/04/2000	6160750 12/12/2000
SPANSION LLC	DRIVING CIRCUIT FOR SUPPLYING TONE VOLTAGES TO LIQUID CRYSTAL DISPLAY PANEL	09/501009 02/09/2000	6747624 06/08/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	IMPROVED VOLTAGE BOOST RESET CIRCUIT FOR A FLASH MEMORY	09/501159 02/09/2000	6243316 06/05/2001
SPANSION LLC	SIMULTANEOUS PROGRAM, PROGRAM VERIFY SCHEME	09/501448 02/10/2000	6215705 04/10/2001
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS USING CONSUMABLE SPACERS	09/502153 02/11/2000	6348379 02/19/2002
SPANSION LLC	SEMICONDUCTOR DEVICE WITH SELF-ALIGNED CONTACTS USING A LINER OXIDE LAYER	09/502163 02/11/2000	6420752 07/16/2002
SPANSION LLC	INTEGRATED CIRCUIT HAVING INCREASED GATE COUPLING CAPACITANCE	09/504087 02/15/2000	6682978 01/27/2004
SPANSION LLC	METHOD OF ERASING NON-VOLATILE MEMORY CELLS	09/504695 02/16/2000	6266281 07/24/2001
SPANSION LLC	METHOD OF MAINTAINING CONSTANT ERASING SPEED FOR NON-VOLATILE MEMORY CELLS	09/504696 02/26/2000	6215702 04/10/2001
SPANSION LLC	SUBSTRATE HOLE INJECTION FOR NEUTRALIZING SPILLOVER CHARGE GENERATED DURING PROGRAMING OF A NON-VOLATILE MEMORY CELL	09/505259 02/16/2000	6243300 06/05/2001
SPANSION LLC	MEMORY CELL STRUCTURE FOR ELIMINATION OF OXYNITRIDE (ONO) ETCH RESIDUE AND POLYSILICON STRINGERS	09/506298 02/17/2000	6455888 09/24/2002
SPANSION LLC	HIGH SPEED SENSING TO DETECT WRITE PROTECT STATE IN A FLASH MEMORY DEVICE	09/506351 02/17/2000	6285583 09/04/2001
SPANSION LLC	METHOD FOR REMOVING SEMICONDUCTOR ARC USING ARC CMP BUFFING	09/507810 02/22/2000	6410443 06/25/2002
SPANSION LLC	VARIABLE PULSE WIDTH MEMORY PROGRAMMING	09/511874 02/25/2000	6343033 01/29/2002
SPANSION LLC	HIGH SPEED, HIGH PRECISION, POWER SUPPLY AND PROCESS INDEPENDENT BOOST LEVEL CLAMPING TECHNIQUE	09/512617 02/25/2000	6225849 05/01/2001
SPANSION LLC	DYNAMIC MEMORY CELL PROGRAMMING VOLTAGE	09/512854 02/25/2000	6205055 03/20/2001
SPANSION LLC	DOUBLE SELF-ALIGNING SHALLOW TRENCH ISOLATION SEMICONDUCTOR AND MANUFACTURING METHOD THEREFOR	09/513260 02/24/2000	6376877 04/23/2002
SPANSION LLC	SEMICONDUCTOR WITH INCREASED GATE COUPLING COEFFICIENT	09/513261 02/24/2000	6448606 09/10/2002
SPANSION LLC	A SYSTEM FOR ERASING A MEMORY CELL	09/514560 02/28/2000	6246611 06/12/2001
SPANSION LLC	FLASH MEMORY CELLS HAVING A MODULATION DOPED METEROJUNCTION	09/516472 03/01/2000	6207978 03/27/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	STRUCTURE		
SPANSION LLC	OUTPUT CIRCUIT AND BATTERY PACK	09/516785 03/01/2000	6218810 04/17/2001
SPANSION LLC	NAND FLASH MEMORY WITH SPECIFIED GATE OXIDE THICKNESS	09/522247 03/09/2000	6429479 08/06/2002
SPANSION LLC	WORDLINE VOLTAGE PROTECTION	09/523816 03/13/2000	6285594 09/04/2001
SPANSION LLC	CHAINED ARRAY OF SEQUENTIAL ACCESS MEMORIES ENABLING CONTINUOUS READ	09/525078 03/14/2000	6622201 09/16/2003
SPANSION LLC	MULTIPLE BANK SIMULTANEOUS OPERATION FOR A FLASH MEMORY	09/526239 03/15/2000	6240040 05/29/2001
SPANSION LLC	PHASE COMPARATOR AND METHOD OF CONTROLLING POWER SAVING OPERATION OF THE SAME, AND SEMICONDUCTOR INTEGRATED CIRCUIT	09/531677 03/20/2000	7103132 09/05/2006
SPANSION LLC	METHOD OF FORMING A NAND-TYPE FLASH MEMORY DEVICE HAVING A NON-STACKED SELECT GATE TRANSISTOR STRUCTURE	09/531749 03/20/2000	6316293 11/13/2001
SPANSION LLC	FLASH MEMORY WITH LESS SUSCEPTIBILITY TO CHARGE GAIN AND CHARGE LOSS	09/532293 03/23/2000	6486506 11/26/2002
SPANSION LLC	HIGH VOLTAGE TRANSISTOR WITH MODIFIED FIELD IMPLANT MASK	09/533057 03/22/2000	6351017 02/26/2002
SPANSION LLC	METHOD AND SYSTEM FOR REDUCING CHARGE GAIN AND CHARGE LOSS IN INTERLAYER DIELECTRIC FORMATION	09/533617 03/22/2000	6635943 10/21/2003
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE	09/534507 03/24/2000	6368916 04/09/2002
SPANSION LLC	METHOD FOR FORMING HIGH QUALITY MULTIPLE THICKNESS OXIDE LAYERS BY REDUCING DESCUM INDUCED DEFECTS	09/535255 03/23/2000	6432618 08/13/2002
SPANSION LLC	PLANARIZATION OF A POLYSILICON LAYER SURFACE BY CHEMICAL MECHANICAL POLISH TO IMPROVE LITHOGRAPHY AND SILICIDE FORMATION	09/538168 03/30/2000	6346466 02/12/2002
SPANSION LLC	CLOCK CONTROL CIRCUIT	09/538523 03/30/2000	6529083 03/04/2003
SPANSION LLC	COMPARATOR AND VOLTAGE CONTROLLED OSCILLATOR CIRCUIT	09/538720 03/30/2000	6456170 09/24/2002
SPANSION LLC	METHOD AND SYSTEM FOR FABRICATING A FLASH MEMORY ARRAY	09/538922 03/30/2000	6306706 10/23/2001
SPANSION LLC	METHOD AND SYSTEM FOR PROCESSING A SEMICONDUCTOR DEVICE	09/539307 03/30/2000	6448594 09/10/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING CONTACT TO A FIRST POLYSILICON LAYER IN A FLASH MEMORY DEVICE	09/539458 03/30/2000	8183619 05/22/2012
SPANSION LLC	USE OF GASEOUS SILICON HYDRIDES AS A REDUCING AGENT TO REMOVE RE-SPUTTERED SILICON OXIDE	09/543484 04/06/2000	6530997 03/11/2003
SPANSION LLC	VARIABLE GAIN AMPLIFIER WITH GAIN CONTROL VOLTAGE BRANCH CIRCUIT	09/543893 04/06/2000	6333675 12/25/2001
SPANSION LLC	NEW METHOD TO FABRICATE A HIGH COUPLING FLASH CELL WITH LESS SILICIDE SEAM PROBLEM	09/543991 04/06/2000	6232635 05/15/2001
SPANSION LLC	ADDRESS TRANSITION DETECT TIMING ARCHITECTURE FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE	09/547556 04/12/2000	6208556 03/27/2001
SPANSION LLC	TRIMMING METHOD AND SYSTEM FOR WORDLINE BOOSTER TO MINIMIZE PROCESS VARIATION OF BOOSTED WORDLINE VOLTAGE	09/547660 04/12/2000	6430087 08/06/2002
SPANSION LLC	CHARGE SHARING TO HELP BOOST THE WORDLINES DURING APDE VERIFY	09/547747 04/12/2000	6269026 07/31/2001
SPANSION LLC	CONTROL SYSTEM FOR CHARGING BATTERIES AND ELECTRONIC APPARATUS USING SAME	09/548213 04/12/2000	RE42,114 02/08/2011
SPANSION LLC	METHOD OF HIGH DENSITY PLASMA METAL ETCHING	09/548616 04/13/2000	6534411 03/18/2003
SPANSION LLC	INTERLEVEL DIELECTRIC THICKNESS MONITOR FOR COMPLEX SEMICONDUCTOR CHIPS	09/548741 04/13/2000	6350627 02/26/2002
SPANSION LLC	CHARGE AND DISCHARGE CONTROL CIRCUIT AND APPARATUS FOR SECONDARY BATTERY	09/556306 04/24/2000	6194871 02/27/2001
SPANSION LLC	MATCHING LOADING BETWEEN REFERENCE AND CELL WITH REDUCED TRANSISTOR COUNT IN A DUAL-BANK FLASH MEMORY	09/557728 04/26/2000	6259645 07/10/2001
SPANSION LLC	AUTO-ADJUSTING WINDOW PLACEMENT SCHEME FOR AN NROM VIRTUAL GROUND ARRAY	09/557832 04/26/2000	6222768 04/24/2001
SPANSION LLC	APPARATUS AND METHOD TO CHARACTERIZE THE THRESHOLD DISTRIBUTION IN AN NROM VIRTUAL GROUND ARRAY	09/558764 04/26/2000	6201737 03/13/2001
SPANSION LLC	METHODOLOGY FOR ACHIEVING DUAL GATE OXIDE THICKNESSES	09/562442 05/01/2000	6232244 05/15/2001
SPANSION LLC	FLASH MEMORY ARRAY AND A METHOD AND SYSTEM OF FABRICATION THEREOF	09/563179 05/02/2000	6610580 08/26/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING CONTACTS WITH GREATER TOLERANCE FOR MISALIGNMENT IN A FLASH MEMORY	09/563797 05/02/2000	6445051 09/03/2002
SPANSION LLC	MULTIPURPOSE GRADED SILICON OXYNITRIDE CAP LAYER	09/567534 05/10/2000	6306758 10/23/2001
SPANSION LLC	SEMICONDUCTOR MANUFACTURING METHOD USING A HIGH EXTINCTION COEFFICIENT DIELECTRIC PHOTOMASK	09/586254 05/31/2000	6294460 09/25/2001
SPANSION LLC	METHOD FOR USING A LOW DIELECTRIC CONSTANT LAYER AS A SEMICONDUCTOR ANTI-REFLECTIVE COATING	09/586264 05/31/2000	6348406 02/19/2002
SPANSION LLC	METHOD FOR ELIMINATING ANTI-REFLECTIVE COATING IN SEMICONDUCTORS	09/588117 05/31/2000	6376389 04/23/2002
SPANSION LLC	METHOD FOR CREATING PARTIALLY UV TRANSPARENT ANTI-REFLECTIVE COATING FOR SEMICONDUCTORS	09/588119 05/31/2000	6380067 04/30/2002
SPANSION LLC	ANTI-REFLECTIVE INTERPOLY DIELECTRIC	09/591266 06/06/2000	7964905 06/21/2011
SPANSION LLC	ACTIVATION OF WORDLINE DECODERS TO TRANSFER A HIGH VOLTAGE SUPPLY	09/592474 06/09/2000	6359824 03/19/2002
SPANSION LLC	METHOD TO REDUCE CAPACITIVE LOADING IN FLASH MEMORY X-DECODER FOR ACCURATE VOLTAGE CONTROL AT WORDLINES AND SELECT LINES	09/593303 06/13/2000	6208561 03/27/2001
SPANSION LLC	FLASH MEMORY HAVING PRE-INTERPOLY DIELECTRIC TREATMENT LAYER AND METHOD OF FORMING	09/594207 06/14/2000	6512264 01/28/2003
SPANSION LLC	FLASH MEMORY HAVING A TREATMENT LAYER DISPOSED BETWEEN AN INTERPOLY DIELECTRIC STRUCTURE AND METHOD OF FORMING	09/595166 06/15/2000	6306777 10/23/2001
SPANSION LLC	VOLTAGE BOOST LEVEL CLAMPING CIRCUIT FOR A FLASH MEMORY	09/595519 06/16/2000	6351420 02/26/2002
SPANSION LLC	DUAL BIT ISOLATION SCHEME FOR FLASH DEVICES	09/596449 06/19/2000	6261904 07/17/2001
SPANSION LLC	DUAL BIT ISOLATION SCHEME FOR FLASH DEVICES	09/597358 06/19/2000	6355514 03/12/2002
SPANSION LLC	VOLTAGE PROTECTION OF WRITE PROTECT CAMS	09/602095 06/22/2000	6212098 04/03/2001
SPANSION LLC	APPARATUS AND METHOD OF DIRECT CURRENT SENSING FROM SOURCE SIDE IN A VIRTUAL GROUND ARRAY	09/602328 06/23/2000	6272043 08/07/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	DUAL-PURPOSE ANTI-REFLECTIVE COATING AND SPACER FOR FLASH MEMORY AND OTHER DUAL GATE TECHNOLOGIES AND METHOD FOR FORMING	09/607675 06/30/2000	6798002 09/28/2004
SPANSION LLC	SPECIES IMPLANTATION FOR MINIMIZING INTERFACE DEFECT DENSITY IN FLASH MEMORY DEVICES	09/609468 07/03/2000	6284600 09/04/2001
SPANSION LLC	TEMPERATURE COMPENSATED BIAS GENERATOR	09/610764 07/06/2000	6205074 03/20/2001
SPANSION LLC	METHOD AND STRUCTURE OF ETCHING A MEMORY CELL POLYSILICON GATE LAYER USING RESIST MASK AND ETCHED SILICON OXYNITRIDE	09/617820 07/17/2000	6452225 09/17/2002
SPANSION LLC	FULLY RECESSED SEMICONDUCTOR DEVICE AND METHOD FOR LOW POWER OPERATIONS	09/620339 07/20/2000	6344393 02/05/2002
SPANSION LLC	PROCESS FOR OPTIMIZING POCKET IMPLANT PROFILE BY RTA IMPLANT ANNEALING FOR A NON-VOLATILE SEMICONDUCTOR DEVICE	09/620480 07/20/2000	6410388 06/25/2002
SPANSION LLC	INTEGRATION OF AN ION IMPLANT HARD MASK STRUCTURE INTO A PROCESS FOR FABRICATING HIGH DENSITY MEMORY CELLS	09/627563 07/28/2000	6486029 11/26/2002
SPANSION LLC	DUAL BIT ISOLATION SCHEME FOR FLASH MEMORY DEVICES HAVING POLYSILICON FLOATING GATES	09/627565 07/28/2000	6242306 06/05/2001
SPANSION LLC	USE OF AN ETCH TO REDUCE THICKNESS AND ROUND THE EDGES OF A RESIST MASK DURING THE CREATION OF A MEMORY CELL	09/627567 07/28/2000	6362052 03/26/2002
SPANSION LLC	OPTIMIZATION OF THERMAL CYCLE FOR FORMATION OF POCKET IMPLANTS	09/627584 07/28/2000	6376341 04/23/2002
SPANSION LLC	NITROGEN IMPLANT AFTER BIT-LINE FORMATION FOR ONO FLASH MEMORY DEVICES	09/627664 07/28/2000	6403420 06/11/2002
SPANSION LLC	PROCESS FOR CREATING A FLASH MEMORY CELL USING A PHOTORESIST FLOW OPERATION	09/628130 07/28/2000	6458656 10/01/2002
SPANSION LLC	TRENCHED GATE NON-VOLATILE SEMICONDUCTOR METHOD WITH THE SOURCE/DRAIN REGIONS SPACED FROM THE TRENCH BY SIDEWALL DOPINGS	09/629780 07/31/2000	6764904 07/20/2004
SPANSION LLC	CAPPING LAYER	09/631894 08/04/2000	6448608 09/10/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	TRENCHED GATE NON-VOLATILE SEMICONDUCTOR DEVICE AND METHOD FOR LOW POWER APPLICATIONS WITH CORNER DOPING AND SIDEWALL DOPING	09/632536 08/04/2000	6303437 10/16/2001
SPANSION LLC	SELF-ALIGNED GATE SEMICONDUCTOR	09/636333 08/10/2000	6495853 12/17/2002
SPANSION LLC	BURST READ WORDLINE BOOSTING	09/638055 08/11/2000	6229735 05/08/2001
SPANSION LLC	MASK FOR AND METHOD OF FORMING A CHARACTER ON A SUBSTRATE	09/639798 08/17/2000	6713842 03/30/2004
SPANSION LLC	OXYGEN IMPLANTATION FOR REDUCTION OF JUNCTION CAPACITANCE IN MOS TRANSISTORS	09/640082 08/17/2000	6475868 11/05/2002
SPANSION LLC	PRECISE REFERENCE WORDLINE LOADING COMPENSATION FOR A HIGH DENSITY FLASH MEMORY DEVICE	09/644358 08/23/2000	6327194 12/04/2001
SPANSION LLC	FAST ERASE MEMORY DEVICE AND METHOD FOR REDUCING ERASE TIME IN A MEMORY DEVICE	09/645623 08/24/2000	6377488 04/23/2002
SPANSION LLC	METHOD OF FORMING ONO FLASH MEMORY DEVICES USING RAPID THERMAL OXIDATION	09/648077 08/25/2000	6395654 05/28/2002
SPANSION LLC	METHOD OF FORMING ONO FLASH MEMORY DEVICES USING LOW ENERGY NITROGEN IMPLANTATION	09/648361 08/25/2000	6362051 03/26/2002
SPANSION LLC	METHOD OF MAKING TUNGSTEN GATE MOS TRANSISTOR AND MEMORY CELL BY ENCAPSULATING	09/649027 08/28/2000	6346467 02/12/2002
SPANSION LLC	SEMICONDUCTOR STRUCTURE	09/651684 08/30/2000	6417082 07/09/2002
SPANSION LLC	METHOD OF DEGASSING LOW K DIELECTRIC FOR METAL DEPOSITION	09/652132 08/31/2000	6436850 08/20/2002
SPANSION LLC	NON-VOLATILE MEMORY DEVICE WITH ENCAPSULATED TUNGSTEN GATE AND METHOD OF MAKING SAME	09/652136 08/31/2000	6429108 08/06/2002
SPANSION LLC	METHOD AND APPARATUS FOR ELIMINATING FALSE DATA IN A PAGE MODE MEMORY DEVICE	09/652742 08/31/2000	6298007 10/02/2001
SPANSION LLC	METHOD OF MICRO-ARCHTECTURAL IMPLEMENTATION OF INTERFACE BETWEEN BIST STATE MACHINE AND TESTER INTERFACE TO ENABLE BIST CYCLING	09/654965 09/05/2000	6587982 07/01/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF MICRO-ARCHITECTURAL IMPLEMENTATION ON BIST FRONTED STATE MACHINE UTILIZING 'DEATH LOGIC' STATE TRANSITION FOR AREA MINIMIZATION	09/655335 09/05/2000	6622274 09/16/2003
SPANSION LLC	USING NEGATIVE GATE ERASE TO INCREASE THE CYCLING ENDURANCE OF A NON-VOLATILE MEMORY CELL WITH AN OXIDE-NITRIDE-OXIDE (ONO) STRUCTURE	09/656675 09/07/2000	6381179 04/30/2002
SPANSION LLC	USING NEGATIVE GATE ERASE VOLTAGE TO SIMULTANEOUSLY ERASE TWO BITS FROM A NON-VOLATILE MEMORY CELL WITH AN OXIDE-NITRIDE-OXIDE (ONO) STRUCTURE	09/657029 09/07/2000	6356482 03/12/2002
SPANSION LLC	OUTPUT BUFFER FOR VCC2	09/661356 09/14/2000	6266284 07/24/2001
SPANSION LLC	CHIP ENABLE INPUT BUFFER	09/661358 09/14/2000	6275421 08/14/2001
SPANSION LLC	SIMULTANEOUS EXECUTION OF COMMAND MODES IN A FLASH MEMORY DEVICE	09/662791 09/15/2000	6654848 11/25/2003
SPANSION LLC	METHOD FOR TRACKING SENSING SPEED BY AN EQUALIZATION PULSE FOR A HIGH DENSITY FLASH MEMORY DEVICE	09/663552 09/18/2000	6353566 03/05/2002
SPANSION LLC	ADDRESS TRANSITION DETECTOR (ATD) ARCHITECTURE FOR HIGH DENSITY FLASH MEMORY DEVICE	09/663909 09/18/2000	6285627 09/04/2001
SPANSION LLC	METHOD AND APPARATUS FOR DETERMINING THE ROBUSTNESS OF MEMORY CELLS TO ALPHA-PARTICLE/COSMIC RAY INDUCED SOFT ERRORS	09/664636 09/19/2000	6348356 02/19/2002
SPANSION LLC	INTEGRATION OF EMBEDDED AND TEST MODE TIMER	09/664819 09/19/2000	6732308 05/04/2004
SPANSION LLC	SERIAL SEQUENCING OF AUTOMATIC PROGRAM DISTURB ERASE VERIFY DURING A FAST ERASE MODE	09/667347 09/22/2000	6370065 04/09/2002
SPANSION LLC	PRESCALER AND PLL CIRCUIT	09/667555 09/22/2000	6466065 10/15/2002
SPANSION LLC	MULTIPLE CHANNEL IMPLANTATION TO FORM RETROGRADE CHANNEL PROFILE AND TO ENGINEER THRESHOLD VOLTAGE AND SUBSURFACE PUNCH-THROUGH	09/667686 09/22/2000	6506640 01/14/2003
SPANSION LLC	APPLICATION OF EXTERNAL VOLTAGE DURING ARRAY VT TESTING	09/667891 09/22/2000	6324108 11/27/2001
SPANSION LLC	NEGATIVE VOLTAGE REGULATION	09/668100 09/22/2000	6438041 08/20/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	PROCESS FOR FABRICATING SHALLOW POCKET REGIONS IN A NON-VOLATILE SEMICONDUCTOR DEVICE	09/670229 09/25/2000	6391730 05/21/2002
SPANSION LLC	DC-DC CONVERTER AND CONTROLLER FOR DETECTING A MALFUNCTION THEREIN	09/671646 09/28/2000	6320359 11/20/2001
SPANSION LLC	POWER-SAVING MODES FOR MEMORIES	09/675372 09/29/2000	6400633 06/04/2002
SPANSION LLC	METHOD AND APPARATUS FOR CONTINUOUSLY REGULATING A CHARGE PUMP OUTPUT VOLTAGE USING A CAPACITOR DIVIDER	09/675940 09/29/2000	6288951 09/11/2001
SPANSION LLC	I/O BASED COLUMN REDUNDANCY FOR VIRTUAL GROUND WITH 2-BIT CELL FLASH MEMORY	09/676623 10/02/2000	6813735 11/02/2004
SPANSION LLC	ARCHITECTURE FOR A DUAL-BANK PAGE MODE MEMORY WITH REDUNDANCY	09/676902 10/02/2000	6310805 10/30/2001
SPANSION LLC	WORDLINE DRIVER FOR FLASH MEMORY READ MODE	09/680344 10/05/2000	6400638 06/04/2002
SPANSION LLC	USING A LOW DRAIN BIAS DURING ERASE VERIFY TO ENSURE COMPLETE REMOVAL OF RESIDUAL CHARGE IN THE NITRIDE IN SONOS NON-VOLATILE MEMORIES	09/684694 10/04/2000	6501681 12/31/2002
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS AND LOCAL INTERCONNECTS USING SELF-ALIGNED LOCAL INTERCONNECTS	09/685968 10/10/2000	6271087 08/07/2001
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS AND LOCAL INTERCONNECTS USING DECOUPLED LOCAL INTERCONNECT PROCESS	09/685972 10/10/2000	6482699 11/19/2002
SPANSION LLC	SELECTIVE ERASURE OF A NON-VOLATILE MEMORY CELL OF A FLASH MEMORY DEVICE	09/686686 10/11/2000	6366501 04/02/2002
SPANSION LLC	SELECTIVE ERASURE OF A NON-VOLATILE MEMORY CELL OF A FLASH MEMORY DEVICE	09/686693 10/11/2000	6349062 02/19/2002
SPANSION LLC	PROCESS FOR FABRICATING A NON-VOLATILE MEMORY DEVICE	09/688504 10/16/2000	6537881 03/25/2003
SPANSION LLC	TWO SIDE DECODING OF A MEMORY ARRAY	09/689036 10/12/2000	6373742 04/16/2002
SPANSION LLC	WORD LINE DECODING ARCHITECTURE IN A FLASH MEMORY	09/690554 10/17/2000	6347052 02/12/2002
SPANSION LLC	METHOD OF FORMING NARROW INSULATING SPACERS FOR USE IN REDUCING MINIMUM COMPONENT SIZE	09/691643 10/18/2000	6537866 03/25/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	AUTOMATIC PROGRAM DISTURB WITH INTELLIGENT SOFT PROGRAMMING FOR FLASH CELLS	09/692881 10/23/2000	6252803 06/26/2001
SPANSION LLC	FEEDBACK METHOD TO OPTIMIZE ELECTRIC FIELD DURING CHANNEL ERASE OF FLASH MEMORY DEVICES	09/693649 10/21/2000	6452840 09/17/2002
SPANSION LLC	SELF-LIMITING MULTI-LEVEL PROGRAMMING STATES	09/693650 10/21/2000	6233175 05/05/2001
SPANSION LLC	LOW COLUMN LEAKAGE NOR FLASH ARRAY-SINGLE CELL IMPLEMENTATION	09/694688 10/23/2000	6363014 03/26/2002
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A CURRENT LIMITER	09/694729 10/23/2000	6269023 07/31/2001
SPANSION LLC	POWER SAVING ON THE FLY DURING READING OF DATA FROM A MEMORY DEVICE	09/696652 10/25/2000	6292425 09/18/2001
SPANSION LLC	POSITIVE GATE ERASURE FOR NON-VOLATILE MEMORY CELLS	09/697810 10/26/2000	6331952 12/18/2001
SPANSION LLC	INTELLIGENT RAMPED GATE AND RAMPED DRAIN ERASURE FOR NON-VOLATILE MEMORY CELLS	09/697813 10/26/2000	6331953 12/18/2001
SPANSION LLC	METHOD OF ERASING A NON-VOLATILE MEMORY CELL USING A SUBSTRATE BIAS	09/697814 10/26/2000	6490205 12/03/2002
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A SUBSTRATE BIAS	09/697815 10/26/2000	6438031 08/20/2002
SPANSION LLC	THIN OXIDE ANTI -FUSE	09/698485 10/30/2000	6515344 02/04/2003
SPANSION LLC	MEMORY LINE DISCHARGE BEFORE SENSING	09/698614 10/27/2000	6507527 01/14/2003
SPANSION LLC	METHOD FOR SELECTIVE REMOVAL OF ONO LAYER	09/699531 10/30/2000	6500768 12/31/2002
SPANSION LLC	SOURCE SIDE BORON IMPLANT AND DRAIN SIDE MDD IMPLANT FOR DEEP SUB 0.18 MICRON FLASH MEMORY	09/699711 10/30/2000	6653189 11/25/2003
SPANSION LLC	SOURCE SIDE BORON IMPLANTING AND DIFFUSING DEVICE ARCHITECTURE FOR DEEP SUBSTANCE 0.18UM FLASH MEMORY	09/699972 10/30/2000	6524914 02/25/2003
SPANSION LLC	PHOTORESIST SPACER PROCESS SIMPLIFICATION TO ELIMINATE STANDARD POLYSILICON OR OXIDE SPACER PROCESS FOR FLASH MEMORY CIRCUITS	09/704026 11/01/2000	6440789 08/27/2002
SPANSION LLC	GAIN VARIABLE AMPLIFIER	09/707879 11/08/2000	6452449 09/17/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	ELIMINATION OF N+ IMPLANT FROM FLASH TECHNOLOGY BY REPLACEMENT WITH STANDARD MEDIUM-DOPED-DRAIN (MDD) IMPLANT	09/708982 11/02/2000	6277690 08/21/2001
SPANSION LLC	FLASH MEMORY CELL WITH MINIMIZED FLOATING GATE TO DRAIN/SOURCE OVERLAP FOR MINIMIZING CHARGE LEAKAGE	09/713390 11/15/2000	6693009 02/17/2004
SPANSION LLC	DOUBLE LAYER HARD MASK TO IMPROVE OXIDE QUALITY FOR NON-VOLATILE FLASH MEMORY PRODUCTS	09/716659 11/20/2000	6306707 10/23/2001
SPANSION LLC	METHOD AND SYSTEM FOR EMBEDDED CHIP ERASE VERIFICATION	09/717550 11/21/2000	6331951 12/18/2001
SPANSION LLC	STAGGERED BITLINE STRAPPING OF A NON-VOLATILE MEMORY CELL	09/718771 11/22/2000	6593606 07/15/2003
SPANSION LLC	METHOD AND SYSTEM FOR TESTING A SEMICONDUCTOR MEMORY DEVICE	09/718986 11/22/2000	6472898 10/29/2002
SPANSION LLC	STAGGERED BITLINE STRAPPING OF A NON-VOLATILE MEMORY CELL	09/721031 11/22/2000	6538270 03/25/2003
SPANSION LLC	PROCESS FOR REDUCTION OF CAPACITANCE OF A BITLINE FOR A NON-VOLATILE MEMORY CELL	09/721066 11/22/2000	6417081 07/09/2002
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE	09/721656 11/27/2000	6324099 11/27/2001
SPANSION LLC	SIMULTANEOUS FORMATION OF CHARGE STORAGE AND BITLINE TO WORDLINE ISOLATION	09/723635 11/28/2000	6465306 10/15/2002
SPANSION LLC	METHOD OF SIMULTANEOUS FORMATION OF BITLINE ISOLATION AND PERIPHERY OXIDE	09/723653 11/28/2000	6468865 10/22/2002
SPANSION LLC	MULTI-SET BLOCK ERASE	09/724675 11/28/2000	6622230 09/16/2003
SPANSION LLC	METHOD OF FORMING A COMPOSITE INTERPOLY GATE DIELECTRIC	09/725843 11/30/2000	6413820 07/02/2002
SPANSION LLC	FLASH NVROM DEVICES WITH UV CHARGE IMMUNITY	09/727714 11/28/2000	6969654 11/29/2005
SPANSION LLC	A DUAL SPACER PROCESS NON-VOLATILE MEMORY DEVICES	09/728554 12/01/2000	7012008 03/14/2006
SPANSION LLC	POWER SAVING SCHEME FOR BURST MODE IMPLEMENTATION DURING READING OF DATA FROM A MEMORY DEVICE	09/729388 12/04/2000	6463003 10/08/2002
SPANSION LLC	INTERNAL SELF-TEST CIRCUIT FOR A MEMORY ARRAY	09/732616 12/07/2000	6785856 08/31/2004
SPANSION LLC	DATA DRIVER AND DISPLAY UTILIZING THE SAME	09/732700 12/11/2000	6864869 03/08/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT FOR DRIVING LIQUID CRYSTAL PANEL	09/733075 12/11/2000	6864873 03/08/2005
SPANSION LLC	RELIABILITY MONITOR FOR MEMORY ARRAY	09/733252 12/07/2000	6684353 01/27/2004
SPANSION LLC	METHOD FOR MANUFACTURING NON-VOLATILE SEMICONDUCTOR MEMORY AND NON-VOLATILE SEMICONDUCTOR MEMORY MANUFACTURED THEREBY	09/738760 12/18/2000	6468861 10/22/2002
SPANSION LLC	METHODS TO FORM REDUCED DIMENSION BIT-LINE ISOLATION IN THE MANUFACTURE OF NON-VOLATILE MEMORY DEVICES	09/739733 12/18/2000	6596591 07/22/2003
SPANSION LLC	PLL SEMICONDUCTOR DEVICE WITH TESTABILITY, AND METHOD AND APPARATUS FOR TESTING SAME	09/757492 01/11/2001	6597162 07/22/2003
SPANSION LLC	ADAPTIVE REFERENCE CELLS FOR A MEMORY DEVICE	09/764965 01/17/2001	6449190 09/10/2002
SPANSION LLC	INTERFACE APPARATUS	09/766001 01/19/2001	6826192 11/30/2004
SPANSION LLC	THREE METAL PROCESS FOR OPTIMIZING LAYOUT DENSITY	09/767341 01/23/2001	6459625 10/01/2002
SPANSION LLC	DC-DC CONVERTER AND SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE FOR DC-DC CONVERTER	09/769240 01/26/2001	6337563 01/08/2002
SPANSION LLC	DISCHARGE CONTROL CIRCUIT OF BATTERIES	09/769344 01/26/2001	6346795 02/12/2002
SPANSION LLC	FLASH MEMORY ERASE SPEED BY FLUORINE IMPLANT OR FLUORINATION	09/772600 01/30/2001	6445030 09/03/2002
SPANSION LLC	METHOD FOR MONITORING SECOND GATE OVER-ETCH IN A SEMICONDUCTOR DEVICE	09/774327 01/31/2001	6410949 06/25/2002
SPANSION LLC	REDUCTION OF VOLTAGE STRESS ACROSS A GATE OXIDE AND ACROSS A JUNCTION WITHIN A HIGH VOLTAGE TRANSISTOR FOR AN ERASABLE MEMORY DEVICE	09/774509 01/31/2001	6275424 08/14/2001
SPANSION LLC	METHOD AND SYSTEM FOR DECREASING THE SPACES BETWEEN WORDLINES	09/777457 02/06/2001	6727195 04/27/2004
SPANSION LLC	ABNORMALITY DETECTION DEVICE FOR DETECTING AN ABNORMALITY IN A COMMUNICATION BUS	09/778837 02/08/2001	7424383 09/09/2008
SPANSION LLC	PIGGYBACK PROGRAMMING USING GRADUATED STEPS FOR MULTI-LEVEL CELL FLASH MEMORY DESIGNS	09/779225 02/08/2001	6418053 07/09/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CONCURRENT PROGRAM RECONNAISSANCE WITH PIGGYBACK PULSES FOR MULTI-LEVEL CELL FLASH MEMORY DESIGNS	09/779764 02/08/2001	6496410 12/17/2002
SPANSION LLC	PIGGYBACK PROGRAMMING USING TIMING CONTROL FOR MULTI-LEVEL CELL FLASH MEMORY DEVICE	09/779792 02/08/2001	6466483 10/15/2002
SPANSION LLC	PROGRAM RECONNAISSANCE TO ELIMINATE VARIATIONS IN VT DISTRIBUTIONS OF MULTI-LEVEL CELL FLASH MEMORY DESIGNS	09/779864 02/08/2001	6424566 07/23/2002
SPANSION LLC	PIGGYBACK PROGRAMMING WITH STAIRCASE VERIFY FOR MULTI-LEVEL CELL MEMORY DESIGNS	09/779884 02/08/2001	6671207 12/30/2003
SPANSION LLC	SERVO CONTROLLER AND SERVO CONTROL METHOD	09/782297 02/14/2001	6462686 10/08/2002
SPANSION LLC	PROCESSOR CAPABLE OF ENABLING/DISABLING MEMORY ACCESS	09/791874 02/26/2001	6647475 11/11/2003
SPANSION LLC	ASCENDING STAIRCASE READ TECHNIQUE FOR A MULTILEVEL CELL NAND FLASH MEMORY DEVICE	09/794480 02/26/2001	6614683 09/02/2003
SPANSION LLC	STAIRCASE PROGRAM VERIFY FOR MULTILEVEL CELL FLASH MEMORY DESIGNS	09/794482 02/26/2001	6538923 03/25/2003
SPANSION LLC	DATA RETENTION CHARACTERISTICS AS A RESULT OF HIGH TEMPERATURE BAKE	09/795849 02/28/2001	6344994 02/05/2002
SPANSION LLC	TAILORED ERASE METHOD USING HIGHER PROGRAM VT AND HIGHER NEGATIVE GATE ERASE	09/795854 02/28/2001	6442074 08/27/2002
SPANSION LLC	NEGATIVE GATE ERASE	09/795856 02/28/2001	6307784 10/23/2001
SPANSION LLC	SINGLE BIT ARRAY EDGES	09/795865 02/28/2001	6493261 12/10/2002
SPANSION LLC	HIGHER PROGRAM VT AND FASTER PROGRAMMING RATES BASED ON IMPROVED ERASE METHODS	09/796282 02/28/2001	6456533 09/24/2002
SPANSION LLC	ACTIVE LOAD CIRCUIT, AND OPERATIONAL AMPLIFIER AND COMPARATOR HAVING THE SAME	09/796549 03/02/2001	6480069 11/12/2002
SPANSION LLC	PROCESS FOR FABRICATING A NON-VOLATILE MEMORY DEVICE	09/798667 03/02/2001	6528390 03/04/2003
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS AND LOCAL INTERCONNECTS FOR SALICIDED GATES USING A SECONDARY SPACER	09/799469 03/05/2001	6306713 10/23/2001

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	HIGH VOLTAGE OXIDATION METHOD FOR HIGHLY RELIABLE FLASH MEMORY DEVICES	09/803400 03/12/2001	6534363 03/18/2003
SPANSION LLC	METHOD OF FORMING HIGHLY CONDUCTIVE SEMICONDUCTOR STRUCTURES VIA PLASMA ETCH	09/805273 03/13/2001	7217652 05/15/2007
SPANSION LLC	METHOD FOR FABRICATING A CONDUCTIVE STRUCTURE FOR A SEMICONDUCTOR DEVICE	09/805287 03/13/2001	6627526 09/30/2003
SPANSION LLC	FRACTIONAL-N-PLL FREQUENCY SYNTHESIZER AND PHASE ERROR CANCELING METHOD THEREFOR	09/809208 03/16/2001	6515525 02/04/2003
SPANSION LLC	PLL FREQUENCY SYNTHESIZER CIRCUIT	09/809221 03/16/2001	6518845 02/11/2003
SPANSION LLC	DUAL BIT MEMORY DEVICE WITH ISOLATED POLYSILICON FLOATING GATES	09/809969 03/16/2001	6713809 03/30/2004
SPANSION LLC	METHOD FOR REDUCED GATE ASPECT RATIO TO IMPROVE GAP-FILL AFTER SPACER ETCH	09/811288 03/16/2001	6376309 04/23/2002
SPANSION LLC	CHARGE CIRCUIT THAT PERFORMS CHARGE CONTROL BY COMPARING A PLURALITY OF BATTERY VOLTAGES	09/815049 03/23/2001	6373225 04/16/2002
SPANSION LLC	TRIMMING CIRCUIT OF SEMICONDUCTOR APPARATUS	09/816749 03/26/2001	6462609 10/08/2002
SPANSION LLC	FORMATION OF NON-VOLATILE MEMORY DEVICE COMPRISED OF AN ARRAY OF VERTICAL FIELD EFFECT TRANSISTOR STRUCTURES	09/817628 03/26/2001	6376312 04/23/2002
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF	09/818652 03/28/2001	6480420 11/12/2002
SPANSION LLC	SYSTEM AND METHOD TO FACILITATE STABILIZATION OF REFERENCE VOLTAGE SIGNALS IN MEMORY DEVICES	09/824166 04/02/2001	6459628 10/01/2002
SPANSION LLC	DOT-INVERSION DATA DRIVER FOR LIQUID CRYSTAL DISPLAY DEVICE	09/824345 04/02/2001	6784866 08/31/2004
SPANSION LLC	METHOD FOR INHIBITING TUNNEL OXIDE GROWTH AT THE EDGES OF A FLOATING GATE DURING SEMICONDUCTOR DEVICE PROCESSING	09/824841 04/02/2001	6337246 01/08/2002
SPANSION LLC	CLOCKED BASED METHOD AND DEVICES FOR MEASURING VOLTAGE-VARIABLE CAPACITANCES AND OTHER ON-CHIP PARAMETERS	09/825027 04/02/2001	6838869 01/04/2005
SPANSION LLC	SOFT PROGRAM AND SOFT PROGRAM VERIFY OF THE CORE CELLS IN FLASH MEMORY ARRAY	09/829193 04/09/2001	6493266 12/10/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	BURST ARCHITECTURE FOR A FLASH MEMORY	09/829518 04/09/2001	6621761 09/16/2003
SPANSION LLC	DUAL-PORTED CAMS FOR SIMULTANEOUS OPERATION FLASH MEMORY	09/829657 04/10/2001	6396749 05/28/2002
SPANSION LLC	DUAL BIT ISOLATION SCHEME FOR FLASH MEMORY DEVICES HAVING POLYSILICON FLOATING GATES	09/833307 04/11/2001	6680507 01/20/2004
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING GATE EDGES PROTECTED FROM CHARGE GAIN/LOSS	09/834419 04/12/2001	6455373 09/24/2002
SPANSION LLC	SYSTEM AND METHOD FOR ERASE TEST OF INTEGRATED CIRCUIT DEVICE HAVING NON-HOMOGENEOUSLY SIZED SECTORS	09/836065 04/16/2001	6966016 11/15/2005
SPANSION LLC	ACCURATE VERIFY APPARATUS AND METHOD FOR NOR FLASH MEMORY CELLS IN THE PRESENCE OF HIGH COLUMN LEAKAGE	09/842288 04/25/2001	6400608 06/04/2002
SPANSION LLC	METHOD AND SYSTEM FOR REDUCING THINNING OF FIELD ISOLATION STRUCTURES IN A FLASH MEMORY DEVICE	09/844692 04/27/2001	6514822 02/04/2003
SPANSION LLC	METHOD FOR FORMING SELF-ALIGNED CONTACTS USING CONSUMABLE SPACERS	09/850484 05/07/2001	6509229 01/21/2003
SPANSION LLC	THRESHOLD VOLTAGE COMPACTING FOR NON-VOLATILE SEMICONDUCTOR MEMORY DESIGNS	09/851773 05/09/2001	6438037 08/20/2002
SPANSION LLC	METHOD OF CHANNEL HOT ELECTRON PROGRAMMING FOR SHORT CHANNEL NOR FLASH ARRAYS	09/861031 05/18/2001	6510085 01/21/2003
SPANSION LLC	METHOD AND APPARATUS FOR BOOSTING BITLINES FOR LOW VCC READ	09/873643 06/04/2001	6515902 02/04/2003
SPANSION LLC	METHODS AND APPARATUS FOR READING A CAM CELL USING BOOSTED AND REGULATED GATE VOLTAGE	09/873927 06/04/2001	6381163 04/30/2002
SPANSION LLC	METHOD AND SYSTEM FOR QUALIFYING AN ONO LAYER IN A SEMICONDUCTOR DEVICE	09/875056 06/05/2001	6617179 09/09/2003
SPANSION LLC	METHOD AND SYSTEM FOR QUALIFYING AN ONO LAYER IN A SEMICONDUCTOR DEVICE	09/875073 06/05/2001	6509202 01/21/2003
SPANSION LLC	RE-OXIDATION APPROACH TO IMPROVE PERIPHERAL GATE OXIDE INTEGRITY IN A TUNNEL NITRIDE OXIDATION PROCESS	09/879738 06/12/2001	6436778 08/20/2002
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A BAKING PROCESS	09/880366 06/13/2001	6618290 09/09/2003
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A DRAIN	09/880367 06/13/2001	6459618 10/01/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	BIAS		
SPANSION LLC	SPECIES IMPLANTATION FOR MINIMIZING INTERFACE DEFECT DENSITY IN FLASH MEMORY DEVICES	09/882242 06/15/2001	6399984 06/04/2002
SPANSION LLC	METHOD OF DRAIN AVALANCHE PROGRAMMING OF A NON-VOLATILE MEMORY CELL	09/884402 06/19/2001	6456531 09/24/2002
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A SUBSTRATE BIAS	09/884409 06/19/2001	6456536 09/24/2002
SPANSION LLC	LOW COLUMN LEAKAGE NOR FLASH ARRAY-DOUBLE CELL IMPLEMENTATION	09/884565 06/19/2001	6449188 09/10/2002
SPANSION LLC	CEILING TEST MODE TO CHARACTERIZE THE THRESHOLD VOLTAGE DISTRIBUTION OF OVER PROGRAMMED MEMORY CELLS	09/884583 06/19/2001	6370061 04/09/2002
SPANSION LLC	METHOD OF MANUFACTURING SPACER ETCH MASK FOR SILICON-OXIDE-NITRIDE-OXIDE-SILICON (SONOS) TYPE NONVOLATILE MEMORY	09/885490 06/20/2001	6465303 10/15/2002
SPANSION LLC	ERASE METHOD FOR DUAL BIT VIRTUAL GROUND FLASH	09/886861 06/21/2001	6512701 01/28/2003
SPANSION LLC	ESD IMPLANT FOLLOWING SPACER DEPOSITION	09/891885 06/26/2001	6900085 05/31/2005
SPANSION LLC	MODULATED CHARGE PUMP WHICH USES AN ANALOG TO DIGITAL CONVERTER TO COMPENSATE FOR SUPPLY VOLTAGE VARIATIONS	09/892189 06/26/2001	6424570 07/23/2002
SPANSION LLC	BANK SELECTOR CIRCUIT FOR A SIMULTANEOUS OPERATION FLASH MEMORY DEVICE WITH A FLEXIBLE BANK PARTITION ARCHITECTURE	09/892431 06/26/2001	6633949 10/14/2003
SPANSION LLC	HIGH DENSITY FLASH EEPROM ARRAY WITH SOURCE SIDE INJECTION	09/892685 06/27/2001	6525368 02/25/2003
SPANSION LLC	SOURCE DRAIN IMPLANT DURING ONO FORMATION FOR IMPROVED ISOLATION OF SONOS DEVICES	09/893279 06/27/2001	6436768 08/20/2002
SPANSION LLC	METHOD OF PROGRAMMING A NON-VOLATILE MEMORY CELL USING A VERTICAL ELECTRIC FIELD	09/899721 07/05/2001	6487121 11/26/2002
SPANSION LLC	USING HOT CARRIER INJECTION TO CONTROL OVER-PROGRAMMING IN A NON-VOLATILE MEMORY CELL HAVING AN OXIDE-NITRIDE-OXIDE (ONO) STRUCTURE	09/902332 07/10/2001	6519182 02/11/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	RECESSED TUNNEL OXIDE PROFILE FOR IMPROVED RELIABILITY IN NAND DEVICES	09/904042 07/11/2001	6933554 08/23/2005
SPANSION LLC	OXIDE/NITRIDE OR OXIDE/NITRIDE/OXIDE THICKNESS MEASUREMENT USING SCATTEROMETRY	09/904089 07/12/2001	6589804 07/08/2003
SPANSION LLC	MULTIPLE BLOCK SEQUENTIAL MEMORY MANAGEMENT	09/912834 07/25/2001	6665777 12/15/2003
SPANSION LLC	RESOURCE LOCKING AND THREAD SYNCHRONIZATION IN A MULTIPROCESSOR ENVIRONMENT	09/912870 07/25/2001	6782440 08/24/2004
SPANSION LLC	METHODS AND SYSTEMS FOR A SHARED MEMORY UNIT WITH EXTENDABLE FUNCTIONS	09/912898 07/25/2001	6715059 03/30/2004
SPANSION LLC	DEMAND USABLE ADAPTER MEMORY ACCESS MANAGEMENT	09/912954 07/25/2001	6675277 01/06/2004
SPANSION LLC	VOLTAGE BOOST CIRCUIT USING SUPPLY VOLTAGE DETECTION TO COMPENSATE FOR SUPPLY VOLTAGE VARIATIONS IN READ MODE VOLTAGES	09/915018 07/25/2001	6535424 03/18/2003
SPANSION LLC	LOAD/STORE MICROPACKET HANDLING SYSTEM	09/915109 07/25/2001	6892298 05/10/2005
SPANSION LLC	NOR ARRAY WITH BURIED TRENCH SOURCE LINE	09/917178 07/30/2001	6525959 02/25/2003
SPANSION LLC	N-GATE/N-SUBSTRATE OR P-GATE/P-SUBSTRATE CAPACITOR TO CHARACTERIZE POLYSILICON GATE DEPLETION EVALUATION	09/917440 07/27/2001	6888157 05/03/2005
SPANSION LLC	CURRENT PULSE RECEIVING CIRCUIT	09/922764 08/07/2001	6456141 09/24/2002
SPANSION LLC	METHOD AND SYSTEM FOR ETCHING TUNNEL OXIDE TO REDUCE UNDERCUTTING DURING MEMORY ARRAY FABRICATION	09/925205 08/08/2001	6472327 10/29/2002
SPANSION LLC	PROCESS FOR TREATING ONO DIELECTRIC FILM OF A FLOATING GATE MEMORY CELL	09/927134 08/10/2001	6709927 03/23/2004
SPANSION LLC	DECODER APPARATUS AND METHODS FOR PRE-CHARGING BIT LINES	09/928059 08/10/2001	6525969 02/25/2003
SPANSION LLC	SYSTEM LSI HAVING COMMUNICATION FUNCTION	09/928355 08/14/2001	6353864 03/05/2002
SPANSION LLC	MICROCOMPUTER AND COMPUTER SYSTEM	09/939751 08/28/2001	7152177 12/19/2006
SPANSION LLC	FLASH MEMORY DEVICE AND A METHOD OF FABRICATION THEREOF	09/941370 08/28/2001	6979619 12/27/2005
SPANSION LLC	MICROCOMPUTER WITH DEBUG SUPPORTING FUNCTION	09/960519 09/24/2001	6922794 07/26/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE AND FABRICATION PROCESS THEREOF	09/963632 09/27/2001	6492677 12/10/2002
SPANSION LLC	NITRIDE BARRIER LAYER FOR PROTECTION OF ONO STRUCTURE FROM TOP OXIDE LOSS IN FABRICATION OF SONOS FLASH MEMORY	09/966702 09/28/2001	6440797 08/27/2002
SPANSION LLC	SALICIDED GATE FOR VIRTUAL GROUND ARRAYS	09/968456 10/01/2001	6645801 11/11/2003
SPANSION LLC	METHOD OF CONSTRUCTING NETWORK TOPOLOGY AND INTERFACE CIRCUIT	09/968519 03/10/2000	7317690 01/08/2008
SPANSION LLC	FLASH MEMORY DEVICE WITH INCREASE OF EFFICIENCY DURING AN APDE (AUTOMATIC PROGRAM DISTURB AFTER ERASE) PROCESS	09/969572 10/01/2001	6469939 10/22/2002
SPANSION LLC	FORMATION OF STI (SHALLOW TRENCH ISOLATION) STRUCTURES WITHIN CORE AND PERIPHERY AREAS OF FLASH MEMORY DEVICE	09/969573 10/01/2001	6509232 01/21/2003
SPANSION LLC	METHOD OF FABRICATING DOUBLE DENSED CORE GATES IN SONOS FLASH MEMORY	09/971483 10/05/2001	6630384 10/07/2003
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE WITH VARIABLE GAIN AMPLIFIER	09/972152 10/09/2001	6727771 04/27/2004
SPANSION LLC	NON SELF-ALIGNED SHALLOW TRENCH ISOLATION PROCESS WITH DISPOSABLE SPACE TO DEFINE SUB-LITHOGRAPHIC POLY SPACE	09/973131 10/09/2001	6664191 12/16/2003
SPANSION LLC	SEMICONDUCTOR MEMORY CAPABLE OF BEING DRIVEN AT LOW VOLTAGE AND ITS MANUFACTURE METHOD	09/973743 10/11/2001	6642586 11/04/2003
SPANSION LLC	DIFFERENTIAL SIGNAL OUTPUT APPARATUS, SEMICONDUCTOR INTEGRATED CIRCUIT APPARATUS HAVING THE DIFFERENTIAL SIGNAL OUTPUT APPARATUS, AND DIFFERENTIAL SIGNAL TRANSMISSION SYSTEM	09/973767 10/11/2001	6788113 09/07/2004
SPANSION LLC	DRAIN SIDE SENSING SCHEME FOR VIRTUAL GROUND FLASH EPROM ARRAY WITH ADJACENT BIT CHARGE AND HOLD	09/999869 10/23/2001	6510082 01/21/2003
SPANSION LLC	NITRIDING PRETREATMENT OF FLASH ONO NITRIDE FOR OXIDE DEPOSITION	10/006529 12/05/2001	6620705 09/16/2003
SPANSION LLC	NOVEL OXIDIZING PRETREATMENT OF FLASH ONO NITRIDE FOR OXIDE DEPOSITION	10/010280 12/05/2001	6858496 02/22/2005
SPANSION LLC	METHOD AND APPARATUS ADJUSTING ON-CHIP CURRENT REFERENCE FOR EEPROM SENSING	10/010985 12/05/2001	6525966 02/25/2003
SPANSION LLC	REDUCTION OF SECTOR CONNECTING LINE CAPACITANCE USING STAGGERED METAL	10/013902 12/11/2001	6700201 03/02/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	LINES		
SPANSION LLC	FLASH MEMORY ARRAY ARCHITECTURE AND METHOD FOR PROGRAMMING, ERASING AND READING THEREOF	10/013993 12/11/2001	6654283 11/25/2003
SPANSION LLC	SWITCHED-CAPACITOR CONTROLLER TO CONTROL THE RISE TIMES OF ON-CHIP GENERATED HIGH VOLTAGES	10/015033 12/11/2001	7002381 02/21/2006
SPANSION LLC	METHOD OF DETERMINING GATE OXIDE THICKNESS OF AN OPERATIONAL MOSFET	10/017832 12/12/2001	6731130 05/04/2004
SPANSION LLC	METHOD FOR MANUFACTURING MEMORY WITH HIGH CONDUCTIVITY BITLINE AND SHALLOW TRENCH ISOLATION INTEGRATION	10/022292 12/15/2001	6723605 04/20/2004
SPANSION LLC	MONOS DEVICE HAVING BURIED METAL SILICIDE BIT LINE	10/022798 12/20/2001	6828199 12/07/2004
SPANSION LLC	METHOD FOR REPAIRING DAMAGE TO CHARGE TRAPPING DIELECTRIC LAYER FROM BIT LINE IMPLANTATION	10/023349 12/20/2001	6500713 12/31/2002
SPANSION LLC	FLASH MEMORY WITH CONTROLLED WORDLINE WIDTH	10/023436 12/15/2001	6653190 11/25/2003
SPANSION LLC	FULLY ISOLATED DIELECTRIC MEMORY CELL STRUCTURE FOR A DUAL BIT NITRIDE STORAGE DEVICE AND PROCESS FOR MAKING SAME	10/027253 12/20/2001	6639271 10/28/2003
SPANSION LLC	MULTI-LEVEL NONVOLATILE MEMORY USING	10/030117 02/28/2000	6670669 12/30/2003
SPANSION LLC	PLANAR TRANSISTOR STRUCTURE USING ISOLATION IMPLANTS FOR IMPROVED V_{SS} RESISTANCE AND FOR PROCESS SIMPLIFICATION	10/032646 12/27/2001	6740926 05/25/2004
SPANSION LLC	METHOD AND SYSTEM FOR FORMING DUAL GATE STRUCTURES IN A NONVOLATILE MEMORY USING A PROTECTIVE LAYER	10/032757 12/27/2001	6974995 12/13/2005
SPANSION LLC	USE OF HIGH-K DIELECTRIC MATERIALS IN MODIFIED ONO STRUCTURE FOR SEMICONDUCTOR DEVICES	10/036757 12/31/2001	6674138 01/06/2004
SPANSION LLC	OVERVOLTAGE-PROTECTIVE DEVICE FOR POWER SYSTEM, AC/DC CONVERTER AND DC/DC CONVERTER CONSTITUTING THE POWER SYSTEM	10/041594 01/10/2002	6674657 01/06/2004
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	10/043114 01/14/2002	6496414 12/17/2002

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF MANUFACTURING HIGH VOLTAGE TRANSISTOR WITH MODIFIED FIELD IMPLANT MASK	10/044510 01/11/2002	6514830 02/04/2003
SPANSION LLC	INNOVATIVE METHOD OF HARD MASK REMOVAL	10/045354 11/07/2001	6809033 10/26/2004
SPANSION LLC	NEGATIVE PUMP REGULATOR USING MOS CAPACITOR	10/050254 01/16/2002	6515903 02/04/2003
SPANSION LLC	SOURCE SIDE SENSING SCHEME FOR VIRTUAL GROUND READ OF FLASH EPROM ARRAY WITH ADJACENT BIT PRECHARGE	10/050257 01/16/2002	6529412 03/04/2003
SPANSION LLC	METHOD AND APPARATUS FOR PRE-CHARGING NEGATIVE PUMP MOS REGULATON CAPACITORS	10/050342 01/16/2002	7057949 06/06/2006
SPANSION LLC	IMPROVED DIODE FABRICATION FOR ESD/EOS PROTECTION	10/050394 01/16/2002	6770938 08/03/2004
SPANSION LLC	METHOD AND APPARATUS FOR SOFT PROGRAM VERIFICATION IN A MEMORY DEVICE	10/050650 01/16/2002	6532175 03/11/2003
SPANSION LLC	TWO-STEP SOURCE SIDE IMPLANT FOR IMPROVING SOURCE RESISTANCE AND SHORT CHANNEL EFFECT IN DEEP SUB-018um FLASH MEMORY TECHNOLOGY	10/053256 01/18/2002	6852594 02/08/2005
SPANSION LLC	MICROCONTROLLER WITH DEBUG SUPPORT UNIT	10/057867 01/29/2002	6944794 09/13/2005
SPANSION LLC	POWER-SAVING MODES FOR MEMORIES	10/061620 02/01/2002	6611473 08/26/2003
SPANSION LLC	NONVOLATILE MEMORY CIRCUIT FOR RECORDING MULTIPLE BIT INFORMATION	10/069124 08/18/2000	6614686 09/02/2003
SPANSION LLC	LOGIC CIRCUIT FOR FAST CARRY/BORROW	10/073132 02/13/2002	6781412 08/24/2004
SPANSION LLC	METHOD OF AND CIRCUIT FOR CONTROLLING A CLOCK	10/073490 02/13/2002	6653871 11/25/2003
SPANSION LLC	DEVICE FOR PROCESSING DATA SIGNALS, METHOD THEREOF, AND DEVICE FOR MULTIPLEXING DATA SIGNALS	10/073570 02/11/2002	7342946 03/11/2008
SPANSION LLC	METHOD FOR REDUCING ANTI-REFLECTIVE COATING LAYER REMOVAL DURING REMOVAL OF PHOTORESIST	10/079775 02/19/2002	7015134 03/21/2006
SPANSION LLC	DUMMY GATE PROCESS TO REDUCE THE VSS RESISTANCE OF FLASH PRODUCTS	10/081246 02/22/2002	6461905 10/08/2002
SPANSION LLC	DC-DC CONVERTER WITH CONTROL CIRCUIT CAPABLE OF GENERATING STEP-UP AND STEP-DOWN SIGNALS	10/083592 02/27/2002	6731099 05/04/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF MATCHING CORE CELL AND REFERENCE CELL SOURCE RESISTANCES	10/083789 02/27/2002	6654285 11/25/2003
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF MANUFACTURE THEREOF	10/085023 05/30/2000	6750520 06/15/2004
SPANSION LLC	NROM CELL WITH N-LESS CHANNEL	10/086112 02/27/2002	6750103 06/15/2004
SPANSION LLC	DC-DC CONVERTER, POWER SUPPLY CIRCUIT, METHOD FOR CONTROLLING DC-DC CONVERTER, AND METHOD FOR CONTROLLING POWER SUPPLY CIRCUIT	10/087852 03/05/2002	6611132 08/26/2003
SPANSION LLC	FREQUENCY MEASUREMENT CIRCUIT	10/088605 08/18/2000	6674277 01/06/2004
SPANSION LLC	SEMICONDUCTOR DEVICE	10/090822 03/06/2002	7136956 11/14/2006
SPANSION LLC	PASSWORD AND DYNAMIC PROTECTION OF FLASH MEMORY DATA	10/091767 03/05/2002	6731536 05/04/2004
SPANSION LLC	MEMORY ARRAY WITH BURIED BIT LINES	10/095512 03/12/2002	6737703 05/18/2004
SPANSION LLC	LOW COLUMN LEAKAGE FLASH MEMORY ARRAY	10/095739 03/12/2002	6768683 07/27/2004
SPANSION LLC	FLASH MEMORY ARRAY ARCHITECTURE HAVING STAGGERED METAL LINES	10/096313 03/12/2002	6646914 11/11/2003
SPANSION LLC	SETTING SYSTEM FOR THRESHOLD VOLTAGE OF	10/096338 03/11/2002	6781884 08/24/2004
SPANSION LLC	LASER THERMAL ANNEALING OF SILICON NITRIDE FOR INCREASED DENSITY AND ETCH SELECTIVITY	10/096741 03/14/2002	6706576 03/16/2004
SPANSION LLC	USE OF HIGH-K DIELECTRIC MATERIAL IN MODIFIED ONO STRUCTURE FOR SEMICONDUCTOR DEVICES	10/097912 03/13/2002	6642573 11/04/2003
SPANSION LLC	OVERERASE CORRECTION METHOD	10/099499 03/13/2002	6639844 10/28/2003
SPANSION LLC	HARD MASK PROCESS FOR MEMORY DEVICE WITHOUT BITLINE SHORTS	10/100485 03/14/2002	6706595 03/16/2004
SPANSION LLC	MEMORY WITH DISPOSABLE ARC FOR WORDLINE FORMATION	10/100487 03/14/2002	6620717 09/16/2003
SPANSION LLC	REGULATOR CIRCUIT AND CONTROL METHOD THEREOF	10/101976 03/21/2002	6828764 12/07/2004
SPANSION LLC	OPERATIONAL AMPLIFIER HAVING OFFSET CANCEL FUNCTION	10/102722 03/22/2002	6586990 07/01/2003
SPANSION LLC	MEMORY DEVICE HAVING IMPROVED PROGRAMMABILITY	10/103077 03/20/2002	6590260 07/08/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	10/103721 03/25/2002	6510090 01/21/2003
SPANSION LLC	OPERATIONAL AMPLIFIER	10/108341 03/29/2002	6903609 06/07/2005
SPANSION LLC	LINER FOR SEMICONDUCTOR MEMORIES AND MANUFACTURING METHODS THEREFOR	10/109234 03/27/2002	6803265 10/12/2004
SPANSION LLC	MEMORY WORDLINE HARD MASK	10/109235 03/27/2002	6617215 09/09/2003
SPANSION LLC	METHOD OF MAKING MEMORY WORDLINE HARD MASK EXTENSION	10/109516 03/27/2002	6479348 11/12/2002
SPANSION LLC	METHOD FOR FORMING A SEMICONDUCTOR DEVICE WITH SELF-ALIGNED CONTACTS USING A LINER OXIDE LAYER	10/109526 03/27/2002	6475847 11/05/2002
SPANSION LLC	A TEST STRUCTURE APPARATUS FOR MEASURING STANDBY CURRENT IN FLASH MEMORY DEVICES	10/112976 03/28/2002	6593590 07/15/2003
SPANSION LLC	METHOD OF DETERMINING LOCATION OF GATE OXIDE BREAKDOWN OF MOSFET	10/113017 03/28/2002	6756806 06/29/2004
SPANSION LLC	METHOD OF DETECTING SHALLOW TRENCH ISOLATION CORNER THINNING BY ELECTRICAL STRESS	10/113152 03/28/2002	6734028 05/11/2004
SPANSION LLC	METHOD OF DETECTING SHALLOW TRENCH ISOLATION CORNER THINNING BY ELECTRICAL TRAPPING	10/113259 03/28/2002	6784682 08/31/2004
SPANSION LLC	PRECISION HIGH-K INTERGATE DIELECTRIC LAYER	10/117818 04/08/2002	6750066 06/15/2004
SPANSION LLC	STACKED POLYSILICON LAYER FOR BORON PENETRATION INHIBITION	10/118363 04/08/2002	6762454 07/13/2004
SPANSION LLC	MEMORY MANUFACTURING PROCESS WITH BITLINE ISOLATION	10/118732 04/08/2002	8673716 03/18/2014
SPANSION LLC	REFRESH SCHEME FOR DYNAMIC PAGE PROGRAMMING	10/119273 04/08/2002	6700815 03/02/2004
SPANSION LLC	IMPROVED ERASE METHOD FOR SINGLE SIDED MIRROR OPERATION	10/119366 04/08/2002	6901010 05/31/2005
SPANSION LLC	ALGORITHM DYNAMIC REFERENCE PROGRAMMING	10/119391 04/08/2002	6690602 02/10/2004
SPANSION LLC	ISOLATION TRENCH FILL PROCESS	10/120116 04/09/2002	6806165 10/19/2004
SPANSION LLC	METHODS AND SYSTEMS FOR FLASH MEMORY TUNNEL OXIDE RELIABILITY TESTING	10/121140 04/11/2002	6606273 08/12/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF DETECTING AND DISTINGUISHING STACK GATE EDGE DEFECTS AT THE SOURCE OR DRAIN JUNCTION	10/126193 04/19/2002	6822259 11/23/2004
SPANSION LLC	USING A FIRST LINER LAYER AS A SPACER IN A SEMICONDUCTOR DEVICE	10/126207 04/19/2002	6716710 04/06/2004
SPANSION LLC	MEMORY MANUFACTURING PROCESS USING DISPOSABLE ARC FOR WORDLINE FORMATION	10/126280 04/19/2002	6720133 04/13/2004
SPANSION LLC	RELACS SHRINK METHOD APPLIED FOR SINGLE PRINT RESIST MASK FOR LLD OR BURIED BITLINE IMPLANTS USNG CHEMICALLY AMPLIFIED DUV TYPE PHOTORESIST	10/126326 04/19/2002	6642148 11/04/2003
SPANSION LLC	METHOD FOR REDUCING SHALLOW TRENCH ISOLATION EDGE THINNING ON THIN GATE OXIDES TO IMPROVE PERIPHERAL TRANSISTOR RELIABILITY AND PERFORMANCE FOR HIGH PERFORMANCE FLASH MEMORY DEVICES	10/126814 04/19/2002	6825083 11/30/2004
SPANSION LLC	METHOD FOR REDUCING SHALLOW TRENCH ISOLATION EDGE THINNING TUNNEL OXIDES USING PARTIAL NITRIDE STRIP AND SMALL BIRD'S BEAK FORMATION FOR HIGH PERFORMANCE FLASH MEMORY DEVICES	10/126840 04/19/2002	6764920 07/20/2004
SPANSION LLC	REPLACING A FIRST LINER LAYER WITH A THICKER OXIDE LAYER WHEN FORMING A SEMICONDUCTOR DEVICE	10/126841 04/19/2002	6689666 02/10/2004
SPANSION LLC	SEMICONDUCTOR MEMORY WITH DEUTERATED MATERIALS	10/128771 04/22/2002	6670241 12/30/2003
SPANSION LLC	DC/DC CONVERTER CONTROL CIRCUITS AND DC/DC CONVERTER SYSTEMS WITH POWER SAVING MODE IN ACCORDANCE WITH AN EXTERNAL CONTROL SIGNAL	10/134751 04/30/2002	6882133 04/19/2005
SPANSION LLC	SYSTEM FOR PROGRAMMING A FLASH MEMORY DEVICE	10/136033 04/29/2002	6621742 09/16/2003
SPANSION LLC	CONTROL SYSTEM FOR PRECHARGE LEVEL ON	10/136034 04/29/2002	6816423 11/09/2004
SPANSION LLC	SYSTEM AND METHOD FOR MULTI-BIT FLASH READS USING DUAL DYNAMIC REFERENCES	10/136173 05/01/2002	6799256 09/28/2004
SPANSION LLC	READ METHOD FOR TWO BIT MEMORY CELL A	10/143449 05/10/2002	6594181 07/15/2003
SPANSION LLC	REPLACING LAYERS OF AN INTERGATE DIELECTRIC LAYER WITH HIGH-K MATERIAL FOR IMPROVED SCALABILITY	10/145952 05/15/2002	6693321 02/17/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR ERROR DETECTION/CORRECTION OF MULTILEVEL CELL MEMORY AND MULTILEVEL CELL MEMORY HAVING ERROR DETECTION/CORRECTION FUNCTION	10/146074 05/16/2002	6990623 01/24/2006
SPANSION LLC	SELF-ALIGNED POLYSILICON POLISH	10/150204 05/15/2002	6610577 08/26/2003
SPANSION LLC	METHOD AND SYSTEM FOR TAILORING CORE AND PERIPHERY CELLS IN A NONVOLATILE MEMORY	10/150240 05/15/2002	6808992 10/26/2004
SPANSION LLC	METHOD AND SYSTEM FOR SCALING A NONVOLATILE MEMORY CELLS	10/150255 05/15/2002	6806155 10/19/2004
SPANSION LLC	METHOD FOR MINIMIZING NITRIDE RESIDUE ON A SILICON WAFER	10/150282 05/15/2002	6605517 08/12/2003
SPANSION LLC	METHOD FOR FABRICATING SELF-ALIGNED GATE OF FLASH MEMORY CELL	10/150556 05/17/2002	6475863 11/05/2002
SPANSION LLC	MEMORY MANUFACTURING PROCESS USING BITLINE RAPID THERMAL ANNEAL	10/151576 05/16/2002	6653191 11/25/2003
SPANSION LLC	SEMICONDUCTOR DEVICE WITH HIGH CONDUCTIVITY REGION USING SHALLOW TRENCH	10/151595 05/16/2002	7208382 04/24/2007
SPANSION LLC	METHOD OF FORMING LOW RESISTANCE COMMON SOURCE LINE FOR FLASH MEMORY DEVICES	10/152747 05/21/2002	6596586 07/22/2003
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING A POLYSILICON STRINGER MONITOR	10/155500 05/23/2002	6602776 08/05/2003
SPANSION LLC	NITRIDE BARRIER LAYER FOR PROTECTION OF ONO STRUCTURE FROM TOP OXIDE LOSS IN FABRICATION OF SONOS FLASH MEMORY	10/158044 05/30/2002	6680509 01/20/2004
SPANSION LLC	A SEMICONDUCTOR ISOLATION MATERIAL DEPOSITION SYSTEM AND METHOD	10/159078 05/31/2002	6734080 05/11/2004
SPANSION LLC	METHOD FOR INCREASING CORE GAIN IN FLASH MEMORY DEVICE USING STRAINED SILICON	10/159323 05/31/2002	6642106 11/04/2003
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND DRIVING	10/160050 06/04/2002	6735127 05/11/2004
SPANSION LLC	HIGH DENSITY DUAL BIT FLASH MEMORY CELL WITH NON PLANAR STRUCTURE	10/164895 06/07/2002	6735123 05/11/2004
SPANSION LLC	HARD MASK REMOVAL PROCESS INCLUDING ISOLATION DIELECTRIC REFILL	10/165837 06/06/2002	6607925 08/19/2003
SPANSION LLC	HIGHER PROGRAM VT AND FASTER PROGRAMMING RATES BASED ON IMPROVED ERASE METHODS	10/173262 06/17/2002	6590811 07/08/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SHALLOW TRENCH ISOLATION FILL PROCESS	10/174550 06/18/2002	6670691 12/30/2003
SPANSION LLC	A TEST STRUCTURE TO MEASURE INTERLAYER DIELECTRIC EFFECTS AND BREAKDOWN AND DETECT METAL DEFECTS IN FLASH MEMORIES	10/174734 06/18/2002	6777957 08/17/2004
SPANSION LLC	USE OF HIGH-K DIELECTRIC MATERIAL FOR ONO AND TUNNEL OXIDE TO IMPROVE FLOATING GATE FLASH MEMORY COUPLING	10/176594 06/21/2002	6617639 09/09/2003
SPANSION LLC	EXTRACTION OF DRAIN JUNCTION OVERLAP WITH THE GATE AND THE CHANNEL LENGTH FOR ULTRA-SMALL CMOS DEVICES WITH ULTRA-THIN GATE OXIDES	10/178144 06/24/2002	6646462 11/11/2003
SPANSION LLC	A PROCESS TO IMPROVE THE V _{SS} LINE FORMATION FOR HIGH DENSITY FLASH MEMORY AND RELATED STRUCTURE ASSOCIATED THEREWITH	10/179723 06/25/2002	6784061 08/31/2004
SPANSION LLC	CHARGE GAIN/CHARGE LOSS JUNCTION LEAKAGE PREVENTION FOR FLASH TECHNOLOGY BY USING DOUBLE ISOLATION/CAPPING LAYER BETWEEN LIGHTLY DOPED DRAIN AND GATE	10/180772 06/25/2002	6589841 07/08/2003
SPANSION LLC	SERVO CONTROLLER AND SERVO CONTROL METHOD	10/187944 07/03/2002	6538834 03/25/2003
SPANSION LLC	METHOD OF INTERPOLY HIGH-K DIELECTRIC INTEGRATION TO MINIMIZE LEAKAGE AND FLOATING GATE CONTAMINATION	10/189643 07/03/2002	
SPANSION LLC	MEMORY DEVICE AND METHOD OF MAKING	10/189651 07/03/2002	6627945 09/30/2003
SPANSION LLC	METHOD FOR SEMICONDUCTOR WAFER PLANARIZATION BY ISOLATION MATERIAL GROWTH	10/190002 07/03/2002	7052969 05/30/2006
SPANSION LLC	METHOD FOR SEMICONDUCTOR WAFER PLANARIZATION BY CMP STOP LAYER FORMATION	10/190397 07/02/2002	6770523 08/03/2004
SPANSION LLC	TEST STRUCTURE FOR MEASURING EFFECT OF TRENCH ISOLATION ON OXIDE IN A MEMORY DEVICE	10/190420 07/03/2002	6859748 02/22/2005
SPANSION LLC	SYSTEM USING DYNAMIC REFERENCE BY	10/197116 07/16/2002	6813189 11/02/2004
SPANSION LLC	NON-VOLATILE MEMORY CELL WITH A NITRIDATED OXIDE LAYER	10/199793 07/19/2002	6750157 06/15/2004
SPANSION LLC	ON-CHIP ERASE PULSE COUNTER FOR EFFICIENT ERASE VERIFY BIST (BUILT-IN-SELF-TEST) MODE	10/200330 07/22/2002	6665214 12/16/2003

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	ADDRESS SEQUENCER WITHIN BIST (BUILT-IN-SELF-TEST) SYSTEM	10/200518 07/22/2002	7010736 03/07/2006
SPANSION LLC	DIAGNOSTIC MODE FOR TESTING FUNCTIONALITY OF BIST (BUILT-IN-SELF-TEST) BACK-END STATE MACHINE	10/200526 07/22/2002	7028240 04/11/2006
SPANSION LLC	GENERATION OF MARGINING VOLTAGE ON-CHIP DURING TESTING CAM PORTION OF FLASH MEMORY DEVICE	10/200539 07/22/2002	6707718 03/16/2004
SPANSION LLC	ON-CHIP REPAIR OF DEFECTIVE ADDRESS OF CORE FLASH MEMORY CELLS	10/200544 07/22/2002	6631086 10/07/2003
SPANSION LLC	SEMICONDUCTOR DEVICE AND LIQUID CRYSTAL PANEL DRIVER DEVICE	10/205414 07/26/2002	7098878 08/29/2006
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND DRIVING	10/207056 07/30/2002	6856552 02/15/2005
SPANSION LLC	SYSTEM AND METHOD OF ERASE VOLTAGE CONTROL DURING MULTIPLE SECTOR ERASE OF A FLASH MEMORY DEVICE	10/210378 07/31/2002	6891752 05/10/2005
SPANSION LLC	NON-VOLATILE MEMORY DEVICE	10/211317 08/05/2002	7012298 03/14/2006
SPANSION LLC	CURRENT PULSE RECEIVING CIRCUIT	10/214149 08/08/2002	6714063 03/30/2004
SPANSION LLC	METHOD FOR REPAIRING OVER-ERASURE OF FAST BITS IN FLOATING GATE MEMORY DEVICES	10/215140 08/07/2002	6643185 11/04/2003
SPANSION LLC	REFLOWABLE-DOPED HDP FILM	10/217403 08/14/2002	6809402 10/26/2004
SPANSION LLC	METHOD OF PROTECTING A STACKED GATE STRUCTURE DURING FABRICATION	10/217807 08/12/2002	6696331 02/24/2004
SPANSION LLC	SALICIDED GATE FOR VIRTUAL GROUND ARRAYS	10/217821 08/12/2002	6730564 05/04/2004
SPANSION LLC	METHOD AND SYSTEM FOR DETECTING TUNNEL OXIDE ENCROACHMENT ON A MEMORY DEVICE	10/217965 08/12/2002	6864106 03/08/2005
SPANSION LLC	MEMORY DEVICE AND METHOD OF MAKING	10/223920 08/20/2002	6753570 06/22/2004
SPANSION LLC	METHOD OF DETERMINING THE ACTIVE REGION WIDTH BETWEEN SHALLOW TRENCH ISOLATION STRUCTURES USING A GATE CURRENT MEASUREMENT TECHNIQUE FOR FABRICATING A FLASH MEMORY SEMICONDUCTOR DEVICE AND DEVICE THEREBY FORMED	10/224737 08/20/2002	6759295 07/06/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF FABRICATING A FLASH MEMORY SEMICONDUCTOR DEVICE BY DETERMINING THE ACTIVE REGION WIDTH BETWEEN SHALLOW TRENCH ISOLATION STRUCTURES USING AN OVERDRIVE CURRENT MEASUREMENT TECHNIQUE AND A DEVICE THEREBY FABRICATED	10/225052 08/20/2002	6884638 04/26/2005
SPANSION LLC	A PRECHARGING SCHEME FOR READING A MEMORY CELL	10/226912 08/22/2002	6771543 08/03/2004
SPANSION LLC	DUMMY WORDLINE FOR ERASE AND BITLINE LEAKAGE	10/230729 08/29/2002	6707078 03/16/2004
SPANSION LLC	FLOATING GATE MEMORY DEVICE WITH HOMOGENEOUS OXINITRIDE TUNNELING DIELECTRIC	10/232487 08/30/2002	6828623 12/07/2004
SPANSION LLC	FLASH MEMORY ARRAY WITH DUAL FUNCTION CONTROL LINES AND ASYMMETRICAL SOURCE AND DRAIN JUNCTIONS	10/233906 09/03/2002	6744668 06/01/2004
SPANSION LLC	GAIN VARIABLE AMPLIFIER	10/237720 09/10/2002	6690236 02/10/2004
SPANSION LLC	MANUFACTURING METHOD OF NONVOLATILE	10/237805 09/10/2002	6765271 07/20/2004
SPANSION LLC	VIRTUAL GROUND SILICIDE BIT-LINE PROCESS FOR FLOATING GATE FLASH MEMORY	10/238412 09/10/2002	6716698 04/06/2004
SPANSION LLC	MEMORY WORDLINE SPACER	10/243108 09/13/2002	6773988 08/10/2004
SPANSION LLC	SYSTEM AND METHOD FOR Y-DECODEING IN A FLASH MEMORY DEVICE	10/243315 09/12/2002	7142454 11/28/2006
SPANSION LLC	PATH GATE DRIVER CIRCUIT	10/243433 09/12/2002	6728160 04/27/2004
SPANSION LLC	METHOD AND SYSTEM TO MINIMIZE PAGE PROGRAMMING TIME FOR FLASH MEMORY DEVICES	10/243792 09/12/2002	6744666 06/01/2004
SPANSION LLC	VOID-FREE INTERLAYER DIELECTRIC (ILD0) FOR 0.18-MICRON FLASH MEMORY SEMICONDUCTOR DEVICE	10/244129 09/13/2002	6627973 09/30/2003
SPANSION LLC	HIGH DENSITY FLOATING GATE FLASH MEMORY AND FABRICATION PROCESSES THEREFOR	10/244229 09/16/2002	6660588 12/09/2003
SPANSION LLC	METHODS FOR FABRICATING AND PLANARIZATION DUAL POLY SCALABLE SONOS FLASH MEMORY	10/244369 09/16/2002	6797565 09/28/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	REFERENCE CELL WITH VARIOUS LOAD CIRCUITS COMPENSATING FOR SOURCE SIDE LOADING EFFECTS IN A NON-VOLATILE MEMORY	10/245146 09/16/2002	6754106 06/22/2004
SPANSION LLC	METHOD FOR FORMING MULTI-BIT SILICON NITRIDE TRAPPING NON-VOLATILE MEMORY CELL	10/247641 09/18/2002	6897533 05/24/2005
SPANSION LLC	IMPLEMENTING REFERENCE CURRENT MEASUREMENT MODE WITHIN REFERENCE ARRAY PROGRAMMING MODE OR REFERENCE ARRAY ERASE MODE IN A SEMICONDUCTOR	10/254381 09/25/2002	6771093 08/03/2004
SPANSION LLC	FLASH MEMORY HAVING IMPROVED CORE FIELD ISOLATION IN SELECTIVE GATE REGIONS	10/260061 09/27/2002	6815292 11/09/2004
SPANSION LLC	ORGANIC SPIN-ON ANTI-REFLECTIVE COATING OVER INORGANIC ANTI-REFLECTIVE COATING	10/262221 09/30/2002	6867063 03/15/2005
SPANSION LLC	GROUND STRUCTURE FOR PAGE READ AND PAGE WRITE FOR FLASH MEMORY	10/264387 10/04/2002	6859393 02/22/2005
SPANSION LLC	METHOD FOR REDUCING DRAIN INDUCED BARRIER LOWERING IN A MEMORY DEVICE	10/265001 10/04/2002	6833297 12/21/2004
SPANSION LLC	NITRIDATION OF GATE OXIDE BY LASER PROCESSING	10/273184 10/18/2002	7670936 03/02/2010
SPANSION LLC	BILAYER FLOATING GATE FOR IMPROVED WORK FUNCTION BETWEEN FLOATING GATE AND A HIGH-K DIELECTRIC LAYER	10/274063 10/17/2002	6630383 10/07/2003
SPANSION LLC	SHALLOW TRENCH ISOLATION APPROACH FOR IMPROVED STI CORNER ROUNDING	10/277395 10/22/2002	7439141 10/21/2008
SPANSION LLC	RECEIVING CIRCUIT	10/278902 10/24/2002	6867623 03/15/2005
SPANSION LLC	BUFFER DRIVER CIRCUIT FOR PRODUCING A FAST, STABLE AND ACCURATE REFERENCE VOLTAGE	10/282459 10/29/2002	6781417 08/24/2004
SPANSION LLC	METHOD OF PROGRAMMING IN-SERIES MEMORY CELLS	10/282847 10/29/2002	6754109 06/22/2004
SPANSION LLC	IMPROVED METHOD FOR READING A NON-VOLATILE MEMORY CELL	10/283590 10/30/2002	6795357 09/21/2004
SPANSION LLC	SEMICONDUCTOR MANUFACTURING RESOLUTION ENHANCEMENT SYSTEM AND METHOD FOR SIMULTANEOUSLY PATTERNING DIFFERENT FEATURE TYPES	10/283685 10/29/2002	6994939 02/07/2006
SPANSION LLC	SYSTEM AND METHOD OF FORMING A PASSIVE LAYER BY A CMP PROCESS	10/284769 10/31/2002	6836398 12/28/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NITROGEN OXIDATION TO REDUCE ENCROACHMENT	10/284866 10/30/2002	6867119 03/15/2005
SPANSION LLC	MULTI-CELL ORGANIC MEMORY ELEMENT AND METHODS OF OPERATING AND FABRICATING	10/284946 10/31/2002	6900488 05/31/2005
SPANSION LLC	MEMORY CELL FORMATION WITH PROCESS FOR PATTERNING CONDUCTING POLYMER FILMS	10/285183 10/31/2002	6753247 06/22/2004
SPANSION LLC	MEMORY DEVICE HAVING RESISTIVE ELEMENT COUPLED TO REFERENCE CELL FOR IMPROVED RELIABILITY	10/285909 10/31/2002	6819615 11/16/2004
SPANSION LLC	CONTROL OF MEMORY ARRAYS UTILIZING ZENER DIODE-LIKE DEVICES	10/287363 11/04/2002	6847047 01/25/2005
SPANSION LLC	STACKED ORGANIC MEMORY DEVICES AND METHODS OF OPERATING AND FABRICATING	10/287612 11/04/2002	6870183 03/22/2005
SPANSION LLC	METHOD OF ALTERNATING GROUNDED/FLOATING POLY LINES TO MONITOR SHORTS	10/288871 11/05/2002	6858450 02/22/2005
SPANSION LLC	METHOD OF FORMING FLASH MEMORY HAVING PRE-INTERPOLY DIELECTRIC TREATMENT LAYER	10/291293 11/08/2002	6716702 04/06/2004
SPANSION LLC	FABRICATION OF SHALLOW TRENCH ISOLATION STRUCTURES WITH ROUNDED CORNER AND SELF-ALIGNED GATE	10/292121 11/12/2002	6709924 03/23/2004
SPANSION LLC	METHOD OF FORMING NITRIDATED TUNNEL OXIDE BARRIERS FOR FLASH MEMORY TECHNOLOGY CIRCUITRY AND STI AND LOCOS ISOLATION	10/295738 11/15/2002	6605511 08/12/2003
SPANSION LLC	OFFSET CANCEL CIRCUIT OF VOLTAGE FOLLOWER EQUIPPED WITH OPERATIONAL AMPLIFIER	10/301649 11/22/2002	6946905 09/20/2005
SPANSION LLC	CASCODE AMPLIFIER CIRCUIT FOR PRODUCING A FAST, STABLE AND ACCURATE BITLINE VOLTAGE	10/302672 11/22/2002	6768677 07/27/2004
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	10/304762 06/29/2000	7102928 09/05/2006
SPANSION LLC	METHOD AND SYSTEM FOR DEFINING A REDUNDANCY WINDOW AROUND A PARTICULAR COLUMN IN A MEMORY ARRAY	10/305700 11/26/2002	7076703 07/11/2006
SPANSION LLC	LATERAL DOPED CHANNEL	10/305724 11/26/2002	7049188 05/23/2006
SPANSION LLC	METHOD OF PROTECTING A MEMORY ARRAY FROM CHARGE DAMAGE DURING FABRICATION	10/305750 11/26/2002	6897110 05/24/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	PROGRAM ALGORITHM INCLUDING SOFT ERASE FOR SONOS MEMORY DEVICE	10/305756 11/26/2002	6744675 06/01/2004
SPANSION LLC	MOCVD FORMATION OF Cu ₂ S	10/305889 11/26/2002	6798068 09/28/2004
SPANSION LLC	MEMORY CIRCUIT FOR SUPPRESSING BIT LINE CURRENT LEAKAGE	10/306080 11/26/2002	6628545 09/30/2003
SPANSION LLC	A METHOD AND SYSTEM FOR ERASING A NITRIDE MEMORY DEVICE	10/306252 11/27/2002	6906959 06/14/2005
SPANSION LLC	A METHOD FOR PRODUCING A LOW DEFECT HOMOGENEOUS OXINITRIDE	10/306382 11/27/2002	6991987 01/31/2006
SPANSION LLC	METHOD FOR FABRICATING NITRIDE MEMORY CELLS USING A FLOATING GATE FABRICATION PROCESS	10/306529 11/27/2002	6743677 06/01/2004
SPANSION LLC	MEMORY WITH IMPROVED CHARGE-TRAPPING DIELECTRIC LAYER	10/307189 11/29/2002	7074677 07/11/2006
SPANSION LLC	SYSTEM FOR PROGRAMMING A NON-VOLATILE MEMORY CELL	10/307667 12/02/2002	6795342 09/21/2004
SPANSION LLC	PRE-CHARGE METHOD FOR READING A NON-VOLATILE MEMORY CELL	10/307749 12/02/2002	6788583 09/07/2004
SPANSION LLC	ONO FABRICATION PROCESS FOR REDUCING OXYGEN VACANCY CONTENT IN BOTTOM OXIDE LAYER IN FLASH MEMORY DEVICES	10/308518 12/03/2002	6803275 10/12/2004
SPANSION LLC	CIRCUIT FOR ACCURATE MEMORY READ OPERATIONS	10/313444 12/05/2002	6731542 05/04/2004
SPANSION LLC	STRUCTURE AND METHOD FOR REDUCING CHARGE LOSS IN A MEMORY CELL	10/313454 12/05/2002	6737701 05/18/2004
SPANSION LLC	METHODS OF FORMING PASSIVE LAYERS IN ORGANIC MEMORY CELLS	10/313494 12/05/2002	6773954 08/10/2004
SPANSION LLC	AN EFFICIENT METHOD TO DETECT PROCESS INDUCED DEFECTS IN THE GATE STACK OF FLASH MEMORY DEVICES	10/313676 12/05/2002	6717850 04/06/2004
SPANSION LLC	IMPLANTATION FOR THE FORMATION OF CUX LAYER IN AN ORGANIC MEMORY DEVICE	10/314054 12/05/2002	6770905 08/03/2004
SPANSION LLC	METHOD OF FORMING COPPER SULFIDE FOR MEMORY CELL	10/314060 12/05/2002	6746971 06/08/2004
SPANSION LLC	SELF ALIGNED MEMORY ELEMENT AND WORDLINE	10/314591 12/09/2002	7220985 05/22/2007
SPANSION LLC	SELECTIVE FORMATION OF TOP MEMORY ELECTRODE BY ELECTROLESS FORMATION OF CONDUCTIVE MATERIALS	10/314837 12/09/2002	6686263 02/03/2004
SPANSION LLC	DISCONTINUOUS NITRIDE STRUCTURE FOR NON-VOLATILE TRANSISTORS	10/315458 12/09/2002	6828607 12/07/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FLASH MEMORY DEVICE HAVING FOUR-BIT CELL	10/315632 12/10/2002	6735124 05/11/2004
SPANSION LLC	METHOD AND SYSTEM FOR REDUCING CONTACT DEFECTS USING NON CONVENTIONAL CONTACT FORMATION METHOD FOR SEMICONDUCTOR CELLS	10/316569 12/10/2002	7015135 03/21/2006
SPANSION LLC	BIPOLAR SUPPLY VOLTAGE GENERATOR AND SEMICONDUCTOR DEVICE FOR SAME	10/316901 12/12/2002	7342436 03/11/2008
SPANSION LLC	DIFFERENTIALLY MIS-ALIGNED CONTACTS IN FLASH ARRAYS TO CALIBRATE FAILURE MODES	10/320910 12/17/2002	7032193 04/18/2006
SPANSION LLC	PULSE WIDTH DETECTION CIRCUIT FILTERING THE INPUT SIGNAL AND GENERATING A BINARY SIGNAL	10/327094 12/24/2002	6765420 07/20/2004
SPANSION LLC	TREATMENT OF DIELECTRIC MATERIAL TO ENHANCE ETCH RATE	10/331938 12/30/2002	6905971 06/14/2005
SPANSION LLC	INTEGRATED CIRCUIT FREE FROM ACCUMULATION OF DUTY RATIO ERRORS	10/335925 01/03/2003	7180512 02/20/2007
SPANSION LLC	SYSTEM AND METHOD FOR CHARGE RESTORATION IN A NON-VOLATILE MEMORY DEVICE	10/338333 01/07/2003	6751146 06/15/2004
SPANSION LLC	METHOD AND SYSTEM FOR TESTING TUNNEL OXIDE ON A MEMORY-RELATED STRUCTURE	10/339536 01/08/2003	6808945 10/26/2004
SPANSION LLC	NONVOLATILE MEMORY DEVICE AND	10/341424 01/14/2003	7057229 06/06/2006
SPANSION LLC	MEMORY DEVICE HAVING A P+ GATE AND THIN BOTTOM OXIDE AND METHOD OF ERASING SAME	10/341881 01/14/2003	6885590 04/26/2005
SPANSION LLC	FLASH MEMORY DEVICES WITH OXYNITRIDE DIELECTRIC AS THE CHARGE STORAGE MEDIA	10/342032 01/14/2003	6797650 09/28/2004
SPANSION LLC	DIELECTRIC MEMORY CELL STRUCTURE WITH COUNTER DOPED CHANNEL REGION	10/342549 01/15/2003	7151292 12/19/2006
SPANSION LLC	FLASH MEMORY CELL PROGRAMMING METHOD AND SYSTEM	10/342585 01/14/2003	6894925 05/17/2005
SPANSION LLC	DC-DC CONVERTER, DUTY-RATIO SETTING CIRCUIT AND ELECTRIC APPLIANCE USING THEM	10/345352 01/16/2003	6696821 02/24/2004
SPANSION LLC	MEMORY CIRCUIT ARRANGEMENT FOR PROGRAMMING A MEMORY CELL	10/348732 01/21/2003	6747900 06/08/2004
SPANSION LLC	DC OFFSET CANCEL CIRCUIT	10/349106 01/23/2003	6968172 11/22/2005
SPANSION LLC	DC OFFSET CANCEL CIRCUIT	10/349107 01/23/2003	6690225 02/10/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR IMPROVING READ MARGIN IN A FLASH MEMORY DEVICE	10/349293 01/21/2003	6643177 11/04/2003
SPANSION LLC	A STRUCTURE AND METHOD FOR REDUCING STANDING WAVES IN A PHOTORESIST	10/350472 01/23/2003	7070911 07/04/2006
SPANSION LLC	NON-VOLATILE MEMORY CELL AND METHOD OF PROGRAMMING FOR IMPROVED DATA RETENTION	10/352658 01/28/2003	6768160 07/27/2004
SPANSION LLC	FINGER MOVEMENT DETECTION METHOD AND APPARATUS	10/352943 01/29/2003	7064743 06/20/2006
SPANSION LLC	IMPROVED METHOD FOR READING A NON-VOLATILE MEMORY CELL ADJACENT TO AN INACTIVE REGION OF A NON-VOLATILE MEMORY CELL ARRAY	10/353558 01/29/2003	6771545 08/03/2004
SPANSION LLC	MICROCOMPUTER, METHOD OF CONTROLLING CACHE MEMORY, AND METHOD OF CONTROLLING CLOCK	10/355177 01/31/2003	7007134 02/28/2006
SPANSION LLC	NONVOLATILE SEMICONDUCTOR DEVICE	10/356495 02/03/2003	6639849 10/28/2003
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE	10/356496 08/03/2000	6765828 07/20/2004
SPANSION LLC	METHOD OF IMPROVING DYNAMIC REFERENCE TRACKING FOR FLASH MEMORY UNIT	10/357879 02/04/2003	6735114 05/11/2004
SPANSION LLC	COMPENSATED OSCILLATOR CIRCUIT FOR CHARGE PUMPS	10/358498 02/04/2003	6888763 05/03/2005
SPANSION LLC	ONO FABRICATION PROCESS FOR INCREASING OXYGEN CONTENT AT BOTTOM OXIDE-SUBSTRATE INTERFACE IN FLASH MEMORY DEVICES	10/358586 02/05/2003	7033957 04/25/2006
SPANSION LLC	METHODS OF CONTROLLING V _{SS} IMPLANTS ON MEMORY DEVICES, AND SYSTEM FOR PERFORMING SAME	10/358587 02/05/2003	6790752 09/14/2004
SPANSION LLC	UV BLOCKING LAYER FOR REDUCING UV-INDUCED CHARGING OF SONOS DUAL-BIT FLASH MEMORY DEVICES IN BEOL PROCESSING	10/358589 02/05/2003	6774432 08/10/2004
SPANSION LLC	REDUCED SILICON GOUGING AND COMMON SOURCE LINE RESISTANCE IN SEMICONDUCTOR DEVICES	10/358756 02/05/2003	6953752 10/11/2005
SPANSION LLC	IMPROVED PERFORMANCE IN FLASH MEMORY DEVICES	10/358866 02/05/2003	6723638 04/20/2004
SPANSION LLC	METHOD OF FORMATION OF SEMICONDUCTOR RESISTANT TO HOT CARRIER INJECTION STRESS	10/359872 02/07/2003	6949433 09/27/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR MEMORY AND OUTPUT SIGNAL CONTROL METHOD AND CIRCUIT IN SEMICONDUCTOR MEMORY	10/360731 02/10/2003	6778448 08/17/2004
SPANSION LLC	SELECTION CIRCUIT FOR ACCURATE MEMORY READ OPERATIONS	10/361378 02/10/2003	6768679 07/27/2004
SPANSION LLC	METHOD FOR FABRICATING DEVICES IN CORE AND PERIPHERY SEMICONDUCTOR REGIONS USING DUAL SPACERS	10/361455 02/10/2003	6670227 12/30/2003
SPANSION LLC	STRUCTURE AND METHOD FOR SUPPRESSING OXIDE ENCROACHMENT IN A FLOATING GATE MEMORY CELL	10/364569 02/10/2003	6767791 07/27/2004
SPANSION LLC	PROTECTION OF CHARGE TAPPING DIELECTRIC FLASH MEMORY DEVICES FROM UV-INDUCED CHARGING IN BEOL PROCESSING	10/368696 02/19/2003	7118967 10/10/2006
SPANSION LLC	THRESHOLD VOLTAGE ADJUSTMENT METHOD OF NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE AND NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE	10/369496 02/21/2003	6879521 04/12/2005
SPANSION LLC	SEMICONDUCTOR DEVICE INCLUDING A VOLTAGE MONITORING CIRCUIT	10/373739 02/27/2003	6870778 03/22/2005
SPANSION LLC	IMPLANT DAMAGE REMOVAL BY LASER THERMAL ANNEALING	10/378885 03/05/2003	6872643 03/29/2005
SPANSION LLC	FAST BANDGAP REFERENCE CIRCUIT FOR USE IN A LOW POWER SUPPLY A/D BOOSTER	10/379744 03/05/2003	6894473 05/17/2005
SPANSION LLC	METHOD OF PROGRAMMING A MEMORY CELL	10/379885 03/05/2003	6781885 08/24/2004
SPANSION LLC	CHARGE-TRAPPING MEMORY ARRAYS RESISTANT TO DAMAGE FROM CONTACT HOLE FORMATION	10/382726 03/05/2003	6794764 09/21/2004
SPANSION LLC	MEMORY ARRAY HAVING SHALLOW BIT LINE WITH SILICIDE CONTACT PORTION AND METHOD OF FORMATION	10/382731 03/05/2003	6744105 06/01/2004
SPANSION LLC	METHOD OF FORMING CORE AND PERIPHERY GATES INCLUDING TWO CRITICAL MASKING STEPS TO FORM A HARD MASK IN A CORE REGION THAT INCLUDES A CRITICAL DIMENSION LESS THAN ACHIEVABLE AT A RESOLUTION LIMIT OF LITHOGRAPHY	10/382744 03/05/2003	6780708 08/24/2004
SPANSION LLC	CONTROL SYSTEM FOR CHARGING BATTERIES AND ELECTRONIC APPARATUS USING SAME	10/383068 03/07/2003	RE43911 01/08/2013
SPANSION LLC	METHOD AND SYSTEM FOR APPLYING TESTING VOLTAGE SIGNAL	10/384856 03/10/2003	7073104 07/04/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR DETECTING DEFECTIVE MATERIAL SURROUNDING FLASH MEMORY CELLS	10/384936 03/10/2003	6765827 07/20/2004
SPANSION LLC	SPIN ON POLYMERS FOR ORGANIC MEMORY DEVICES	10/385375 03/10/2003	6656763 12/02/2003
SPANSION LLC	INTERNAL BUS TESTING DEVICE AND METHOD	10/385527 03/12/2003	7028237 04/11/2006
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	10/387064 03/11/2003	6912160 06/28/2005
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY AND METHOD OF MANUFACTURING THE SAME	10/387427 03/14/2003	7026687 04/11/2006
SPANSION LLC	CIRCUIT FOR FAST AND ACCURATE MEMORY READ OPERATIONS	10/387617 03/13/2003	6744674 06/01/2004
SPANSION LLC	MEMORY DEVICE HAVING REVERSE LDD METHOD	10/387774 03/12/2003	6936515 08/30/2005
SPANSION LLC	APPARATUS AND METHOD FOR A SENSE AMPLIFIER CIRCUIT THAT SAMPLES AND HOLDS A REFERENCE VOLTAGE	10/389149 03/13/2003	6819612 11/16/2004
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	10/392912 03/21/2003	6914824 07/05/2005
SPANSION LLC	ALIGNMENT SYSTEM FOR PLANAR CHARGE TRAPPING DIELECTRIC MEMORY CELL LITHOGRAPHY	10/394565 03/21/2003	6667212 12/23/2003
SPANSION LLC	CIRCUIT WITH VARIATION CORRECTION FUNCTION	10/401604 03/31/2003	8049539 11/01/2011
SPANSION LLC	EQUIPMENT FOR LOW TEMPERATURE	10/404081 04/02/2003	6970007 11/29/2005
SPANSION LLC	PHOTOSENSITIVE POLYMERIC MEMORY ELEMENTS	10/405272 04/02/2003	6825060 11/30/2004
SPANSION LLC	BMC-HOSTED REAL-TIME CLOCK AND NON-VOLATILE RAM REPLACEMENT	10/406130 04/03/2003	7197657 03/27/2007
SPANSION LLC	FAST, ACCURATE AND LOW POWER SUPPLY VOLTAGE BOOSTER USING A/D CONVERTER	10/406415 04/03/2003	6798275 09/28/2004
SPANSION LLC	MEMORY DEVICE HAVING IMPROVED PERIPHERY AND CORE ISOLATION	10/407999 04/03/2003	7078314 07/18/2006
SPANSION LLC	METHOD FOR PREDICTING REMAINING CHARGE OF PORTABLE ELECTRONICS BATTERY	10/412427 04/14/2003	6897635 05/24/2005
SPANSION LLC	METHOD OF PROGRAMMIN DUAL CELL MEMORY DEVICE TO STORE MULTIPLE DATA STATES PER CELL	10/413800 04/15/2003	6956768 10/18/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	AMPLIFICATION CIRCUIT AND OPTICAL COMMUNICATION APPARATUS PROVIDED WITH THE AMPLIFICATION CIRCUIT	10/418174 04/18/2003	6788152 09/07/2004
SPANSION LLC	DIFFERENTIAL CIRCUIT AND PEAK HOLD CIRCUIT INCLUDING DIFFERENTIAL CIRCUIT	10/418197 04/18/2003	6741105 05/25/2004
SPANSION LLC	FREQUENCY SYNTHESIZER CIRCUIT	10/419206 04/21/2003	6806782 10/19/2004
SPANSION LLC	METHOD OF CONTROLLING PROGRAM THRESHOLD VOLTAGE DISTRIBUTION OF A DUAL CELL MEMORY DEVICE	10/422090 04/24/2003	6822909 11/23/2004
SPANSION LLC	METHOD OF DUAL CELL MEMORY DEVICE OPERATION FOR IMPROVED END-OF-LIFE READ MARGIN	10/422092 04/24/2003	6778442 08/17/2004
SPANSION LLC	METHOD OF PROGRAMMING AND READING A DUAL CELL MEMORY DEVICE	10/422276 04/24/2003	6768673 07/27/2004
SPANSION LLC	METHOD OF PROGRAMMING A DUAL CELL MEMORY DEVICE	10/422489 04/24/2003	6775187 08/10/2004
SPANSION LLC	SEMICONDUCTOR DEVICE, DISPLAY DEVICE, AND SIGNAL TRANSMISSION SYSTEM	10/427547 04/30/2003	7215312 05/08/2007
SPANSION LLC	STRUCTURE AND METHOD FOR A TWO-BIT MEMORY CELL	10/429140 05/03/2003	6861696 03/01/2005
SPANSION LLC	METHOD FOR REDUCING SHORT CHANNEL EFFECTS IN MEMORY CELLS AND RELATED STRUCTURE	10/429150 05/03/2003	6773990 08/10/2004
SPANSION LLC	PROCESS FOR REDUCING HYDROGEN CONTAMINATION DIELECTRIC MATERIALS IN MEMORY DEVICES	10/429447 05/05/2003	6740605 05/25/2004
SPANSION LLC	METHOD OF FORMATION OF GATE STACK SPACER AND CHARGE STORAGE MATERIALS HAVING REDUCED HYDROGEN CONTENT IN CHARGE TRAPPING DIELECTRIC FLASH MEMORY DEVICE	10/430471 05/06/2003	7163860 01/16/2007
SPANSION LLC	TRENCH SIDE WALL CHARGE TRAPPING DIELECTRIC FLASH MEMORY DEVICE	10/430582 05/06/2003	6754105 06/22/2004
SPANSION LLC	MEMORY DEVICE WITH REDUCED OPERATING VOLTAGE HAVING DIELECTRIC STACK	10/430604 05/06/2003	6868014 03/15/2005
SPANSION LLC	METHOD TO OBTAIN TEMPERATURE INDEPENDENT PROGRAM THRESHOLD VOLTAGE DISTRIBUTION USING TEMPERATURE DEPENDENT VOLTAGE REFERENCE	10/431065 05/06/2003	6944057 09/13/2005
SPANSION LLC	NON-VOLATILE MEMORY READ CIRCUIT WITH END OF LIFE SIMULATION	10/431320 05/06/2003	6791880 09/14/2004

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR MANUFACTURING A DOUBLE BITLINE IMPLANT	10/431321 05/06/2003	7232729 06/19/2007
SPANSION LLC	METHOD AND SYSTEM FOR IMPROVING SHORT CHANNEL EFFECT ON A FLOATING GATE DEVICE	10/431322 05/06/2003	6878589 04/12/2005
SPANSION LLC	ERASING AND PROGRAMMING AN ORGANIC MEMORY DEVICE AND METHODS OF OPERATING AND FABRICATING	10/436786 05/13/2003	6960783 11/01/2005
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE AND METHOD OF FABRICATING THEREOF	10/437896 05/15/2003	6940120 09/06/2005
SPANSION LLC	LASER THERMAL ANNEALING METHODS FOR FLASH MEMORY DEVICES	10/438942 05/16/2003	7001814 02/21/2006
SPANSION LLC	PLL CIRCUIT INCLUDING A VOLTAGE CONTROLLED OSCILLATOR AND A METHOD FOR CONTROLLING A VOLTAGE CONTROLLED OSCILLATOR	10/443105 05/22/2003	6853257 02/08/2005
SPANSION LLC	PLL SEMICONDUCTOR DEVICE WITH TESTABILITY, AND METHOD AND APPARATUS FOR TESTING SAME	10/452149 06/03/2003	6876185 04/05/2005
SPANSION LLC	PLANAR POLYMER MEMORY DEVICE	10/452877 06/02/2003	6977389 12/20/2005
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING CONDUCTIVE STRUCTURES FORMED NEAR A GATE ELECTRODE	10/454517 06/05/2003	6917068 07/12/2005
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	10/455310 06/06/2003	6839279 01/04/2005
SPANSION LLC	MEMORY DEVICE HAVING A THIN TOP DIELECTRIC AND METHOD OF ERASING SAME	10/459102 06/11/2003	6862221 03/01/2005
SPANSION LLC	NON-VOLATILE MEMORY DEVICE	10/459576 06/12/2003	6963104 11/08/2005
SPANSION LLC	STRUCTURE AND METHOD FOR PREVENTING UV RADIATION DAMAGE IN A MEMORY CELL AND IMPROVING CONTACT CD CONTROL	10/460278 06/12/2003	6894342 05/17/2005
SPANSION LLC	STRUCTURE AND METHOD FOR PREVENTING UV RADIATION DAMAGE AND INCREASING DATA RETENTION IN MEMORY CELLS	10/460279 06/12/2003	6765254 07/20/2004
SPANSION LLC	STRUCTURE AND METHOD FOR PREVENTING PROCESS-INDUCED UV RADIATION DAMAGE IN A MEMORY CELL	10/460282 06/12/2003	6833581 12/21/2004
SPANSION LLC	METHOD OF FABRICATING A PLANAR STRUCTURE TRAPPING MEMORY CELL ARRAY WITH RECTANGULAR GATES AND REDUCED BIT LINE RESISTANCE	10/463643 06/17/2003	6855608 02/15/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY WITH A CORE-BASED VIRTUAL GROUND AND DYNAMIC REFERENCE SENSING SCHEME	10/600065 06/20/2003	7324374 01/29/2008
SPANSION LLC	SIMULTANEOUS EXECUTION OF COMMAND MODES IN A FLASH MEMORY DEVICE	10/603136 06/23/2003	6957297 10/18/2005
SPANSION LLC	AN APPARATUS AND METHOD FOR A METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR WITH SOURCE SIDE PUNCH-THROUGH PROTECTION IMPLANT	10/609159 06/27/2003	8530977 09/10/2013
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE FOR DIFFERENTIAL DATA AMPLIFICATION AND METHOD THEREFOR	10/614066 07/08/2003	6975540 12/13/2005
SPANSION LLC	FLASH MEMORY DEVICE	10/614177 07/08/2003	7196372 03/27/2007
SPANSION LLC	POLYMER MEMORY DEVICE FORMED IN VIA OPENING	10/614397 07/07/2003	6787458 09/07/2004
SPANSION LLC	SILICON CONTAINING MATERIAL FOR PATTERNING POLYMERIC MEMORY ELEMENT	10/614484 07/07/2003	6803267 10/12/2004
SPANSION LLC	A METHOD FOR FABRICATING A FLASH MEMORY DEVICE	10/616804 07/09/2003	6939766 09/06/2005
SPANSION LLC	UNDOPED OXIDE LINER/BPSG FOR IMPROVED DATA RETENTION	10/617450 07/11/2003	7023046 04/04/2006
SPANSION LLC	PECVD SILICON-RICH OXIDE LAYER FOR REDUCED UV CHARGING	10/617451 07/11/2003	7060554 06/13/2006
SPANSION LLC	PROGRAMMING OF A FLASH MEMORY CELL	10/617971 07/10/2003	6937518 08/30/2005
SPANSION LLC	MEMORY STRUCTURE HAVING TUNABLE INTERLAYER DIELECTRIC AND METHOD FOR FABRICATING SAME	10/618156 07/11/2003	7078749 07/18/2006
SPANSION LLC	FLASH MEMORY CELL HAVING REDUCED LEAKAGE CURRENT	10/618191 07/10/2003	6897518 05/24/2005
SPANSION LLC	METHOD OF FABRICATING SEMICONDUCTOR DEVICE HAVING TRIPLE LDD STRUCTURE AND LOWER GATE RESISTANCE FORMED WITH A SINGLE IMPLANT PROCESS	10/618514 07/11/2003	6939770 09/06/2005
SPANSION LLC	PARTIALLY DE-COUPLED CORE AND PERIPHERY GATE MODULE PROCESS	10/619797 07/14/2003	6835662 12/28/2004
SPANSION LLC	CONTROL CIRCUIT FOR DC/DC CONVERTER	10/624644 07/23/2003	7176663 02/13/2007
SPANSION LLC	ANALOG SWITCH CIRCUIT	10/625738 07/24/2003	6842063 01/11/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FULLY ISOLATED DIELECTRIC MEMORY CELL STRUCTURE FOR A DUAL BIT NITRIDE STORAGE DEVICE AND PROCESS FOR MAKING SAME	10/631199 07/31/2003	6861307 03/01/2005
SPANSION LLC	NONVOLATILE MEMORY HAVING TRANSLAYER	10/631812 08/01/2003	6934194 08/23/2005
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	10/631856 08/01/2003	7012838 03/14/2006
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	10/633535 08/05/2003	7061809 06/13/2006
SPANSION LLC	DUAL-LEVEL STACKED FLASH MEMORY CELL WITH A MOSFET STORAGE TRANSISTOR	10/634042 08/04/2003	6958271 10/25/2005
SPANSION LLC	DESIGN METHOD FOR INTEGRATED CIRCUIT HAVING SCAN FUNCTION	10/634857 08/06/2003	6990642 01/24/2006
SPANSION LLC	MEMORY DEVICE AND METHOD OF SIMULTANEOUS FABRICATION OF CORE AND PERIPHERY OF SAME	10/635089 08/06/2003	7060564 06/13/2006
SPANSION LLC	MEMORY DEVICE HAVING SILICIDE BITLINE AND METHOD OF FORMING THE SAME	10/635781 08/06/2003	6987048 01/17/2006
SPANSION LLC	TEST STRUCTURE FOR DETERMINING ELECTROMIGRATION AND INTERLAYER DIELECTRIC FAILURE	10/636162 08/07/2003	6897476 05/24/2005
SPANSION LLC	STRUCTURE AND METHOD TO REDUCE DRAIN INDUCED BARRIER LOWERING	10/636336 08/06/2003	7067381 06/27/2006
SPANSION LLC	LOW POWER CHARGE PUMP	10/636337 08/06/2003	7116154 10/03/2006
SPANSION LLC	APPARATUS AND METHOD FOR BOOSTING A PASS GATE PUMP FOR A FLASH MEMORY	10/636846 08/06/2003	
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE	10/643967 08/20/2003	7098147 08/29/2006
SPANSION LLC	USE OF HIGH-K DIELECTRIC MATERIALS IN MODIFIED ONO STRUCTURE FOR SEMICONDUCTOR DEVICES	10/646080 08/22/2003	6803272 10/12/2004
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE, AND ADJUSTMENT METHOD OF SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE	10/648272 08/27/2003	6943616 09/13/2005
SPANSION LLC	PLL CLOCK GENERATOR CIRCUIT AND CLOCK GENERATION METHOD	10/649672 08/28/2003	7253691 08/07/2007
SPANSION LLC	SEMICONDUCTOR MEMORY CAPABLE OF BEING DRIVEN AT LOW VOLTAGE AND ITS MANUFACTURE METHOD	10/649994 08/28/2003	6927133 08/09/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CAM (CONTENT ADDRESSABLE MEMORY) CELLS AS PART OF CORE ARRAY IN FLASH MEMORY DEVICE	10/650049 08/26/2003	6970368 11/29/2005
SPANSION LLC	MEMORY INTEGRATED CIRCUIT DEVICE	10/650072 08/28/2003	6969663 11/29/2005
SPANSION LLC	MEMORY CIRCUIT HAVING	10/652035 09/02/2003	6865133 03/08/2005
SPANSION LLC	PATTERNING FOR ELLIPTICAL V _{ss} CONTACT ON FLASH MEMORY	10/654739 09/03/2003	6900124 05/31/2005
SPANSION LLC	MEMORY CELL STRUCTURE HAVING NITRIDE LAYER WITH REDUCED CHARGE LOSS AND METHOD FOR FABRICATING SAME	10/655179 09/04/2003	6992370 01/31/2006
SPANSION LLC	METHOD OF FABRICATING A FLOATING GATE	10/655936 09/04/2003	6919247 07/19/2005
SPANSION LLC	SEMICONDUCTOR MEMORY FOR FUNCTION WELL	10/658428 09/10/2003	6853596 02/08/2005
SPANSION LLC	MEMORY DEVICE HAVING HIGH WORK FUNCTION GATE AND METHOD OF ERASING SAME	10/658506 09/09/2003	6912163 06/28/2005
SPANSION LLC	METHOD AND APPARATUS FOR COUPLING TO A COMMON LINE IN AN ARRAY	10/658882 09/09/2003	7323726 01/29/2008
SPANSION LLC	FLASH MEMORY WITH HIGH-K DIELECTRIC BETWEEN SUBSTRATE AND GATE	10/658936 09/09/2003	7414281 08/19/2008
SPANSION LLC	METHOD AND APPARATUS FOR COUPLING TO A SOURCE LINE IN A MEMORY DEVICE	10/658937 09/09/2003	7217964 05/15/2007
SPANSION LLC	HIGH DENSITY FLOATING GATE FLASH MEMORY AND FABRICATION PROCESSES THEREFOR	10/660420 09/10/2003	6812514 11/02/2004
SPANSION LLC	A FLASH MEMORY CELL DRAIN AND SOURCE FABRICATION SYSTEM AND METHOD	10/661720 09/11/2003	6943401 09/13/2005
SPANSION LLC	A METHOD FOR FABRICATING A MEMORY DEVICE	10/662011 09/11/2003	7026230 04/11/2006
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	10/662810 09/19/2003	6873022 03/29/2005
SPANSION LLC	CONTROL METHOD OF NON-VOLATILE SEMICONDUCTOR MEMORY CELL AND NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE	10/665205 09/22/2003	6862217 03/01/2005
SPANSION LLC	PORTABLE DEVICE HAVING A CHARGING CIRCUIT AND SEMICONDUCTOR DEVICE FOR USE IN THE CHARGING CIRCUIT OF THE SAME	10/665406 09/22/2003	7045990 05/16/2006
SPANSION LLC	METHOD OF MANUFACTURING SEMICONDUCTOR MEMORY WITH DEUTERATED MATERIALS	10/672093 09/26/2003	6884681 04/26/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	ORGANIC MEMORY CELL FORMATION ON Ag SUBSTRATE	10/676612 10/01/2003	6936545 08/30/2005
SPANSION LLC	MEMORY DEVICE AND METHOD	10/677031 10/01/2003	6980473 12/27/2005
SPANSION LLC	SELF ASSEMBLY OF CONDUCTING POLYMER FOR FORMATION OF POLYMER MEMORY CELL	10/677042 10/01/2003	6852586 02/08/2005
SPANSION LLC	MEMORY DEVICE AND METHOD	10/677073 10/01/2003	6973003 12/06/2005
SPANSION LLC	MEMORY DEVICE AND METHOD USING POSITIVE GATE STRESS TO RECOVER OVERERASED CELL	10/677790 10/02/2003	6967873 11/22/2005
SPANSION LLC	EFFICIENT AND ACCURATE SENSING CIRCUIT AND TECHNIQUE FOR LOW VOLTAGE FLASH MEMORY DEVICES	10/678446 10/03/2003	6898124 05/24/2005
SPANSION LLC	CIRCUIT AND TECHNIQUE FOR ACCURATELY SENSING LOW VOLTAGE FLASH MEMORY DEVICES	10/679179 10/03/2003	6963506 11/08/2005
SPANSION LLC	FLASH MEMORY DEVICE AND METHOD OF FABRICATION THEREOF	10/679774 10/06/2003	6958511 10/25/2005
SPANSION LLC	CURRENT PULSE RECEIVING CIRCUIT	10/681306 10/09/2003	6891408 05/10/2005
SPANSION LLC	RECESSED CHANNEL	10/683631 10/10/2003	6963108 11/08/2005
SPANSION LLC	RECESS CHANNEL FLASH ARCHITECTURE FOR REDUCED SHORT CHANNEL EFFECT	10/683649 10/10/2003	6965143 11/15/2005
SPANSION LLC	TRAPPING DIELECTRIC MEMORY CELL STRUCTURE WITH GATE HOLE INJECTION ERASE	10/684890 10/14/2003	6903407 06/07/2005
SPANSION LLC	MEMORY CELL ARRAY WITH STAGGERED LOCAL INTERCONNECT STRUCTURE	10/685044 10/14/2003	6911704 06/28/2005
SPANSION LLC	METHOD FOR FORMING A DIELECTRIC SPACER IN A NON-VOLATILE MEMORY DEVICE	10/696234 10/28/2003	6908816 06/21/2005
SPANSION LLC	SIDEWELL FORMATION FOR HIGH DENSITY POLYMER MEMORY ELEMENT ARRAY	10/699903 11/03/2003	7015504 03/21/2006
SPANSION LLC	MEMORY ELEMENT FORMATION WITH PHOTSENSITIVE POLYMER DIELECTRIC	10/700021 11/03/2003	6955939 10/18/2005
SPANSION LLC	FREQUENCY MEASUREMENT CIRCUIT	10/700454 11/05/2003	6917191 07/12/2005
SPANSION LLC	METHOD AND STRUCTURE FOR PROTECTING NROM DEVICES FROM INDUCED CHARGE DAMAGE DURING DEVICE FABRICATION	10/701780 11/05/2003	6869844 03/22/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR TESTING ARTICLES OF MANUFACTURE	10/703860 11/07/2003	6970806 11/29/2005
FASL AND SPANSION LLC	Transfer In Progress - Incomplete Record	10/705881 11/13/2003	7189659 03/13/2007
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT	10/706664 11/12/2003	6940338 09/06/2005
SPANSION LLC	TIGHTLY SPACED GATE FORMATION THROUGH DAMASCENE PROCESS	10/716209 11/18/2003	6933219 08/23/2005
SPANSION LLC	DUAL CELL MEMORY DEVICE HAVING A TOP DIELECTRIC STACK	10/716230 11/18/2003	6894932 05/17/2005
SPANSION LLC	NONVOLATILE SEMICONDUCTOR DEVICE	10/717622 05/25/2001	6950343 09/27/2005
SPANSION LLC	METHODS FOR FORMING NITROGEN-RICH REGIONS IN NON-VOLATILE SEMICONDUCTOR MEMORY DEVICES	10/718707 11/24/2003	6989319 01/24/2006
SPANSION LLC	READING FLASH MEMORY	10/721643 11/24/2003	6950344 09/27/2005
SPANSION LLC	FLASH MEMORY DEVICE	10/726508 12/04/2003	6933558 08/23/2005
SPANSION LLC	PATTERN RECOGNITION AND METROLOGY STRUCTURE FOR AN X-INITIATIVE LAYOUT DESIGN	10/726829 12/03/2003	6982188 01/03/2006
SPANSION LLC	DIELECTRIC PATTERN FORMATION FOR ORGANIC ELECTRONIC DEVICES	10/726868 12/03/2003	7012013 03/14/2006
SPANSION LLC	NEUTRON DETECTING DEVICE	10/728510 12/05/2003	6841841 01/11/2005
SPANSION LLC	HARD MASK AND PACER FOR SUBLITHOGRAPHIC BITLINE	10/729732 12/05/2003	6962849 11/08/2005
SPANSION LLC	IMPROVED PROCESS FOR FABRICATION OF SPACER LAYER WITH REDUCED HYDROGEN CONTENT IN SEMICONDUCTOR DEVICE	10/731494 12/09/2003	6949481 09/27/2005
SPANSION LLC	PROCESS FOR FABRICATION OF NITRIDE LAYER WITH REDUCED HYDROGEN CONTENT IN ONO STRUCTURE IN SEMICONDUCTOR DEVICE	10/731659 12/09/2003	6955965 10/18/2005
SPANSION LLC	FLASH MEMORY WITH BURIED BIT LINES	10/738322 12/16/2003	7288809 10/30/2007
SPANSION LLC	SPREAD SPECTRUM CLOCK GENERATION CIRCUIT, JITTER GENERATION CIRCUIT AND SEMICONDUCTOR DEVICE	10/743188 12/23/2003	6975148 12/13/2005
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	10/747692 12/30/2003	6970381 11/29/2005

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NARROW BITLINE USING SAFIER FOR MIRROBIT	10/755430 01/12/2004	6872609 03/29/2005
SPANSION LLC	POCKET IMPLANT FOR COMPLEMENTARY BIT DISTURB IMPROVEMENT AND CHARGING IMPROVEMENT OF SONOS MEMORY CELL	10/755740 01/12/2004	6958272 10/25/2005
SPANSION LLC	SUBSTRATE BIAS FOR PROGRAMMING NON-VOLATILE MEMORY	10/755979 01/12/2004	7023740 04/04/2006
SPANSION LLC	A HIGH VOLTAGE TRANSISTOR SCALING TILT ION IMPLANT SYSTEM AND METHOD	10/756573 01/12/2004	7011998 03/14/2006
SPANSION LLC	METHOD AND STRUCTURE FOR CONTROLLING FLOATING BODY EFFECTS	10/756585 01/12/2004	7211473 05/01/2007
SPANSION LLC	ELECTROSTATIC DISCHARGE PERFORMANCE OF A SILICON STRUCTURE AND EFFICIENT USE OF AREA WITH ELECTROSTATIC DISCHARGE PROTECTIVE DEVICE UNDER THE PAD APPROACH AND ADJUSTMENT OF VIA CONFIGURATION THERETO TO CONTROL DRAIN JUNCTION RESISTANCE	10/758173 01/14/2004	7019366 03/28/2006
SPANSION LLC	STRUCTURE FOR INCREASING DRIVE CURRENT IN A MEMORY ARRAY AND RELATED METHOD	10/759809 01/16/2004	6825526 11/30/2004
SPANSION LLC	FLEXIBLE CASCODE AMPLIFIER CIRCUIT WITH HIGH GAIN FOR FLASH MEMORY CELLS	10/759855 01/16/2004	7026843 04/11/2006
SPANSION LLC	METHOD FOR ERASING A MEMORY SECTOR IN VIRTUAL GROUND ARCHITECTURE WITH REDUCED LEAKAGE CURRENT	10/762071 01/20/2004	6819591 11/16/2004
SPANSION LLC	STRUCTURE AND METHOD FOR LOW VSS RESISTANCE AND REDUCED DIBL IN A FLOATING GATE MEMORY CELL	10/762445 01/22/2004	7301193 11/27/2007
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	10/768188 02/02/2004	6987297 01/17/2006
SPANSION LLC	NON-VOLATILE MEMORY DEVICE	10/770010 02/03/2004	6958512 10/25/2005
SPANSION LLC	DISPOSABLE HARD MASK FOR MEMORY BITLINE SCALING	10/770245 02/02/2004	7018868 03/28/2006
SPANSION LLC	IMPROVED CONTACT INTEGRATION AND ENHANCED INTERLEVEL DIELECTRIC CHEMICAL MECHANICAL POLISHING PROCESS	10/770260 02/02/2004	6989563 01/24/2006
SPANSION LLC	BITLINE HARD MASK SPACER FLOW FOR MEMORY CELL SCALING	10/770673 02/02/2004	6927145 08/09/2005
SPANSION LLC	MICROCONTROLLER HAVING A SYSTEM RESOURCE PRESCALER THEREON	10/790016 03/02/2004	7454650 11/18/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	TESTING FOR OPERATING LIFE OF A MEMORY DEVICE WITH ADDRESS CYCLING USING A GRAY CODE SEQUENCE	10/791417 03/02/2004	7254692 08/07/2007
SPANSION LLC	BAND DISTRIBUTION INSPECTING DEVICE AND BAND DISTRIBUTION INSPECTING METHOD	10/792810 03/05/2004	7071675 07/04/2006
SPANSION LLC	SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURE	10/795890 03/08/2004	7026211 04/11/2006
SPANSION LLC	SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURE	10/795924 03/08/2004	6998677 02/14/2006
SPANSION LLC	CLOCK SHIFT CIRCUIT FOR GRADUAL FREQUENCY CHANGE	10/796005 03/10/2004	7012454 03/14/2006
SPANSION LLC	AVOIDING FIELD OXIDE GOUGING IN SHALLOW TRENCH ISOLATION (STI) REGIONS	10/799413 03/12/2004	7265014 09/04/2007
SPANSION LLC	DC/DC CONVERTER	10/806150 03/23/2004	7019501 03/28/2006
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT USING BAND-GAP REFERENCE CIRCUIT	10/808532 03/25/2004	7034514 04/25/2006
SPANSION LLC	OPERATIONAL AMPLIFIER, LINE DRIVER, AND LIQUID CRYSTAL DISPLAY DEVICE	10/811431 03/29/2004	7081792 07/25/2006
SPANSION LLC	RECESSED CHANNEL WITH SEPARATED ONO MEMORY DEVICE	10/812703 03/30/2004	7067377 06/27/2006
SPANSION LLC	USING ORGANIC SEMICONDUCTOR MEMORY IN CONJUNCTION WITH A MEMS ACTUATOR	10/817186 04/02/2004	7499309 03/03/2009
SPANSION LLC	POLYMER DIELECTRICS FOR ME ARRAY INTERN CONNECT	10/817467 04/02/2004	7608855 10/27/2009
SPANSION LLC	UV BLOCKING LAYER FOR REDUCING UV-INDUCED CHARGING OF SONOS DUAL-BIT FLASH MEMORY DEVICES IN BEOL PROCESSING	10/818112 04/05/2004	7018896 03/28/2006
SPANSION LLC	MEMORY DEVICE AND METHODS OF USING AND MAKING THE DEVICE	10/818261 04/02/2004	7259039 08/21/2007
SPANSION LLC	A FLASH MEMORY DEVICE AND METHOD OF FORMING THE SAME WITH IMPROVED GATE BREAKDOWN AND ENDURANCE	10/819162 04/07/2004	7067388 06/27/2006
SPANSION LLC	NARROW WIDE SPACER	10/821312 04/08/2004	6927129 08/09/2005
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING A PAD METAL LAYER AND A LOWER METAL LAYER THAT ARE ELECTRICALLY COUPLED, WHEREAS APERTURES ARE FORMED IN THE LOWER METAL LAYER BELOW A CENTER AREA OF THE PAD METAL LAYER	10/823970 04/13/2004	7632749 12/15/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	A MEMORY DEVICE WITH AN ALTERNATING V _{ss} INTERCONNECTION	10/823972 04/13/2004	7009271 03/07/2006
SPANSION LLC	METHOD FOR PROVIDING SHORT CHANNEL EFFECT CONTROL USING A SILICIDE V _{SS} LINE	10/835341 04/28/2004	7109555 09/19/2006
SPANSION LLC	FLASH MEMORY DEVICE	10/838215 05/05/2004	7279735 10/09/2007
SPANSION LLC	METHOD FOR MINIMIZING FALSE DETECTION OF STATES IN FLASH MEMORY DEVICES	10/838962 05/04/2004	7283398 10/16/2007
SPANSION LLC	METHOD AND APPARATUS FOR ELIMINATING WORD LINE BENDING BY SOURCE SIDE IMPLANTATION	10/839561 05/04/2004	7029975 04/18/2006
SPANSION LLC	POSITIVE GATE STRESS DURING ERASE TO IMPROVE RETENTION IN MULTY-LEVEL, NON-VOLATILE FLASH MEMORY	10/839562 05/04/2004	7142455 11/28/2006
SPANSION LLC	METHODS AND APPARATUS FOR WORDLINE PROTECTION IN FLASH MEMORY DEVICES	10/839614 05/05/2004	7160773 01/09/2007
SPANSION LLC	METHOD FOR REDUCING SHORT CHANNEL EFFECTS IN MEMORY CELLS AND RELATED STRUCTURE	10/839626 05/04/2004	6963106 11/08/2005
SPANSION LLC	FLASH MEMORY CELL AND METHODS FOR PROGRAMMING AND ERASING	10/841850 05/07/2004	7120063 10/10/2006
SPANSION LLC	STRUCTURE AND METHOD FOR PROTECTING MEMORY CELLS FROM UV RADIATION DAMAGE AND UV RADIATION-INDUCED CHARGING DURING BACKEND PROCESSING	10/841933 05/06/2004	6974989 12/13/2005
SPANSION LLC	BITLINE IMPLANT UTILIZING DUAL POLY	10/843289 05/11/2004	6989320 01/24/2006
SPANSION LLC	CASCADE AMPLIFIER CIRCUIT FOR PRODUCING A FAST, STABLE AND ACCURATE BITLINE VOLTAGE	10/844116 05/12/2004	6885250 04/26/2005
SPANSION LLC	STACKED ORGANIC MEMORY DEVICES AND METHODS OF OPERATING AND FABRICATING	10/848679 05/19/2004	6979837 12/27/2005
SPANSION LLC	OPERATION MODE CONTROL CIRCUIT, MICROCOMPUTER INCLUDING THE SAME, AND CONTROL SYSTEM USING THE MICROCOMPUTER	10/849958 05/21/2004	7500021 03/03/2009
SPANSION LLC	CHARGE/DISCHARGE CONTROL CIRCUIT AND SECONDARY BATTERY	10/854781 05/27/2004	RE41915 11/09/2010
SPANSION LLC	METHOD AND DEVICE FOR REDUCING INTERFACE AREA OF A MEMORY DEVICE	10/859369 06/01/2004	7151027 12/19/2006
SPANSION LLC	METHOD OF DETERMINING VOLTAGE COMPENSATION FOR FLASH MEMORY DEVICES	10/860450 06/03/2004	7009887 03/07/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	UV-BLOCKING ETCH STOP LAYER FOR REDUCING UV-INDUCED CHARGING OF CHARGE STORAGE LAYER IN MEMORY DEVICES IN BEOL PROCESSING	10/861437 06/03/2004	7091088 08/15/2006
SPANSION LLC	METHOD AND SYSTEM FOR IMPROVING THE TOPOGRAPHY OF A MEMORY ARRAY	10/861575 06/04/2004	7226839 06/05/2007
SPANSION LLC	LDC IMPLANT FOR MIRROR BIT TO IMPROVE VT ROLL OFF AND FORMS SHARPER JUNCTION	10/862636 06/07/2004	7176113 02/13/2007
SPANSION LLC	MEMORY DEVICE AND METHODS OF USING NEGATIVE GATE STRESS TO CORRECT OVER-ERASED MEMORY CELLS	10/863673 06/08/2004	6834012 12/21/2004
SPANSION LLC	RAMP SOURCE HOT-HOLE PROGRAMMING FOR TRAP BASED NONVOLATILE MEMORY DEVICES	10/863933 06/09/2004	6934190 08/23/2005
SPANSION LLC	MEMORY WORDLINE SPACER	10/864142 06/08/2004	7053446 05/30/2006
SPANSION LLC	ERASE ALGORITHM FOR MULTI-LEVEL BIT FLASH MEMORY	10/864947 06/10/2004	7251158 07/31/2007
SPANSION LLC	SPREAD-SPECTRUM CLOCK GENERATOR	10/866985 06/15/2004	7098709 08/29/2006
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE	10/869075 06/17/2004	7084658 08/01/2006
SPANSION LLC	ALIGNMENT MARKS WITH SALICIDED SPACERS BETWEEN BITLINES FOR ALIGNMENT SIGNAL IMPROVEMENT	10/869286 06/16/2004	7098546 08/29/2006
SPANSION LLC	METHOD OF FORMING CORE AND PERIPHERY GATES INCLUDING TWO CRITICAL MASKING STEPS TO FORM A HARD MASK IN A CORE REGION THAT INCLUDES A CRITICAL DIMENSION LESS THAN ACHIEVABLE AT A RESOLUTION LIMIT OF LITHOGRAPHY	10/869774 06/16/2004	6995437 02/07/2006
SPANSION LLC	OSCILLATION CIRCUIT AND SEMICONDUCTOR DEVICE FREE FROM THE INFLUENCE OF SOURCE VOLTAGE, TEMPERATURE AND FLUCTUATIONS IN THE INVERTER THRESHOLD VOLTAGE	10/877981 06/29/2004	7068116 06/27/2006
SPANSION LLC	MEMORY DEVICE HAVING A P+ GATE AND THIN BOTTOM OXIDE AND METHOD OF ERASING SAME	10/878091 06/28/2004	6995423 02/07/2006
SPANSION LLC	CONTROL OF MEMORY ARRAYS UTILIZING ZENER DIODE-LIKE DEVICES	10/882538 06/30/2004	6943370 09/13/2005
SPANSION LLC	SWITCHABLE MEMORY DIODE- A NEW MEMORY DEVICE	10/883350 07/01/2004	7157732 01/02/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FLOATING GATE SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURE	10/883924 07/01/2004	6984563 01/10/2006
SPANSION LLC	ARCHITECTURE FOR GENERATING ADAPTIVE ARBITRARY WAVEFORMS	10/885284 07/06/2004	7072781 07/04/2006
SPANSION LLC	CUS FORMATION BY ANODIC SULFIDE PASSIVATION OF CU SURFACE	10/885944 07/07/2004	6893895 05/17/2005
SPANSION LLC	SEMICONDUCTOR DEVICE BUILT ON PLASTIC SUBSTRATE	10/885959 07/07/2004	8044387 10/25/2011
SPANSION LLC	BOND PAD STRUCTURE FOR COPPER METALLIZATION HAVING INCREASED RELIABILITY AND METHOD FOR FABRICATING SAME	10/887585 07/08/2004	7242102 07/10/2007
SPANSION LLC	METHOD OF REFERENCE CELL DESIGN FOR OPTIMIZED MEMORY CIRCUIT YIELD	10/887782 07/09/2004	7020022 03/28/2006
SPANSION LLC	ONO FABRICATION PROCESS FOR REDUCING OXYGEN VACANCY CONTENT IN BOTTOM OXIDE LAYER IN FLASH MEMORY DEVICES	10/889424 07/12/2004	6969886 11/29/2005
SPANSION LLC	APPARATUS AND METHOD FOR A MEMORY ARRAY WITH SHALLOW TRENCH ISOLATION REGIONS BETWEEN BIT LINES FOR INCREASED PROCESS MARGINS	10/896292 07/20/2004	7423312 09/09/2008
SPANSION LLC	METHOD FOR PROGRAMMING DUAL BIT MEMORY DEVICES TO REDUCE COMPLEMENTARY BIT DISTURBANCE	10/896299 07/20/2004	7079423 07/18/2006
SPANSION LLC	SIGNAL DETECTION APPARATUS, SIGNAL DETECTION METHOD, SIGNAL TRANSMISSION SYSTEM, AND COMPUTER READABLE PROGRAM TO EXECUTE SIGNAL TRANSMISSION	10/896967 07/23/2004	6885221 04/26/2005
SPANSION LLC	SERIAL COMMUNICATION DEVICE	10/899072 07/27/2004	7403582 07/22/2008
SPANSION LLC	THREE DIMENSIONAL POLYMER MEMORY CELL SYSTEMS	10/899344 07/26/2004	7307338 12/11/2007
SPANSION LLC	METHOD FOR PULSE ERASE IN DUAL BIT MEMORY DEVICES	10/899684 07/26/2004	7092297 08/15/2006
SPANSION LLC & GLOBALFOUNDRIES US INC.	METHODS OF DETERMINING CHARACTERISTICS OF DOPED REGIONS ON DEVICE WAFERS, AND SYSTEM FOR ACCOMPLISHING SAME	10/900832 07/28/2004	7063991 06/20/2006
SPANSION LLC	FLASH MEMORY UNIT AND METHOD OF PROGRAMMING A FLASH MEMORY DEVICE	10/909693 08/02/2004	7042767 05/09/2006
SPANSION LLC	HORIZONTAL MOS TRANSISTOR	10/911630 08/05/2004	7075159 07/11/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY CELL WITH REDUCED DIBL AND VSS RESISTANCE	10/915771 08/11/2004	7170130 01/30/2007
SPANSION LLC	METHOD OF FORMING NARROWLY SPACED FLASH MEMORY CONTACT OPENINGS AND LITHOGRAPHY MASKS	10/916167 08/11/2004	7507661 03/24/2009
SPANSION LLC	USING THIN UNDOPED TEOS WITH BPTEOS ILD OR BPTEOS ILD ALONE TO IMPROVE CHARGE LOSS AND CONTACT RESISTANCE IN MULTI BIT MEMORY DEVICES	10/917562 08/13/2004	7157335 01/02/2007
SPANSION LLC	TEST STRUCTURE FOR CHARACTERIZING JUNCTION LEAKAGE CURRENT	10/919119 08/16/2004	6977195 12/20/2005
SPANSION LLC	POLYMER MEMORY DEVICE WITH VARIABLE PERIOD OF RETENTION TIME	10/919572 08/17/2004	7199394 04/03/2007
SPANSION LLC	SYSTEMS AND METHODS FOR ADJUSTING PROGRAMMING THRESHOLDS OF POLYMER MEMORY CELLS	10/919846 08/17/2004	7289353 10/30/2007
SPANSION LLC	METHOD TO IMPROVE YIELD AND SIMPLIFY OPERATION OF POLYMER MEMORY CELLS	10/919872 08/17/2004	7122853 10/17/2006
SPANSION LLC	MEMORY DEVICES CONTAINING A HIGH-K DIELECTRIC LAYER	10/927692 08/27/2004	8691647 04/08/2014
SPANSION LLC	SONOS MEMORY WITH INVERSION BIT-LINES	10/928582 08/27/2004	7151293 12/19/2006
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT FOR DRIVING LIQUID CRYSTAL PANEL	10/930856 09/01/2004	7460097 12/02/2008
SPANSION LLC	SYSTEM AND METHOD FOR MULTI-BIT FLASH READS USING DUAL DYNAMIC REFERENCES	10/933588 09/03/2004	7103706 09/05/2006
SPANSION LLC	A SEMICONDUCTOR CONTACT FORMATION SYSTEM AND METHOD	10/934828 09/02/2004	7572727 08/11/2009
SPANSION LLC	SEMICONDUCTOR CONTACT AND NITRIDE SPACER FORMATION SYSTEM AND METHOD	10/934923 09/02/2004	7361587 04/22/2008
SPANSION LLC	VOLTAGE CONTROLLED OSCILLATOR AND PLL CIRCUIT	10/939513 09/14/2004	7301413 11/27/2007
SPANSION LLC	METHOD AND STRUCTURE OF MEMORY ELEMENT PLUG WITH CONDUCTIVE TA REMOVED FROM SIDEWALL AT REGION OF MEMORY ELEMENT FILMS	10/939773 09/13/2004	7129133 10/31/2006
SPANSION LLC	METHOD OF MAKING A SEMICONDUCTOR STRUCTURE	10/939775 09/13/2004	7135396 11/14/2006
SPANSION LLC	METHOD OF FORMING COPPER SULFIDE LAYER OVER SUBSTRATE	10/939897 09/13/2004	7148144 12/12/2006
SPANSION LLC	CAPACITANCE DIFFERENCE DETECTING CIRCUIT AND MEMS SENSOR	10/942127 09/16/2004	7119550 10/10/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHODS AND SYSTEMS FOR REDUCING ERASE TIMES IN FLASH MEMORY DEVICES	10/945914 09/22/2004	7079424 07/18/2006
SPANSION LLC	READ APPROACH FOR MULTI-LEVEL VIRTUAL GROUND MEMORY	10/946809 09/22/2004	7038948 05/02/2006
SPANSION LLC	PAGE_EXE ERASE ALGORITHM FOR FLASH MEMORY	10/946812 09/22/2004	7415646 08/19/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND MICROCONTROLLER	10/947538 09/23/2004	7149830 12/12/2006
SPANSION LLC	LEVEL CONVERSION CIRCUIT	10/948524 09/24/2004	7176740 02/13/2007
SPANSION LLC	SWITCHING REGULATOR CONTROL CIRCUIT, SWITCHING REGULATOR AND SWITCHING REGULATOR CONTROL METHOD	10/948644 03/29/2004	7012411 03/14/2006
SPANSION LLC	PHOTOSENSITIVE POLYMERIC MEMORY ELEMENTS	10/951370 09/28/2004	6878961 04/12/2005
SPANSION LLC	SYSTEM THAT FACILITATES READING MULTI-LEVEL DATA IN NON-VOLATILE MEMORY	10/951410 09/28/2004	7068204 06/27/2006
SPANSION LLC	CHARGE CONTROL THAT KEEPS CONSTANT INPUT VOLTAGE SUPPLIED TO BATTERY PACK	10/954754 10/01/2004	7701178 04/20/2010
SPANSION LLC	SO ₂ TREATMENT OF OXIDIZED CuO FOR COPPER SULFIDE FORMATION OF MEMORY ELEMENT GROWTH	10/957247 10/01/2004	7115440 10/03/2006
SPANSION LLC	MOS CAPACITOR DEVICE	10/965856 10/18/2004	7196379 03/27/2007
SPANSION LLC	A NON-VOLATILE MEMORY SYSTEM HAVING A PROGRAMMABLY SELECTABLE BOOT CODE SECTION SIZE	10/968414 10/19/2004	7206914 04/17/2007
SPANSION LLC	ION PATH POLYMERS FOR ION-MOTION MEMORY	10/968705 10/19/2004	7067349 06/27/2006
SPANSION LLC	PATTERNING FOR ELONGATED VSS CONTACT ON FLASH MEMORY	10/968713 10/19/2004	7018922 03/28/2006
SPANSION LLC	CONTROL CIRCUIT OF DC-DC CONVERTER AND ITS CONTROL METHOD	10/973257 10/27/2004	7250745 07/31/2007
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING OUTPUT CIRCUIT ADAPTIVELY SUPPRESSING SSO NOISE	10/975831 10/29/2004	7135895 11/14/2006
SPANSION LLC	FLASH MEMORY DEVICE HAVING INCREASED OVER-ERASE CORRECTION EFFICIENCY AND ROBUSTNES AGAINST DEVICE VARIATIONS	10/976760 11/01/2004	7599228 10/06/2009
SPANSION L.L.C.	SYSTEM AND METHOD FOR PROTECTING SEMICONDUCTOR DEVICES	10/976816 11/01/2004	7402868 07/22/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	POLYMER MEMORY CELL OPERATION	10/978621 11/01/2004	7221599 05/22/2007
SPANSION LLC	METHOD OF MAKING AN ORGANIC MEMORY CELL	10/978845 11/01/2004	7374654 05/20/2008
SPANSION LLC	METHOD OF MAKING A MEMORY CELL	10/979516 11/02/2004	7141482 11/28/2006
SPANSION LLC	METHOD FOR ISOLATING A FAILURE SITE IN A WORDLINE IN A MEMORY ARRAY	10/981026 11/04/2004	7319623 01/15/2008
SPANSION LLC	MEMORY CELL WITH PLASMA-GROWN OXIDE SPACER FOR REDUCED DIBL AND VSS RESISTANCE AND INCREASED RELIABILITY	10/981174 11/04/2004	7151028 12/19/2006
SPANSION LLC	CIRCUIT AND METHOD FOR CONTROLLING DC-DC CONVERTER	10/981792 11/05/2004	7262587 08/28/2007
SPANSION LLC	CIRCUIT FOR DETECTING DIFFERENCE IN CAPACITANCE	10/981795 11/05/2004	7119555 10/10/2006
SPANSION LLC	RAMPED SOFT PROGRAMMING FOR CONTROL OF ERASE VOLTAGE DISTRIBUTIONS IN FLASH MEMORY DEVICES	10/981833 11/04/2004	7020021 03/28/2006
SPANSION LLC	IMPROVED MULTI BIT PROGRAM ALGORITHM	10/982296 11/05/2004	7038950 05/02/2006
SPANSION LLC	CONTROL OF MEMORY DEVICES POSSESSING VARIABLE RESISTANCE CHARACTERISTICS	10/983919 11/08/2004	7443710 10/28/2008
SPANSION LLC	SYSTEMS AND METHOD FOR A MEMORY AND/OR SELECTION ELEMENT FORMED WITHIN A RECESS IN A METAL LINE	10/985172 11/10/2004	7199416 04/03/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING	10/986652 11/12/2004	7084037 08/01/2006
SPANSION LLC	PROTECTION OF ACTIVE LAYERS OF MEMORY CELLS DURING PROCESSING OF OTHER ELEMENTS	10/987262 11/12/2004	7220642 05/22/2007
SPANSION LLC	DIODE ARRAY ARCHITECTURE FOR ADDRESSING NANOSCALE RESISTIVE MEMORY ARRAYS	10/990706 11/17/2004	7035141 04/25/2006
SPANSION LLC	FULLY ISOLATED DIELECTRIC MEMORY CELL STRUCTURE FOR A DUAL BIT NITRIDE STORAGE DEVICE AND PROCESS FOR MAKING SAME	10/997345 11/24/2004	7001807 02/21/2006
SPANSION LLC	SELECTIVE POLYMER GROWTH FOR MEMORY CELL FABRICATION	11/000740 12/01/2004	7141844 11/28/2006
AMD AND SPANSION LLC	METAL/OXIDE ETCH AFTER POLISH TO PREVENT BRIDGING BETWEEN ADJACENT FEATURES OF A SEMICONDUCTOR STRUCTURE	11/000870 12/01/2004	7288487 10/30/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY DEVICE WITH A SELECTION ELEMENT AND A CONTROL LINE IN A SUBSTANTIALLY SIMILAR LAYER	11/001519 12/01/2004	7391064 06/24/2008
SPANSION LLC	METHOD, SYSTEM, AND CIRCUIT FOR PERFORMING A MEMORY RELATED OPERATION	11/001940 12/01/2004	7272060 09/18/2007
SPANSION LLC	METHOD FOR ACHIEVING INCREASED CONTROL OVER INTERCONNECT LINE THICKNESS ACROSS A WAFER AND BETWEEN WAFERS	11/003208 12/02/2004	7122465 10/17/2006
SPANSION LLC	HIGH-VOLTAGE TRANSISTOR HAVING A U-SHAPED GATE AND METHOD FOR FORMING SAME	11/003528 12/03/2004	7400013 07/15/2008
SPANSION LLC	INPUT OF TEST CONDITIONS AND OUTPUT GENERATION FOR BUILT-IN SELF TEST	11/006034 12/07/2004	7672803 03/02/2010
AMD AND SPANSION LLC	MEMORY CELL HAVING ENHANCED HIGH-K DIELECTRIC	11/008233 12/10/2004	7365389 04/29/2008
AMD AND SPANSION LLC	ETCH STOP LAYER FOR MEMORY CELL RELIABILITY IMPROVEMENT	11/008240 12/10/2004	8319266 11/27/2012
SPANSION LLC	ONO STACK WITH STEAM OXIDE FOR CHARGE RETENTION	11/008263 12/10/2004	7071538 07/04/2006
SPANSION LLC	UTILIZATION OF MEMORY-DIODE WHICH MAY HAVE EACH OF A PLURALITY OF DIFFERENT MEMORY STATES	11/021944 12/23/2004	7450416 11/11/2008
SPANSION LLC	METHOD OF PROGRAMMING, READING AND ERASING MEMORY-DIODE IN A MEMORY-DIODE ARRAY	11/021958 12/23/2004	7379317 05/27/2008
SPANSION LLC	MEMORY ELEMENT WITH NITROGEN-CONTAINING ACTIVE LAYER	11/021959 12/23/2004	7208757 04/24/2007
SPANSION LLC	CURRENT SENSING ARCHITECTURE FOR HIGH BITLINE VOLTAGE, RAIL TO RAIL OUTPUT SWING AND V _{cc} NOISE CANCELLATION	11/023914 12/28/2004	7397696 07/08/2008
SPANSION LLC	SENSE AMPLIFIER WITH HIGH VOLTAGE SWING	11/024257 12/28/2004	7312641 12/25/2007
SPANSION LLC	MEMORY CONTROL CIRCUIT AND MICROPROCESSORY SYSTEM FOR PRE-FETCHING INSTRUCTIONS	11/024843 12/30/2004	7793085 09/07/2010
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND CONTROL	11/029454 11/19/2003	6965530 11/15/2005
AMD AND SPANSION LLC	MEMORY DEVICE HAVING TRAPEZOIDAL BITLINES AND METHOD OF FABRICATING SAME	11/033588 01/12/2005	8125018 02/28/2012
SPANSION LLC	MEMORY CELL CONTAINING COPOLYMER CONTAINING DAIRYLACETYLENE PORTION	11/033941 01/12/2005	7105374 09/12/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	VARIABLE DENSITY AND VARIABLE PERSISTENT ORGANIC MEMORY DEVICES, METHODS, AND FABRICATION	11/034071 01/12/2005	7273766 09/25/2007
SPANSION LLC	METHODS INVOLVING SPIN-ON POLYMERS THAT REVERSIBLY BIND CHARGE CARRIERS	11/034154 01/12/2005	7232750 06/19/2007
SPANSION LLC	MULTI-LEVEL ONO FLASH PROGRAM ALGORITHM FOR THRESHOLD WIDTH CONTROL	11/034642 01/13/2005	7130210 10/31/2006
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING AN ARITHMETIC UNIT OF A RECONFIGURABLE CIRCUIT CONFIGURATION IN ACCORDANCE WITH STORED CONFIGURATION DATA AND A MEMORY STORING FIXED VALUE DATA TO BE SUPPLIED TO THE ARITHMETIC UNIT, REQUIRING NO DATA AREA FOR STORING FIXED VALUE DATA TO BE SET IN A CONFIGURATION MEMORY	11/035055 01/14/2005	7580963 08/25/2009
SPANSION LLC	METHOD FOR CONTROLLING POLY 1 THICKNESS AND UNIFORMITY IN A MEMORY ARRAY FABRICATION PROCESS	11/035188 01/13/2005	7294573 11/13/2007
SPANSION LLC	MICROCOMPUTER WITH INTERNAL DMA	11/036332 01/18/2005	8230133 07/24/2012
SPANSION LLC	MICROCOMPUTER CAPABLE OF MONITORING INTERNAL MEMORY	11/036395 01/18/2005	7613956 11/03/2009
SPANSION LLC	AUTOMATED TESTS FOR BUILT IN SELF TEST	11/041608 01/24/2005	7284167 10/16/2007
SPANSION LLC	?? MODULATOR FOR PLL CIRCUIT	11/042136 01/26/2005	7388438 06/17/2008
SPANSION LLC	SEMICONDUCTOR DEVICE	11/043336 01/27/2005	7091518 08/15/2006
SPANSION LLC	FILTER CIRCUIT PERMITTING ADJUSTMENT OF CUTOFF FREQUENCY	11/043985 01/28/2005	7310507 12/18/2007
SPANSION LLC	BURIED WORD LINE MEMORY INTEGRATED CIRCUIT SYSTEM	11/045694 01/27/2005	7141838 11/28/2006
SPANSION LLC	MOS TYPE VARIABLE CAPACITANCE DEVICE	11/047559 03/03/2003	7622760 11/24/2009
SPANSION LLC & GLOBALFOUNDRIES US INC.	NON-VOLATILE MEMORY DEVICE WITH IMPROVED ERASE SPEED	11/049855 02/04/2005	7863128 01/04/2011
SPANSION LLC	MEMORY ELEMENT USING ACTIVE LAYERS OF BLENDED MATERIALS	11/052688 02/07/2005	7378682 05/27/2008
SPANSION LLC	MULTIPLE DUAL BIT MEMORY INTEGRATED CIRCUIT SYSTEM	11/059139 02/15/2005	7692236 04/06/2010
SPANSION LLC	CURRENT-VOLTAGE CONVERTER CIRCUIT AND CONTROL METHOD THEREOF	11/061119 02/18/2005	7046043 05/16/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR MEMORY STORAGE DEVICE AND A REDUNDANCY CONTROL METHOD THEREFOR	11/061307 02/18/2005	7068555 06/22/2006
SPANSION LLC	SEMICONDUCTOR MEMORY STORAGE DEVICE AND ITS REDUNDANT METHOD	11/061365 02/18/2005	7061816 06/13/2006
SPANSION LLC	SYSTEM AND METHOD FOR GATE FORMATION IN A SEMICONDUCTOR DEVICE	11/062629 02/23/2005	7320914 01/22/2008
SPANSION LLC	SYSTEM AND METHOD FOR ERASING A MEMORY CELL	11/062641 02/23/2005	7167398 01/23/2007
GLOBALFOUNDRIES INC. AND SPANSION LLC	NON-VOLATILE MEMORY DEVICE WITH INCREASED RELIABILITY	11/063560 02/24/2005	7238571 07/03/2007
SPANSION LLC	RESET CONTROL CIRCUIT AND RESET CONTROL METHOD	11/063975 02/24/2005	7405602 07/29/2008
SPANSION LLC	SEMICONDUCTOR MEMORY STORAGE DEVICE AND ITS CONTROL METHOD	11/064054 02/22/2005	7154807 12/26/2006
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	11/065305 08/29/2003	7253046 08/07/2007
SPANSION LLC	MEMORY DEVICE HAVING A NANOCRYSTAL CHARGE STORAGE REGION AND METHOD".	11/065388 02/24/2005	7309650 12/18/2007
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF CONTROLLING SEMICONDUCTOR MEMORY DEVICE	11/067976 03/01/2005	7224606 05/29/2007
SPANSION LLC	PROCESSING A COPOLYMER TO FORM A POLYMER MEMORY CELL	11/068674 03/01/2005	8012673 09/06/2011
SPANSION LLC	METHOD FOR PATTERNING ELECTRICALLY CONDUCTING POLY(PHENYL ACETYLENE) AND POLY (DIPHENYL ACETYLENE)	11/069181 03/01/2005	7344912 03/18/2008
SPANSION LLC	BUFFER CIRCUIT	11/071349 03/04/2005	7295039 11/13/2007
SPANSION LLC	METHOD FOR CONTAINING A SILICIDED GATE WITHIN A SIDEWALL SPACER IN INTEGRATED CIRCUIT TECHNOLOGY	11/075999 03/08/2005	7737019 06/15/2010
SPANSION LLC	DECODER FOR MEMORY DEVICE	11/076252 03/08/2005	7126862 10/24/2006
SPANSION LLC	CONSTANT-VOLTAGE POWER SUPPLY CIRCUIT	11/076940 03/11/2005	7092226 08/15/2006
SPANSION LLC	MEMORY DEVICE WITH IMPROVED SWITCHING SPEED AND DATA RETENTION	11/078873 03/11/2005	8274073 09/25/2012
SPANSION LLC	PULSE WIDTH MEASURING DEVICE WITH AUTOMATIC RANGE SETTING FUNCTION	11/085138 04/10/2003	7006936 02/28/2006
SPANSION LLC	SEMICONDUCTOR DEVICE WITH MECHANISM FOR LEAK DEFECT DETECTION	11/085144 03/22/2005	7471099 12/30/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	HIGH K STACK FOR NON-VOLATILE MEMORY	11/086310 03/23/2005	7492001 02/17/2009
SPANSION LLC	TEMPERATURE COMPENSATION OF THIN FILM DIODE VOLTAGE THRESHOLD IN MEMORY SENSING CIRCUIT	11/086884 03/22/2005	7145824 12/05/2006
SPANSION LLC	VARIABLE BREAKDOWN CHARACTERISTIC DIODE	11/087000 03/22/2005	7579631 08/25/2009
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY	11/087735 02/27/2003	7280404 10/09/2007
SPANSION LLC	CURRENT SENSING CIRCUIT WITH A CURRENT-COMPENSATED DRAIN VOLTAGE REGULATION	11/087944 03/23/2005	7099204 08/29/2006
SPANSION LLC	MEMORY DEVICE WITH IMPROVED DATA RETENTION	11/089707 03/25/2005	7307321 12/11/2007
SPANSION LLC	MEMORY DEVICE WITH IMPROVED DATA RETENTION	11/089708 03/25/2005	7830015 11/09/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR WRITING DATE INTO THE SEMICONDUCTOR DEVICE	11/090716 03/25/2005	7158417 01/02/2007
AMD AND SPANSION LLC	ULTRAVIOLET RADIATION BLOCKING INTERLAYER DIELECTRIC	11/091519 03/29/2005	8022468 09/20/2011
GLOBALFOUNDRIES INC. AND SPANSION LLC	FILM STACKS TO PREVENT UV-INDUCED DEVICE DAMAGE	11/091524 03/29/2005	7927723 04/19/2011
SPANSION LLC	QUAD BIT USING HOT HOLE ERASE FOR CBD CONTROL	11/091982 03/29/2005	7113431 09/26/2006
SPANSION LLC	METHOD OF PROVIDING AN ERASE ACTIVATION ENERGY OF A MEMORY DEVICE	11/095849 03/31/2005	8098521 01/17/2012
SPANSION LLC	NON-CRITICAL COMPLEMENTARY MASKING METHOD FOR POLY-1 DEFINITION IN FLASH MEMORY DEVICE FABRICATION	11/099339 04/04/2005	7307002 12/11/2007
SPANSION LLC	CRYSTAL OSCILLATION CIRCUIT	11/099517 04/15/2003	7042299 05/09/2006
SPANSION LLC	SPIN ON MEMORY CELL ACTIVE LAYER DOPED WITH METAL IONS	11/099847 04/06/2005	7344913 03/18/2008
AMD AND SPANSION LLC	DISPOSABLE HARD MASK FOR FORMING BIT LINES	11/100563 04/07/2005	7341956 03/11/2008
SPANSION LLC	SPLIT GATE MULTI-BIT MEMORY CELL	11/101783 04/07/2005	7312495 12/25/2007
SPANSION LLC	ETCH-BACK PROCESS FOR CAPPING A POLYMER MEMORY DEVICE	11/102004 04/08/2005	7323418 01/29/2008
SPANSION LLC	OPERATIONAL AMPLIFIER	11/108815 04/19/2005	7113041 09/26/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	VOID FREE INTERLAYER DIELECTRIC	11/109719 04/20/2005	8367493 02/05/2013
GLOBALFOUNDRIES INC. AND SPANSION LLC	METHOD FOR MANUFACTURING A SEMICONDUCTOR COMPONENT THAT INHIBITS FORMATION OF WORMHOLES	11/109964 04/19/2005	7217660 05/15/2007
GLOBALFOUNDRIES INC. AND SPANSION LLC	SEMICONDUCTOR COMPONENT AND METHOD OF MANUFACTURE	11/109965 04/19/2005	
SPANSION LLC	NON-VOLATILE SEMICONDUCTOR DEVICE AND METHOD FOR AUTOMATICALLY RECOVERING ERASE FAILURE IN THE DEVICE	11/110220 04/20/2005	7352620 04/01/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	METHOD FOR FORMING MEMORY ARRAY BITLINES COMPRISING EPITAXIALLY GROWN SILICON AND RELATED STRUCTURE	11/112607 04/22/2005	7354826 04/08/2008
AMD AND SPANSION LLC	MEMORY CELL HAVING COMBINATION RAISED SOURCE AND DRAIN AND METHOD OF FABRICATING SAME	11/112884 04/22/2005	7414277 08/19/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	RADICAL OXIDATION FOR BITLINE OXIDE OF SONOS	11/113507 04/25/2005	7232724 06/19/2007
SPANSION LLC	THE FORMATION METHOD OF AN ARRAY SOURCE LINE IN NAND FLASH MEMORY	11/113508 04/25/2005	7238569 07/03/2007
SPANSION LLC	SELF-ALIGNED STI SONOS	11/113509 04/25/2005	7303964 12/04/2007
GLOBALFOUNDRIES INC. AND SPANSION LLC	METHOD FOR MANUFACTURING A MEMORY DEVICE HAVING A NANOCRYSTAL CHARGE STORAGE REGION	11/116538 04/27/2005	7335594 02/26/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	METHOD FOR MANUFACTURING A MEMORY DEVICE HAVING A NANOCRYSTAL CHARGE STORAGE REGION	11/116551 04/27/2005	7378310 05/27/2008
SPANSION LLC	MULTI CHIP MODULE AND METHOD OF MANUFACTURE	11/116571 04/27/2005	7163839 01/16/2007
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING TRIPLE LDD STRUCTURE AND LOWER GATE RESISTANCE FORMED WITH A SINGLE IMPLANT PROCESS	11/120690 05/02/2005	7084458 08/01/2006
SPANSION LLC	DC-DC CONVERTER AND CONTROL CIRCUIT FOR DC-DC CONVERTER	11/121067 05/04/2005	7224152 05/29/2007
SPANSION LLC	MULTI-PHASE DC-DC CONVERTER AND CONTROL CIRCUIT FOR MULTI-PHASE DC-DC CONVERTER	11/121084 05/04/2005	7122995 10/17/2006

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SIGNAL DETECTION METHOD, FREQUENCY DETECTION METHOD, POWER CONSUMPTION CONTROL METHOD, SIGNAL DETECTING DEVICE, FREQUENCY DETECTING DEVICE, POWER CONSUMPTION CONTROL DEVICE AND ELECTRONIC APPARATUS	11/122123 05/05/2005	7373531 05/13/2008
SPANSION LLC	MULTI-CHIP MODULE HAVING A SUPPORT STURCTURE AND METHOD OF MANUFACTURE	11/125396 05/04/2005	8586413 11/19/2013
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	11/126330 05/11/2005	7372740 05/13/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	11/126558 05/11/2005	7206241 04/17/2007
SPANSION LLC	NON-VOLATILE SEMICONDUCTOR MEMORY, SEMICONDUCTOR DEVICE AND CHARGE PUMP CIRCUIT	11/126701 05/11/2005	7113442 09/26/2006
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	11/126738 05/11/2005	7221587 05/22/2007
SPANSION LLC	CARRIER FOR STACKED TYPE SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	11/126739 05/11/2005	7285848 10/23/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD HAVING DATA PROTECTION FEATURE	11/126869 05/11/2005	7224602 05/29/2007
GLOBALFOUNDRIES INC. AND SPANSION LLC	POLYMER SPACERS FOR CREATING SUB-LITHOGRAPHIC SPACES	11/127175 05/12/2005	7285499 10/23/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	11/127712 05/12/2005	7307894 12/11/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND ITS CONTROL METHOD	11/127713 05/12/2005	7450434 11/11/2008
AMD AND SPANSION LLC	AGGRESSIVE CLEANING PROCESS FOR SEMICONDUCTOR DEVICE CONTACT FORMATION	11/128391 05/13/2005	7476604 01/13/2009
SPANSION LLC	SPREAD SPECTRUM CLOCK GENERATION CIRCUIT AND A METHOD OF CONTROLLING THEREOF	11/131244 05/18/2005	8503501 08/06/2013
SPANSION LLC	COMMUNICATION SYSTEM	11/131322 05/18/2005	7720138 05/18/2010
SPANSION LLC	EARLY EFFECT CANCELLING CIRCUIT, DIFFERENTIAL AMPLIFIER, LINEAR REGULATOR, AND EARLY EFFECT CANCELING METHOD	11/132172 05/19/2005	7352163 04/01/2008
SPANSION LLC	METHOD FOR FABRICATING SEMICONDUCTOR DEVICE AND	11/133966 05/20/2005	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	SEMICONDUCTOR DEVICE		
SPANSION LLC	FLEXIBLE LATENCY IN FLASH MEMORY	11/135231 05/23/2005	7158442 01/02/2007
AMD AND SPANSION LLC	INTERFACE LAYER BETWEEN DUAL POLYCRYSTALLINE SILICON LAYERS	11/135492 05/24/2005	7256141 08/14/2007
SPANSION LLC	FAST WIDE OUTPUT RANGE CMOS VOLTAGE REFERENCE	11/135925 05/24/2005	7327186 02/05/2008
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	A BURIED SILICIDE LOCAL INTERCONNECT WITH SIDEWALL SPACERS AND METHOD FOR MAKING THE SAME	11/136569 05/25/2005	7786003 08/31/2010
SPANSION LLC	PAGE BUFFER ARCHITECTURE FOR PROGRAMMING, ERASING AND READING NANOSCALE RESISTIVE MEMORY DEVICES	11/139227 05/27/2005	7259983 08/21/2007
SPANSION LLC	VOLTAGE CONTROL OSCILLATION CIRCUIT AND ADJUSTING METHOD FOR THE SAME	11/143643 06/03/2005	7482882 01/27/2009
SPANSION LLC	MULTIPHASE DC-DC CONVERTER	11/145232 06/06/2005	7161337 01/09/2007
SPANSION LLC	SYSTEM AND METHOD FOR REDUCING PROCESS-INDUCED CHARGING	11/146126 06/07/2005	7262095 08/28/2007
SPANSION LLC	MICROCONTROLLER	11/146237 06/07/2005	7624205 11/24/2009
SPANSION LLC	METHOD OF PROGRAMMING A MEMORY DEVICE	11/146690 06/07/2005	7269050 09/11/2007
SPANSION LLC	MEMORY ELEMENT WITH IMPROVED PERFORMANCE	11/147059 06/07/2005	
SPANSION LLC	SYSTEM AND METHOD FOR GATE FORMATION IN A SEMICONDUCTOR DEVICE	11/147207 06/08/2005	7220643 05/22/2007
AMD AND SPANSION LLC	INTERLAYER DIELECTRIC FOR CHARGE LOSS IMPROVEMENT	11/147208 06/08/2005	7300886 11/27/2007
SPANSION LLC	JUNCTION LEAKAGE SUPPRESSION IN MEMORY DEVICES	11/152375 06/15/2005	7939440 05/10/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	11/152547 06/14/2005	7309893 12/18/2007
SPANSION LLC	NOT FILED BY SKGF; AWAITING RECEIPT OF FILE/AUTHORIZATION TO PROCEED. PART OF TRANSFER-IN PORTFOLIO FOR SPANSION.	11/153738 06/15/2005	8400841 03/19/2013
SPANSION LLC	DUAL-LEVEL STACKED FLASH MEMORY CELL WITH A MOSFET STORAGE TRANSISTOR	11/154070 06/16/2005	7339226 03/04/2008
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND SELECT	11/155510 06/06/2003	7190630 03/13/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR FORMING STRAIGHT WORD LINES IN A FLASH MEMORY ARRAY	11/155707 06/16/2005	7488657 02/10/2009
SPANSION LLC	RESISTIVE MEMORY DEVICE WITH IMPROVED DATA RETENTION	11/165005 06/23/2005	7286388 10/23/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND SOURCE VOLTAGE CONTROL METHOD	11/165008 06/23/2005	7206232 04/17/2007
SPANSION LLC	MEMORY DEVICE WITH BURIED BIT LINE STRUCTURE	11/165329 06/24/2005	8148770 04/03/2012
SPANSION LLC	METHOD OF PROGRAMMING A RESISTIVE MEMORY DEVICE	11/166572 06/24/2005	7289351 10/30/2007
SPANSION LLC	VOLTAGE CONTROL CIRCUIT AND SEMICONDUCTOR DEVICE	11/166575 06/25/2004	7450460 11/11/2008
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING A DYNAMICALLY RECONFIGURABLE CIRCUIT CONFIGURATION	11/167310 06/28/2005	7908453 03/15/2011
SPANSION LLC	MICROCONTROLLER	11/168448 06/29/2005	7978750 07/12/2011
SPANSION LLC	PREAMORPHIZATION TO MINIMIZE VOID FORMATION	11/173244 07/01/2005	7361586 04/22/2008
SPANSION LLC	MEMORY SYSTEM AND TEST METHOD THEREOF	11/173735 07/01/2005	7281180 10/09/2007
SPANSION LLC	POWER INTERCONNECT STRUCTURE FOR BALANCED BITLINE CAPACITANCE IN A MEMORY ARRAY	11/173930 07/01/2005	7227768 06/05/2007
SPANSION LLC	PROGRAMMING A MEMORY DEVICE	11/174560 07/06/2005	7269067 09/11/2007
SPANSION LLC	INTEGRATED CIRCUIT TEST SOCKET	11/180943 07/12/2005	7108535 09/19/2006
SPANSION LLC	OFFSET CANCEL CIRCUIT OF VOLTAGE FOLLOWER EQUIPPED WITH OPERATIONAL AMPLIFIER	11/181774 07/15/2005	7358946 04/15/2008
SPANSION LLC	AMPLIFIER CIRCUIT AND CONTROL METHOD THEREOF	11/181775 07/15/2005	7345536 03/18/2008
SPANSION LLC	METHOD AND APPARATUS FOR SCHEDULING WORK IN A FABRICATION FACILITY	11/185388 07/20/2005	7236843 06/26/2007
SPANSION LLC	CONTROL CIRCUIT AND CONTROL METHOD OF CURRENT MODE CONTROL TYPE DC-DC CONVERTER	11/185783 07/21/2005	7876077 01/25/2011
AMD AND SPANSION LLC	SYSTEMS AND METHOD FOR IMPROVING RELIABILITY IN A SEMICONDUCTOR DEVICE	11/186969 07/22/2005	7985687 07/26/2011
SPANSION LLC	FILE MANAGEMENT FOR RECOVERING FROM SUDDEN POWER OFF	11/187650 07/22/2005	7558904 07/07/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SYSTEM AND METHOD FOR IMPROVING RELIABILITY IN A SEMICONDUCTOR DEVICE	11/189874 07/27/2005	8802537 08/12/2014
SPANSION LLC	METHOD FOR FORMING A SEMICONDUCTOR LAYER WITH IMPROVED GAP FILLING PROPERTIES	11/189875 07/27/2005	8133801 03/13/2012
SPANSION LLC	IMPROVED READ MODE FOR FLASH MEMORY	11/189923 07/27/2005	7706183 04/27/2010
SPANSION LLC	METHOD AND APPARATUS FOR INFORMATION SETTING IN A NON-VOLATILE MEMORY DEVICE	11/192562 07/29/2004	7490192 02/10/2009
SPANSION LLC	METHODS AND SYSTEMS FOR REDUCING THE THRESHOLD VOLTAGE DISTRIBUTION FOLLOWING A MEMORY CELL ERASE	11/193391 08/01/2005	7170796 01/30/2007
AMD AND SPANSION LLC	SYSTEM AND METHOD FOR IMPROVING MESA WIDTH IN A SEMICONDUCTOR DEVICE	11/193409 08/01/2005	7842618 11/30/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR WRITING DATA INTO SEMICONDUCTOR DEVICE	11/193872 07/29/2005	7221594 05/22/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF GENERATING SENSE SIGNAL	11/194007 07/29/2005	7221595 05/22/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND WRITING METHOD	11/194023 07/29/2005	7227778 06/05/2007
SPANSION LLC	METHOD AND APPARATUS FOR INITIALIZATION CONTROL IN A NON-VOLATILE MEMORY DEVICE	11/194111 07/28/2005	7415568 08/19/2008
SPANSION LLC	BACK-TO-BACK NPN/PNP PROTECTION DIODES	11/194449 08/02/2005	7285827 10/23/2007
SPANSION LLC	MEMORY DEVICE WITH BARRIER LAYER	11/194471 08/02/2005	7053445 05/30/2006
SPANSION LLC	SEMICONDUCTOR MEMORY WITH DATA RETENTION LINER	11/195201 08/01/2005	7297592 11/20/2007
GLOBALFOUNDRIES INC. AND SPANSION LLC	SONOS MEMORY CELL HAVING HIGH-K DIELECTRIC	11/196434 08/04/2005	7446369 11/04/2008
AMD AND SPANSION LLC	VOID FREE INTERLAYER DIELECTRIC	11/201378 08/11/2005	7307027 12/11/2007
SPANSION LLC	AMPLIFICATION CIRCUIT AND CONTROL METHOD OF AMPLIFICATION CIRCUIT	11/201417 08/11/2005	7355481 04/08/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND ENTRY INTO TEST MODE WITHOUT USE OF UNNECESSARY TERMINAL	11/207935 08/22/2005	7372760 05/13/2008
SPANSION LLC	MEMORY CELL DUAL POCKET IMPLANT	11/211509 08/26/2005	7678674 03/16/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FLASH MEMORY DEVICE HAVING IMPROVED PROGRAM RATE	11/212850 08/29/2005	7307878 12/11/2007
SPANSION LLC	CARRIER STRUCTURE FOR STACKED-TYPE SEMICONDUCTOR DEVICE, METHOD OF PRODUCING THE SAME, AND METHOD OF FABRICATING STACKED-TYPE SEMICONDUCTOR DEVICE	11/214630 08/30/2005	7489029 02/10/2009
SPANSION LLC	ONE STEP REACTIVE ION ETCH TO REMOVE MULTIPLE OXIDE AND NITRIDE LAYERS	11/215184 08/29/2005	
SPANSION LLC	EXPOSURE SYSTEM, SEMICONDUCTOR DEVICE, AND METHOD FOR FABRICATING THE SEMICONDUCTOR DEVICE	11/215246 08/30/2005	7286219 10/23/2007
SPANSION LLC	NON-VOLATILE MEMORY DEVICE, AND CONTROL METHOD THEREFOR	11/215850 08/30/2005	7280414 10/09/2007
SPANSION LLC	NON-VOLATILE MEMORY DEVICE AND ERASING METHOD THEREFOR	11/215889 08/30/2005	7266019 09/04/2007
SPANSION LLC	VARIABLE CAPACITY CIRCUIT AND CONTROL METHOD OF VARIABLE CAPACITY CIRCUIT	11/216000 09/01/2005	7301412 11/27/2007
SPANSION LLC	SPREAD SPECTRUM CLOCK GENERATION CIRCUIT, JITTER GENERATION CIRCUIT AND SEMICONDUCTOR DEVICE	11/217459 09/02/2005	7095260 08/22/2006
SPANSION LLC	OPERATIONAL AMPLIFIER AND METHOD FOR CANCELING OFFSET VOLTAGE OF OPERATIONAL AMPLIFIER	11/225188 09/14/2005	7253679 08/07/2007
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE COMPRISING ONE OR MORE INJECTING BILAYER ELECTRODES	11/227603 09/15/2005	7582893 09/01/2009
SPANSION LLC	METHODS FOR FABRICATING SEMICONDUCTOR DEVICES AND CONTACTS TO SEMICONDUCTOR DEVICES	11/227657 09/14/2005	7462903 12/09/2008
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE USING READ DATA BUS FOR WRITING DATA DURING HIGH-SPEED WRITING	11/228777 09/16/2005	7263007 08/28/2007
SPANSION LLC	MEMORY DEVICES WITH ACTIVE AND PASSIVE DOPED SOL-GEL LAYERS	11/228842 09/16/2005	7307280 12/11/2007
SPANSION LLC	MEMORY DEVICES WITH ACTIVE AND PASSIVE LAYERS HAVING MULTIPLE SELF-ASSEMBLED SUBLAYERS	11/228975 09/16/2005	7633129 12/15/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR CONTROLLING THE SAME	11/228976 09/16/2005	7307893 12/11/2007
SPANSION LLC	MULTI-BIT FLASH MEMORY DEVICE HAVING IMPROVED PROGRAM RATE	11/229519 09/20/2005	7433228 10/07/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	HIGH PERFORMANCE FLASH MEMORY DEVICE CAPABLE OF HIGH DENSITY DATA STORAGE	11/229527 09/20/2005	7443732 10/28/2008
SPANSION LLC	FLASH MEMORY PROGRAMMING WITH DATA DEPENDENT CONTROL OF SOURCE LINES	11/229529 09/20/2005	8358543 01/22/2013
SPANSION LLC	CHARGE SHARING TECHNIQUE DURING FLASH MEMORY PROGRAMMING	11/229530 09/20/2005	7196938 03/27/2007
SPANSION LLC	FLASH MEMORY PROGRAMMING POWER REDUCTION	11/229667 09/20/2005	7957204 06/07/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATION	11/237591 09/27/2005	7479427 01/20/2009
SPANSION LLC	DIGITAL DATA TRANSFER BETWEEN DIFFERENT CLOCK DOMAINS	11/242215 10/03/2005	7813459 10/12/2010
SPANSION LLC	RELIABLE AND SCALABLE VIRTUAL GROUND MEMORY ARRAYS FORMED WITH REDUCED THERMAL CYCLE	11/242773 10/04/2005	7273775 09/25/2007
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	11/243752 10/04/2005	7163862 01/16/2007
SPANSION LLC	METHOD AND APPARATUS FOR MANUFACTURING SEMICONDUCTOR DEVICE	11/244166 10/10/2003	7415318 08/19/2008
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	11/247328 10/12/2005	7132332 11/07/2006
SPANSION LLC	VOLTAGE SUPPLY CIRCUIT FOR MEMORY ARRAY PROGRAMMING	11/250913 10/14/2005	7260014 08/21/2007
SPANSION LLC	STACKED ORGANIC MEMORY DEVICES AND METHODS OF OPERATING AND FABRICATING	11/251999 10/17/2005	7465956 12/16/2008
SPANSION LLC	MEMORY ARRAY TESTER INFORMATION PROCESSING SYSTEM	11/253521 10/18/2005	7443746 10/28/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	BIT LINE IMPLANT	11/254769 10/21/2005	7432178 10/07/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	TRIPLE LAYER ANTI-REFLECTIVE HARD MASK	11/256184 10/24/2005	7888269 02/15/2011
SPANSION LLC	SYSTEM AND METHOD FOR PROCESSING AN ORGANIC MEMORY CELL	11/256558 10/21/2005	7632706 12/15/2009
GLOBALFOUNDRIES INC. AND SPANSION LLC	ISOLATION REGION BIRD'S BEAK SUPPRESSION	11/258209 10/26/2005	7465644 12/16/2008
SPANSION LLC	METHOD AND APPARATUS FOR SETTING OPERATIONAL INFORMATION OF A NON-VOLATILE MEMORY	11/259873 10/26/2005	7120050 10/10/2006
SPANSION LLC	BAND GAP CIRCUIT	11/260176 10/28/2005	7236047 06/26/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THEREOF	11/261176 10/28/2005	7910974 03/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR CONTROLLING THE SAME	11/261743 10/28/2005	7286407 10/23/2007
SPANSION LLC	MEMORY ARRAY	11/262651 10/31/2005	7260019 08/21/2007
SPANSION LLC	METHOD FOR MANUFACTURING A SEMICONDUCTOR COMPONENT	11/264194 10/31/2005	7244660 07/17/2007
SPANSION LLC	CLOCK GENERATING CIRCUIT AND CLOCK GENERATING METHOD	11/267152 11/07/2005	7215165 05/08/2007
SPANSION LLC	METHOD OF INCREASING ERASE SPEED IN MEMORY ARRAYS	11/268025 11/07/2005	7462907 12/09/2008
SPANSION LLC	SUCCESSIVE APPROXIMATION A/D CONVERTER PROVIDED WITH A SAMPLE-HOLD AMPLIFIER	11/273025 11/15/2005	7199745 04/03/2007
AMD AND SPANSION LLC	MEMORY CELL SYSTEM USING SILICON-RICH NITRIDE	11/277008 03/20/2006	8803216 08/12/2014
SPANSION LLC	CONTROL CIRCUIT HAVING ERROR AMPLIFIER FOR DC-DC CONVERTER AND CONTROL METHOD THEREFOR	11/278822 04/06/2006	7242170 07/10/2007
SPANSION LLC	INTEGRATED CIRCUIT CONTACT SYSTEM	11/286173 11/22/2005	7994047 08/09/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREOF	11/289997 11/30/2005	7227780 06/05/2007
SPANSION LLC	NONVOLATILE MEMORY DEVICE, AND ITS MANUFACTURING METHOD	11/291048 11/29/2005	7307879 12/11/2007
SPANSION LLC	SEMICONDUCTOR DEVICE, FABRICATING METHOD THEREOF, AND PHOTOMASK	11/291318 11/30/2005	7651826 01/26/2010
SPANSION LLC	SEMICONDUCTOR MEMORY AND METHOD OF FABRICATING THE SAME	11/291342 11/30/2005	7736953 06/15/2010
SPANSION LLC	CONSTANT CURRENT CIRCUIT AND CONSTANT CURRENT GENERATING METHOD	11/296392 12/08/2005	7518437 04/14/2009
SPANSION LLC	MICROCOMPUTER, METHOD OF CONTROLLING CACHE MEMORY, AND METHOD OF CONTROLLING CLOCK	11/299893 12/13/2005	7434079 10/07/2008
SPANSION LLC	NOISE FILTER AND FILTERING METHOD	11/305088 12/19/2005	7733995 06/08/2010
SPANSION LLC	REDUNDANCY SUBSTITUTION METHOD, SEMICONDUCTOR MEMORY DEVICE AND INFORMATION PROCESSING APPARATUS	11/311485 12/20/2005	7266015 09/04/2007
SPANSION LLC	CLOCK GENERATION CIRCUIT AND CLOCK GENERATION METHOD	11/312392 12/21/2005	7276944 10/02/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR CONTROLLING OPERATION THEREOF	11/316800 12/22/2005	7321511 01/22/2008
SPANSION LLC	METHOD AND APPARATUS FOR APPLYING BIAS TO A STORAGE DEVICE	11/317082 12/21/2005	7239548 07/03/2007
SPANSION LLC	FABRICATION METHOD FOR A SEMICONDUCTOR DEVICE	11/317083 12/21/2005	
SPANSION LLC	SYNCHRONOUS STORAGE DEVICE AND CONTROLLING METHOD THEREOF	11/317084 12/21/2005	7239574 07/03/2007
SPANSION LLC	ACTIVE FILTER IN PLL CIRCUIT	11/318608 12/28/2005	7782144 08/24/2010
SPANSION LLC	SONOS WITH USE OF SWITCH GATE, WITHOUT BURIED DIFFUSION LAYER BITLINE	11/319999 12/27/2005	7675107 03/09/2010
SPANSION LLC	RANDOM CACHE READ USING A DOUBLE MEMORY	11/332241 01/17/2006	7423915 09/09/2008
SPANSION LLC	CONTROLLING THE LATCHUP EFFECT	11/333208 01/18/2006	8912014 12/16/2014
SPANSION LLC	SEMICONDUCTOR DEVICE WITH OPERATION MODE SET BY EXTERNAL RESISTOR	11/335513 01/20/2006	7199653 04/03/2007
SPANSION LLC	FAST RAIL-TO-RAIL VOLTAGE COMPARATOR AND METHOD FOR RAIL-TO-RAIL VOLTAGE COMPARISON	11/336464 01/20/2006	7635994 12/22/2009
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE HAVING LOWERED BIT LINE RESISTANCE	11/338956 01/24/2006	8901637 12/02/2014
SPANSION LLC	STACKED TYPE SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING STACKED TYPE SEMICONDUCTOR DEVICE	11/339352 01/25/2006	7696616 04/13/2010
SPANSION LLC	METHOD OF DETERMINING VOLTAGE COMPENSATION FOR FLASH MEMORY DEVICES	11/340916 01/27/2006	7440333 10/21/2008
SPANSION LLC	METHOD AND APPARATUS FOR ADDRESS ALLOTING AND VERIFICATION IN A SEMICONDUCTOR DEVICE	11/341029 01/27/2006	7433219 10/07/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	11/341932 01/26/2006	
SPANSION LLC	CARRIER FOR STACKED TYPE SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING STACKED TYPE SEMICONDUCTOR DEVICE	11/341984 01/27/2006	7414305 08/19/2008
SPANSION LLC	MEMORY DEVICE AND METHOD OF CONTROLLING THE SAME	11/342013 01/27/2006	7239576 07/03/2007
SPANSION LLC	DC-DC CONVERTER AND METHOD OF CONTROLLING DC-DC CONVERTER	11/342553 01/31/2006	7279870 10/09/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NON-VOLATILE MEMORY AND METHOD OF CONTROLLING THE SAME	11/342947 01/30/2006	7274592 09/25/2007
SPANSION LLC	METHOD AND APPARATUS FOR REFERENCE CELL ADJUSTING IN A STORAGE DEVICE	11/344677 01/31/2006	7239553 07/03/2007
SPANSION LLC	RECONFIGURABLE ADDRESS GENERATION CIRCUIT FOR IMAGE PROCESSING, AND RECONFIGURABLE LSI COMPRISING THE SAME	11/346177 02/03/2006	7515159 04/07/2009
SPANSION LLC	ARRAY TYPE CAM CELL FOR SIMPLIFYING PROCESSES	11/349562 02/08/2006	8237210 08/07/2012
SPANSION LLC	EXTENDED LANGUAGE SPECIFICATION ASSIGNING METHOD, PROGRAM DEVELOPING METHOD AND COMPUTER-READABLE STORAGE MEDIUM	11/350072 02/09/2006	8572592 10/29/2013
SPANSION LLC	SWITCHABLE MEMORY DIODES BASED ON FERROELECTRIC/CONJUGATED POLYMER HETEROSTRUCTURES AND/OR THEIR COMPOSITES	11/350556 02/09/2006	8089110 01/03/2012
SPANSION LLC	DC-DC CONVERTER AND ITS CONTROL METHOD, AND SWITCHING REGULATOR AND ITS CONTROL METHOD	11/350720 02/10/2006	7423415 09/09/2008
SPANSION LLC	METHODS FOR FABRICATING SEMICONDUCTOR DEVICES AND CONTACTS TO SEMICONDUCTOR DEVICES	11/355474 02/15/2006	7470614 12/30/2008
AMD AND SPANSION LLC	SEMICONDUCTOR DEVICES WITH COPPER INTERCONNECTS AND COMPOSITE SILICON NITRIDE CAPPING LAYERS	11/356311 02/17/2006	7534732 05/19/2009
SPANSION LLC	NONVOLATILE SEMICONDUCTOR MEMORY DEVICE PERFORMING ERASE OPERATION THAT CREATES NARROW THRESHOLD DISTRIBUTION	11/358206 02/22/2006	7227784 06/05/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREFOR	11/360091 02/22/2006	7466605 12/16/2008
SPANSION LLC	RECESSED CHANNEL WITH SEPARATED ONO MEMORY DEVICE	11/361277 02/24/2006	7394125 07/01/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/361630 02/24/2006	7968404 06/28/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/361724 02/24/2006	7323744 01/29/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	11/362317 02/23/2006	7573091 08/11/2009
SPANSION LLC	METHOD AND APPARATUS FOR TESTING A MEMORY DEVICE	11/362318 02/23/2006	7352638 04/01/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	STEP-UP (BOOST) DC REGULATOR WITH TWO-LEVEL BACK-BIAS SWITCH GATE VOLTAGE	11/362513 02/27/2006	7298117 11/20/2007
SPANSION LLC	SIGMA-DELTA MODULATOR FOR PLL CIRCUITS	11/363049 11/28/2003	7279990 10/09/2007
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREOF	11/363792 02/28/2006	
SPANSION LLC	ANALOG-TO-DIGITAL CONVERTER	11/363968 03/01/2006	7233273 06/19/2007
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF FABRICATING THE SAME	11/368678 03/07/2006	7453116 11/18/2008
SPANSION LLC	PLURAL OUTPUT SWITCHING REGULATOR WITH PHASE COMPARISON AND DELAY MEANS	11/369003 03/07/2006	7268448 09/11/2007
SPANSION LLC	CONTROLLER AND CONTROL METHOD FOR DC-DC CONVERTER	11/370880 03/09/2006	7609039 10/27/2009
SPANSION LLC	OXYGEN ELIMINATION FOR DEVICE PROCESSING	11/371023 03/09/2006	7381620 06/03/2008
AMD AND SPANSION LLC	ENHANCED ETCHING OF A HIGH DIELECTRIC CONSTANT LAYER	11/371024 03/09/2006	7498222 03/03/2009
SPANSION LLC	CONTROL CIRCUIT AND CONTROL METHOD FOR DC-DC CONVERTER	11/374196 03/14/2006	7193401 03/20/2007
SPANSION LLC	MEMORY DEVICE AND CONTROL METHOD THEREFOR	11/378444 03/16/2006	7321515 01/22/2008
SPANSION LLC	VERTICAL SEMICONDUCTOR DEVICE	11/378463 03/16/2006	7859026 12/28/2010
SPANSION LLC	METHOD FOR FABRICATING A SEMICONDUCTOR DEVICE	11/378464 03/16/2006	7816203 10/19/2010
SPANSION LLC	NONVOLATILE MEMORY DEVICE AND	11/386686 03/23/2006	7462529 12/09/2008
SPANSION LLC	METHOD FOR DECREASING SHEET RESISTIVITY VARIATIONS OF AN INTERCONNECT METAL LAYER	11/388390 03/24/2006	7358191 04/15/2008
GLOBALFOUNDRIES INC. AND SPANSION LLC	A METHOD OF FORMING A CONTACT IN A SEMICONDUCTOR DEVICE WITH ENGINEERED PLASMA TREATMENT PROFILE OF BARRIER METAL LAYER	11/388976 03/27/2006	8039391 10/18/2011
SPANSION LLC	ENHANCED PROCESSOR ELEMENT STRUCTURE IN A RECONFIGURABLE INTEGRATED CIRCUIT DEVICE	11/390131 03/28/2006	7734896 06/08/2010
SPANSION LLC	DC-DC CONVERTER CONTROL CIRCUIT AND DC-DC CONVERTER CONTROL METHOD	11/390133 03/28/2006	7595621 09/29/2009
SPANSION LLC	CLOCK SUPPLY CIRCUIT AND METHOD	11/391290 03/29/2006	7489175 02/10/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF GENERATING A REFERENCE VOLTAGE THEREFOR	11/392398 03/28/2006	7321513 01/22/2008
SPANSION LLC	SEMICONDUCTOR DEVICE WITH RECONFIGURABLE LOGIC	11/394515 03/31/2006	8445972 05/21/2013
SPANSION LLC	REDUCTION OF LEAKAGE CURRENT AND PROGRAM DISTURBS IN FLASH MEMORY DEVICES	11/398414 04/05/2006	7489560 02/10/2009
SPANSION LLC	FLASH MEMORY PROGRAMMING AND VERIFICATION WIHT REDUCED LEAKAGE CURRENT	11/398415 04/05/2006	7630253 12/08/2009
SPANSION LLC	COMPARATOR CIRCUIT AND CONTROL METHOD THEREOF	11/398702 04/06/2006	7336107 02/26/2008
SPANSION LLC	METHODS FOR ERASING AND PROGRAMMING MEMORY DEVICES	11/399130 04/05/2006	7394702 07/01/2008
SPANSION LLC	METHOD AND APPARATUS FOR DETERMINING CHROMINANCE SPACE	11/401309 04/11/2006	7671872 03/02/2010
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	GAP-FILLING WITH UNIFORM PROPERTIES	11/408086 04/21/2006	7884030 02/08/2011
SPANSION LLC	DUAL CHARGE STORAGE NODE MEMORY DEVICE AND METHODS FOR FABRICATING SUCH DEVICE	11/408866 04/20/2006	7915123 03/29/2011
SPANSION LLC	MEMORY DEVICE AND METHODS FOR ITS FABRICATION	11/409361 04/21/2006	7432156 10/07/2008
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	METHODS FOR FABRICATING FLASH MEMORY DEVICES	11/412365 04/26/2006	7696038 04/13/2010
SPANSION LLC	MEMORY CELL ARRAY WITH LOW RESISTANCE COMMON SOURCE AND HIGH CURRENT DRIVABILITY	11/412574 04/27/2006	7692253 04/06/2010
SPANSION LLC	RESISTIVE MEMORY CELL ARRAY WITH COMMON PLATE	11/412589 04/27/2006	7495951 02/24/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD THEREFOR	11/414081 04/27/2006	7679150 03/16/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREFOR	11/414082 04/27/2006	7626227 12/01/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREFOR	11/414646 04/27/2006	7825457 11/02/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD THEREFOR	11/414647 04/27/2006	7645693 01/12/2010
SPANSION LLC	METHOD FOR IMPROVING PERFORMANCE IN A MOBILE DEVICE	11/414845 05/01/2006	7639768 12/29/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR DETERMINING WORDLINE CRITICAL DIMENSION IN A MEMORY ARRAY AND RELATED STRUCTURE	11/416551 05/03/2006	7339222 03/04/2008
SPANSION LLC	TWO-BIT MEMORY CELL HAVING CONDUCTIVE CHARGE STORAGE SEGMENTS AND METHOD FOR FABRICATING SAME	11/416703 05/03/2006	7538383 05/26/2009
SPANSION LLC	METHODS FOR FABRICATING FLASH MEMEORY DEVICES	11/418352 05/03/2006	7416940 08/26/2008
SPANSION LLC	MEMORY SYSTEM WITH SWITCH ELEMENT	11/419705 05/22/2006	8014199 09/06/2011
SPANSION LLC	METHOD AND APPARATUS FOR HIGH VOLTAGE OPERATION FOR A HIGH PERFORMANCE SEMICONDUCTOR MEMORY DEVICE	11/423638 06/12/2006	7345916 03/18/2008
SPANSION LLC	METHOD AND APPARATUS FOR DRAIN PUM OPERATION	11/423645 06/12/2006	7355904 04/08/2008
SPANSION LLC	METHOD AND APPARATUS FOR DRAIN PUMP POWER CONSERVATION	11/423649 06/12/2006	
SPANSION LLC	AUTOMATED LOADING/UNLOADING OF DEVICES FOR BURN-IN TESTING	11/424934 06/19/2006	7378836 05/27/2008
SPANSION LLC	A FLASH MEMORY DEVICE AND METHOD OF FORMING THE SAME WITH IMPROVED GATE BREAKDOWN AND ENDURANCE	11/432495 05/12/2006	8093646 01/10/2012
SPANSION LLC	DC-DC CONVERTER AND CONTROL CIRCUIT FOR DC-DC CONVERTER	11/436534 05/19/2006	7456623 11/25/2008
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND CONTROL METHOD THEREOF	11/438324 05/23/2006	7663923 02/16/2010
SPANSION LLC	CYCLE SIMULATION METHOD, CYCLE SIMULATOR, AND COMPUTER PRODUCT	11/439124 05/24/2006	7729896 06/01/2010
SPANSION LLC	RESIN-SEALING METHOD USING INTERMEDIATE PLATE	11/441760 05/26/2006	7622067 11/24/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME	11/441771 05/26/2006	
SPANSION LLC	RECONFIGURABLE CIRCUIT	11/442971 05/31/2006	7783693 08/24/2010
SPANSION LLC	CIRCUIT FOR ASYNCHRONOUSLY RESETTNG SYNCHRONOUS CIRCUIT	11/443110 05/31/2006	7449926 11/11/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD THEREFOR	11/443640 05/30/2006	7376033 05/20/2008
SPANSION LLC	STORAGE DEVICE AND CONTROL METHOD THEREFOR	11/443770 05/30/2006	7274602 09/25/2007
SPANSION LLC	SEMICONDUCTOR DIVICE HAVING LAMINATED ELECTRONIC CONDUCTOR ON	11/444216 05/30/2005	7943982 05/17/2011

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	BIT LINE		
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE, AND ADJUSTMENT METHOD OF SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE	11/444401 06/01/2006	7459960 12/02/2008
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE WITH A TEST CIRCUIT THAT MEASURES A PERIOD TO SELECT A TEST MODE	11/446139 06/05/2006	7518390 04/14/2009
SPANSION LLC	POWER SOURCE CONTROL CIRCUIT, POWER SUPPLY DEVICE, AND CONTROL METHOD FOR THE SAME	11/446140 06/05/2006	7719136 05/18/2010
SPANSION LLC	WET ETCH CHEMISTRIES AND PROCESSES FOR ELECTRONIC DEVICES	11/446611 06/05/2006	
SPANSION LLC	DC LINEAR REGULATOR SINGLE CONTROLLER WITH PLURAL LOADS	11/447009 06/06/2006	7545054 06/09/2009
SPANSION LLC	PHASE ADJUSTER CIRCUIT AND PHASE ADJUSTING METHOD	11/447852 06/07/2006	7420404 09/02/2008
SPANSION LLC	CURRENT-CONTROLLED DC-DC CONVERTER CONTROL CIRCUIT, CURRENT-CONTROLLED DC-DC CONVERTER, AND METHOD FOR CONTROLLING CURRENT-CONTROLLED DC-DC CONVERTER	11/447853 06/07/2006	7663356 02/16/2010
SPANSION LLC	OPERATIONAL AMPLIFIER, LINE DRIVER, AND LIQUID CRYSTAL DISPLAY DEVICE	11/448669 06/08/2006	7336124 02/26/2008
SPANSION LLC	SURGE DETECTION CIRCUIT	11/449701 06/09/2006	7554784 06/30/2009
SPANSION LLC	OPERATIONAL AMPLIFIER	11/450347 06/12/2006	7342443 03/11/2008
AMD AND SPANSION LLC	MEMORY CELL SYSTEM WITH CHARGE TRAP	11/458046 07/17/2006	8587049 11/19/2013
AMD AND SPANSION LLC	INTEGRATED CIRCUIT MEMORY SYSTEM EMPLOYING SILICON RICH LAYERS	11/461131 07/31/2006	7675104 03/09/2010
GLOBALFOUNDRIES INC. AND SPANSION LLC	MEMORY CELL SYSTEM WITH MULTIPLE NITRIDE LAYERS	11/461428 07/31/2006	8809936 08/19/2014
AMD AND SPANSION LLC	MEMORY CELL SYSTEM WITH NITRIDE CHARGE ISOLATION	11/461998 08/02/2006	
AMD AND SPANSION LLC	MEMORY CELL SYSTEM WITH GRADIENT CHARGE ISOLATION	11/462009 08/02/2006	
SPANSION LLC	MEMORY CELL CONTAINING COPOLYMER CONTAINING DAIRYLACETYLENE PORTION	11/462525 08/04/2006	7777218 08/17/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SELECT TRANSISTOR USING BURRIED BITLINE (FROM CORE) AS SOURCE AND DRAIN	11/465701 08/18/2006	7561457 07/14/2009
SPANSION LLC	MEMORY SYSTEM WITH PROTECTION LAYER	11/469164 08/31/2006	8119477 02/21/2012
SPANSION LLC	MULTIPLE COMMUNICATION CHANNELS ON MMC OR SD CMD LINE	11/469755 09/01/2006	8156272 04/10/2012
SPANSION LLC	MEMORY ERASE MANAGEMENT SYSTEM	11/470958 09/07/2006	7443712 10/28/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/478537 06/28/2006	7880218 02/01/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREFOR	11/478554 06/28/2006	7596032 09/29/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	11/479373 06/30/2006	8076753 12/13/2011
SPANSION LLC	NON-VOLATILE MEMORY DEVICE AND CONTROL METHOD OF NON-VOLATILE MEMORY DEVICE	11/479379 06/30/2006	8008778 08/30/2011
SPANSION LLC	NON-VOLATILE MEMORY DEVICE AND CONTROL METHOD OF NON-VOLATILE MEMORY DEVICE	11/479387 06/30/2006	7436715 10/14/2008
SPANSION LLC	SEMICONDUCTOR DEVICE WITH STOP LAYERS AND FABRICATION METHOD USING CERIA SLURRY	11/480207 06/29/2006	8222147 07/17/2012
SPANSION LLC	VOLTAGE DETECTION CIRCUIT, SEMICONDUCTOR DEVICE, METHOD FOR CONTROLLING VOLTAGE DETECTION CIRCUIT	11/482129 07/07/2006	7358778 04/15/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND LIQUID CRYSTAL PANEL DRIVER DEVICE	11/487339 07/17/2006	7580020 08/25/2009
SPANSION LLC	COMMON INPUT/OUTPUT TERMINAL CONTROL CIRCUIT	11/490151 07/21/2006	7456657 11/25/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	11/493467 07/25/2006	7724071 05/25/2010
SPANSION LLC	FABRICATION AND METHOD OF OPERATION OF MULTI-LEVEL MEMORY CELL ON SOI SUBSTRATE	11/493468 07/25/2006	7915663 03/29/2011
SPANSION LLC	DELAY CONTROL CIRCUIT	11/493622 07/27/2006	7525364 04/28/2009
SPANSION LLC	PARALLEL PROCESSING APPARATUS DYNAMICALLY SWITCHING OVER CIRCUIT CONFIGURATION	11/494477 07/28/2006	7512873 03/31/2009
SPANSION LLC	PULSE WIDTH MODULATION CIRCUIT	11/494620 07/28/2006	7315158 01/01/2008

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	11/494872 07/27/2006	7385844 06/10/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/495116 07/27/2006	8183622 05/22/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	11/501449 08/08/2006	7606085 10/20/2009
SPANSION LLC	METHOD AND APPARATUS FOR SUPPORTING SOFTWARE TUNING FOR MULTI-CORE PROCESSOR, AND COMPUTER PRODUCT	11/501870 08/10/2006	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR BOOSTING WORD LINE	11/502957 08/12/2005	7525853 04/28/2009
SPANSION LLC	METHOD AND ARCHITECTURE FOR FAST FLASH MEMORY PROGRAMMING	11/504254 08/14/2006	7505328 03/17/2009
SPANSION LLC	STORAGE DEVICE, CONTROL METHOD OF STORAGE DEVICE, AND CONTROL METHOD OF STORAGE CONTROL DEVICE	11/510061 08/25/2006	8395959 03/12/2013
SPANSION LLC	MEMORY DEVICE AND CONTROL METHOD OF MEMORY DEVICE	11/510077 08/25/2006	7706197 04/27/2010
SPANSION LLC	PRESCALER AND BUFFER	11/510720 08/28/2006	7573970 08/11/2009
SPANSION LLC	FLASH MEMORY CELL AND METHODS FOR PROGRAMMING AND ERASING	11/511763 08/29/2006	7215577 05/08/2007
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE	11/512229 08/30/2006	7911003 03/22/2011
SPANSION LLC	CIRCUIT AND METHOD FOR CONTROLLING DC-DC CONVERTER	11/512318 08/30/2006	7663345 02/16/2010
SPANSION LLC	ELECTRONIC DEVICE INCORPORATING SYSTEM POWER SUPPLY UNIT AND METHOD FOR SUPPLYING POWER SUPPLY VOLTAGE	11/512334 08/30/2006	7679214 03/16/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/513693 12/15/2008	7589371 09/15/2009
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	11/514391 08/30/2006	7573743 08/11/2009
SPANSION LLC	CONTROL CIRCUIT OF POWER SUPPLY, POWER SUPPLY AND CONTROL METHOD THEREOF	11/516611 09/07/2006	7781909 08/24/2010
SPANSION LLC	NON-VOLATILE SEMICONDUCTOR MEMORY DEVICE, ERASE METHOD FOR SAME, AND TEST METHOD FOR SAME	11/518207 09/11/2006	7359251 04/15/2008
SPANSION LLC	CIRCUIT FOR DETECTING DIFFERENCE IN CAPACITANCE	11/520757 09/14/2006	7250773 07/31/2007

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	IMAGE PROCESSING APPARATUS AND METHOD FOR IMAGE RESIZING MATCHING DATA SUPPLY SPEED	11/520778 09/14/2006	8630511 01/14/2014
AMD AND SPANSION LLC	DAMASCENE METAL-INSULATOR-METAL (MIM) DEVICE WITH IMPROVED SCALEABILITY	11/521204 09/14/2006	8232175 07/31/2012
SPANSION LLC	METHOD OF FORMING INSULATING LAYER IN A METAL-INSULATOR-METAL MEMORY DEVICE	11/521205 09/14/2006	
SPANSION LLC	DC-DC CONVERTER CONTROL CIRCUIT, DC-DC CONVERTER, POWER SUPPLY UNIT, AND DC-DC CONVERTER CONTROL METHOD	11/526051 09/25/2006	7705483 04/27/2010
SPANSION LLC	CONTROL CIRCUIT OF POWER SUPPLY AND CONTROL METHOD OF THE POWER SUPPLY	11/527496 09/27/2006	7675267 03/09/2010
SPANSION LLC	STORAGE DEVICE AND CONTROL METHOD THEREOF	11/529790 09/30/2005	7881142 02/01/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	11/529805 09/29/2006	
SPANSION LLC	METHODS FOR CONTROLLING THE PROFILE OF A TRENCH OF A SEMICONDUCTOR STRUCTURE	11/538403 10/03/2006	7632689 12/15/2009
SPANSION LLC	DUAL BIT FLASH MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	11/538404 10/03/2006	7368347 05/06/2008
SPANSION LLC	METHOD AND APPARATUS FOR SECTOR ERASE OPERATION IN A FLASH MEMORY ARRAY	11/538408 10/03/2006	7382650 06/03/2008
AMD AND SPANSION LLC	MEMORY CELL SYSTEM WITH CHARGE TRAP	11/539984 10/10/2006	8143661 03/27/2012
SPANSION LLC	SEMICONDUCTOR DEVICE, FABRICATION METHOD THEREFOR, AND FILM FABRICATION METHOD	11/540034 09/28/2006	7683473 03/23/2010
SPANSION LLC	RECONFIGURABLE CIRCUIT	11/545477 10/11/2006	8099540 01/17/2012
SPANSION LLC AND CRYPTOLOG	VIRTUAL MEMORY CARD CONTROLLER	11/549551 10/13/2006	7558907 07/07/2009
SPANSION LLC	BURIED WORD LINE MEMORY INTEGRATED CIRCUIT SYSTEM	11/550406 10/17/2006	8508047 08/13/2013
AMD AND SPANSION LLC	CONTACTS FOR SEMICONDUCTOR DEVICES	11/551532 10/20/2006	8564041 10/22/2013
SPANSION LLC	P-CHANNEL NAND IN ISOLATED N-WELL	11/567257 12/06/2006	7671403 03/02/2010
SPANSION LLC	METHOD OF SELECTING OPERATING CHARACTERISTICS OF A RESISTIVE MEMORY DEVICE	11/590378 10/31/2006	7646624 01/12/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	CU ANNEALING FOR IMPROVED DATA RETENTION IN FLASH MEMORY DEVICES	11/593086 11/06/2006	8026169 09/27/2011
SPANSION LLC	SONOS MEMORY WITH INVERSION BIT-LINES	11/595639 11/10/2006	7501677 03/10/2009
SPANSION LLC	METHOD AND CIRCUIT FOR CORRECTING SENSOR TEMPERATURE DEPENDENCY CHARACTERISTIC	11/598571 11/14/2006	7857505 12/28/2010
SPANSION LLC	ANALOG FILTER CIRCUIT AND ADJUSTMENT METHOD THEREOF	11/600847 11/17/2006	7245178 07/17/2007
SPANSION LLC	MEMORY DEVICE PROTECTION LAYER	11/608032 12/07/2006	8415734 04/09/2013
SPANSION LLC	PREVENTION OF OXIDATION OF CARRIER IONS TO IMPROVE MEMORY RETENTION PROPERTIES OF POLYMER MEMORY CELL	11/608388 12/08/2006	7902086 03/08/2011
AMD AND SPANSION LLC	INTEGRATED CIRCUIT SYSTEM WITH METAL AND SEMI-CONDUCTING GATE	11/611856 12/16/2006	8283718 10/09/2012
SPANSION LLC	STRAPPING CONTACT FOR CHARGE PROTECTION	11/612265 12/18/2006	7750407 07/06/2010
SPANSION LLC	DUAL-BIT MEMORY DEVICE HAVING TRENCH ISOLATION MATERIAL DISPOSED NEAR BIT LINE CONTACT AREAS	11/612413 12/18/2006	7948052 05/24/2011
SPANSION LLC	ERASING FLASH MEMORY USING ADAPTIVE DRAIN AND/OR GATE BIAS	11/612863 12/19/2006	7778088 08/17/2010
SPANSION LLC	METHOD AND APPARATUS FOR MULTI-CHIP PACKAGING	11/612992 12/19/2006	7691668 04/06/2010
SPANSION LLC	METHOD AND APPARTATUS FOR ADAPTIVE MEMORY CELL OVERERASE COMPENSATION	11/613379 12/20/2006	7619934 11/17/2009
SPANSION LLC	FLASH MEMORY DEVICE WITH EXTERNAL HIGH VOLTAGE SUPPLY	11/613383 12/20/2006	7626882 12/01/2009
SPANSION LLC	A SEMICONDUCTOR MEMORY COPMPRISING DUAL CHARGE STORAGE NODES AND METHODS FOR ITS FABRICATION	11/613513 12/20/2006	7767517 08/03/2010
SPANSION LLC	USE OF PERIODIC REFRESH IN MEDIUM RETENTION MEMORY ARRAYS	11/613832 12/21/2006	7474579 01/06/2009
SPANSION LLC	METHODS FOR FABRICATING A SPLIT CHARGE STORAGE NODE SEMICONDUCTOR MEMORY	11/614048 12/20/2006	7666739 02/23/2010
SPANSION LLC	METHODS FOR FABRICATING A MEMORY DEVICE INCLUDING A DUAL BIT MEMORY CELL	11/614050 12/20/2006	7635627 12/22/2009
AMD AND SPANSION LLC	METHOD AND APPARTAUS FOR PROTECTION AGAINST PROCESS-INDUCED CHARGING	11/614053 12/20/2006	8445966 05/21/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SOLID-STATE MEMORY-BASED GENERATION AND HANDLING OF SECURITY AUTHENTICATION TOKENS	11/614306 12/21/2006	8261091 09/04/2012
SPANSION LLC	A FLOATING GATE PROCESS METHODOLOGY	11/614767 12/21/2006	7745236 06/29/2010
SPANSION LLC	COPPER PROCESS METHODOLOGY	11/614770 12/21/2006	7691737 04/06/2010
SPANSION LLC & GLOBALFOUNDRIES US INC.	ZERO INTERFACE POLYSILICON TO POLYSILICON GATE FOR FLASH MEMORY	11/614801 12/21/2006	7863175 01/04/2011
SPANSION LLC	MEMORY SYSTEM WITH FIN FET TECHNOLOGY	11/614815 12/21/2006	8785268 07/22/2014
SPANSION LLC	NEGATIVE WORDLINE BIAS FOR REDUCTION OF LEAKAGE CURRENT DURING FLASH MEMORY OPERATION	11/615280 12/22/2006	7463525 12/09/2008
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	11/615365 12/22/2006	7687360 03/30/2010
SPANSION LLC	FLASH MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	11/615489 12/22/2006	8486782 07/16/2013
SPANSION LLC	MEMORY DEVICE HAVING IMPLANTED OXIDE TO BLOCK ELECTRON DRIFT, AND METHOD OF MANUFACTURING THE SAME	11/615563 12/22/2006	7622373 11/24/2009
SPANSION LLC	INTEGRATED CIRCUIT WAFER SYSTEM WITH CONTROL STRATEGY	11/615583 12/22/2006	8110412 02/07/2012
SPANSION LLC	REPETITIVE ERASE VERIFY TECHNIQUE FOR FLASH MEMORY DEVICES	11/615710 12/22/2006	7385851 06/10/2008
SPANSION LLC	SWITCHABLE MEMORY DIODE- A NEW MEMORY DEVICE	11/616045 12/26/2006	7550761 06/23/2009
AMD AND SPANSION LLC	MEMORY DEVICE ETCH METHODS	11/616085 12/26/2006	7670959 03/02/2010
SPANSION LLC	PERSONAL DIGITAL RIGHTS MANAGEMENT AGENT-SERVER	11/616385 12/27/2006	
SPANSION LLC	LOCAL INTERCONNECT HAVING INCREASED MISALIGNMENT TOLERANCE	11/616544 12/27/2006	7879718 02/01/2011
AMD AND SPANSION LLC	METHOD FOR IMPROVED PLANARIZATION IN SEMICONDUCTOR DEVICES	11/616563 12/27/2006	7696094 04/13/2010
SPANSION LLC	DUAL-BIT MEMORY DEVICE HAVING ISOLATION MATERIAL DISPOSED UNDERNEATH A BIT LINE SHARED BY ADJACENT DUAL-BIT MEMORY CELLS	11/616718 12/27/2006	8076715 12/13/2011
SPANSION LLC	FULLY ASSOCIATIVE BANKING FOR MEMORY	11/625150 01/19/2007	8230154 07/24/2012

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD OF PROGRAMMING, ERASING AND READING MEMORY CELLS IN A RESISTIVE MEMORY ARRAY	11/633791 12/05/2006	7355886 04/08/2008
SPANSION LLC	METHODS OF PROGRAMMING AND ERASING RESISTIVE MEMORY DEVICES	11/633800 12/05/2006	7894243 02/22/2011
SPANSION LLC	GETTERING/STOP LAYER FOR PREVENTION OF REDUCTION OF INSULATING OXIDE IN A METAL-INSULATOR-METAL DEVICE	11/633844 12/05/2006	8093698 01/10/2012
SPANSION LLC	METHOD OF PROGRAMMING MEMORY DEVICE	11/633845 12/05/2006	7564708 07/21/2009
GLOBALFOUNDRIES INC. AND SPANSION LLC	DAMASCENE METAL-INSULATOR-METAL (MIM) DEVICE	11/633929 12/05/2006	8089113 01/03/2012
SPANSION LLC	TEST STRUCTURES FOR DEVELOPMENT OF METAL-INSULATOR-METAL (MIM) DEVICES	11/633930 12/05/2006	7468525 12/23/2008
SPANSION LLC	METHOD OF PROGRAMMING, ERASING AND REPAIRING A MEMORY DEVICE	11/633940 12/05/2006	8077495 12/13/2011
SPANSION LLC	METHOD OF ERASING A RESISTIVE MEMORY DEVICE	11/633941 12/05/2006	7916523 03/29/2011
SPANSION LLC	METHOD OF FABRICATING METAL-INSULATOR-METAL (MIM) DEVICE WITH STABLE DATA RETENTION	11/633942 12/05/2006	7384800 06/10/2008
SPANSION LLC	A NEW METHOD TO PROVIDE A HIGHER REFERENCE VOLTAGE AT A LOWER POWER SUPPLY IN FLASH MEMORY DEVICES	11/634776 12/06/2006	7724075 05/25/2010
SPANSION LLC	BARRIER REGION FOR MEMORY DEVICES	11/634777 12/06/2006	
SPANSION LLC	REAL-TIME EQUIPMENT CONTROL TO MAINTAIN YIELD	11/636064 12/06/2006	7908025 03/15/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREFOR	11/636111 12/07/2006	7450419 11/11/2008
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	11/637260 12/11/2006	7468909 12/23/2008
SPANSION LLC	A HOST/CLIENT SYSTEM HAVING A SCALABLE SERIAL BUS INTERFACE	11/638338 12/12/2006	8819326 08/26/2014
SPANSION LLC	A NON VOLATILE MEMORY DEVICE AND ITS CONTROL METHOD	11/639128 12/13/2006	7372743 05/13/2008
SPANSION LLC	MEMORY CELLS HAVING SPLIT CHARGE STORAGE NODES AND METHODS FOR FABRICATING MEMORY CELLS HAVING SPLIT CHARGE STORAGE NODES	11/639666 12/15/2006	
SPANSION LLC	TABLE LOOKUP OPERATION ON MASKED DATA	11/639683 12/15/2006	8422668 04/16/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHODS AND SYSTEMS FOR MEMORY DEVICES	11/639935 12/15/2006	7746706 06/29/2010
SPANSION LLC	DRAIN VOLTAGE REGULATOR	11/639936 12/15/2006	7460415 12/02/2008
SPANSION LLC	STRESS MANAGEMENT IN BGA PACKAGING	11/641506 12/19/2006	
SPANSION LLC	RESISTIVE MEMORY ARRAY USING P-I-N DIODE SELECT DEVICE AND METHODS OF FABRICATION THEREOF	11/641646 12/19/2006	7989328 08/02/2011
SPANSION LLC	MEMORY DEVICE WITH IMPROVED DATA RETENTION	11/642477 12/20/2006	7449742 11/11/2008
SPANSION LLC	THIN OXIDE DUMMY TILING AS CHARGE PROTECTION	11/645475 12/26/2006	7977218 07/12/2011
SPANSION LLC	DEEP BITLINE IMPLANT TO AVOID PROGRAM DISTURB	11/646157 12/26/2006	7671405 03/02/2010
SPANSION LLC	LEVEL CONVERSION CIRCUIT	11/650485 01/08/2007	7414453 08/19/2008
SPANSION LLC	A SHALLOW BIPOLAR JUNCTION TRANSISTOR	11/652785 01/11/2007	
SPANSION LLC	METHODS FOR FORMING A MEMORY CELL HAVING A TOP OXIDE SPACER	11/653649 01/12/2007	7803680 09/28/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	11/654703 01/17/2007	7566978 07/28/2009
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	11/656437 01/23/2007	7759745 07/20/2010
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	11/656438 01/23/2007	7482226 01/27/2009
SPANSION LLC	DIVISION-BASED SENSING AND PARTITIONING OF ELECTRONIC MEMORY	11/687436 03/16/2007	7852669 12/14/2010
SPANSION LLC	HIGH ACCURACY ADAPTIVE PROGRAMMING	11/687492 03/16/2007	7835189 11/16/2010
SPANSION LLC	DUAL STORAGE NODE MEMORY	11/702845 02/05/2007	8564042 10/22/2013
SPANSION LLC	FLASH MEMORY CELLS HAVING TRENCHED STORAGE ELEMENTS	11/702846 02/05/2007	8742486 06/03/2014
SPANSION LLC	MIRROR BIT MEMORY DEVICE HAVING BOTH PSG SPACER AND SILICIDE LAYER ON THE BIT LINE	11/712299 02/27/2007	8143664 03/27/2012
SPANSION LLC	PLL FREQUENCY SYNTHESIZER	11/714139 09/08/2004	7405627 07/29/2008
SPANSION LLC	CONTROL APPARATUS, SEMICONDUCTOR INTEGRATED CIRCUIT APPARATUS, AND SOURCE VOLTAGE SUPPLY CONTROL	11/723599 03/21/2007	7557587 07/07/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
	SYSTEM		
SPANSION LLC	CYCLING IMPROVEMENT USING HIGHER ERASE BIAS	11/724711 03/16/2007	7561471 07/14/2009
SPANSION LLC & GLOBALFOUNDRIES US INC.	DIELECTRIC EXTENSION TO MITIGATE SHORT CHANNEL EFFECTS	11/724725 03/16/2007	
SPANSION LLC	USING IMPLANTED POLY-I TO IMPROVE CHARGING PROTECTION IN DUAL-POLY PROCESS	11/724726 03/16/2007	7553727 06/30/2009
SPANSION LLC	MULTI-STATE RESISTANCE CHANGING MEMORY WITH A WORD LINE DRIVER FOR APPLYING A SAME PROGRAM VOLTAGE TO THE WORD LINE	11/724773 03/16/2007	8085615 12/27/2011
GLOBALFOUNDRIES INC. AND SPANSION LLC	METHODS AND SYSTEMS FOR MEMORY DEVICES	11/724774 03/16/2007	7561465 07/14/2009
SPANSION LLC	USING THICK SPACER FOR BITLINE IMPLANT THEN REMOVE	11/724775 03/16/2007	7888218 02/15/2011
SPANSION LLC	NON-VOLATILE RESISTIVE SWITCHING FOR ADVANCED MEMORY APPLICATIONS	11/724788 03/16/2007	7755922 07/13/2010
GLOBALFOUNDRIES INC. AND SPANSION LLC	MEMORY SYSTEM WITH POLY METAL GATE	11/735241 04/13/2007	
SPANSION LLC	TRANSFER OF NON-ASSOCIATED INFORMATION ON FLASH MEMORY DEVICES	11/741996 04/30/2007	7505298 03/17/2009
SPANSION LLC	METHOD TO OBTAIN MULTIPLE GATE THICKNESSES USING IN-SITU GATE ETCH MASK APPROACH	11/741998 04/30/2007	7776696 08/17/2010
SPANSION LLC	TRIPLE POLY-SI REPLACEMENT SCHEME FOR MEMORY DEVICES	11/742003 04/30/2007	7807580 10/05/2010
SPANSION LLC	ADAPTIVE DETECTION OF THRESHOLD LEVELS IN MEMORY	11/742371 04/30/2007	7672161 03/02/2010
SPANSION LLC	MULTI-PHASE WORDLINE ERASING FOR FLASH MEMORY	11/745327 05/07/2007	7626869 12/01/2009
SPANSION LLC	SELF ALIGNED NARROW STORAGE ELEMENTS FOR ADVANCED MEMORY DEVICE	11/746122 05/09/2007	7682905 03/23/2010
SPANSION LLC	VARIABLE SALICIDE BLOCK FOR RESISTANCE EQUALIZATION IN AN ARRAY	11/748215 05/14/2007	7713875 05/11/2010
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	METHODS OF FORMING SILICIDES OF DIFFERENT THICKNESSES ON DIFFERENT STRUCTURES	11/748743 05/15/2007	8236693 08/07/2012
SPANSION LLC	SELF ALIGNED MEMORY ELEMENT AND WORDLINE	11/750724 05/18/2007	7645632 01/12/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	STRUCTURE AND PROCESS FOR A RESISTIVE MEMORY CELL WITH SEPARATELY PATTERNED ELECTRODES	11/763510 06/15/2007	7566628 07/28/2009
SPANSION LLC	FAULTY DANGLING METAL ROUTE DETECTION	11/767620 06/25/2007	7915907 03/29/2011
SPANSION LLC	PROCESS APPLYING DIE ATTACH FILM TO SINGULATED DIE	11/767623 06/25/2007	7799612 09/21/2010
SPANSION LLC	DIE ATTACHMENT, DIE STACKING, AND WIRE EMBEDDING USING FILM	11/770239 06/28/2007	
SPANSION LLC	MULTI-LEVEL BIT OPERATION IN DUAL ELEMENT CELLS USING A SUPPLEMENTAL PROGRAMMING LEVEL	11/771961 06/29/2007	7652919 01/26/2010
SPANSION LLC	SYSTEM AND METHOD FOR REDUCING PROCESS-INDUCED CHARGING	11/782507 07/24/2007	7804125 09/28/2010
SPANSION LLC	CIRCUIT FOR PREVENTING THROUGH CURRENT IN DC-DC CONVERTER	11/785958 04/23/2007	7876076 01/25/2011
SPANSION LLC	SELECTION OF A LOOKUP TABLE WITH DATA MASKED WITH A COMBINATION OF AN ADDITIVE AND MULTIPLICATIVE MASK	11/788264 04/19/2007	7970129 06/28/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	11/789888 04/25/2007	7502271 03/10/2009
SPANSION LLC	EXHAUST SYSTEM	11/790305 04/24/2007	
SPANSION LLC	DC-DC CONVERTER WITH OSCILLATOR AND MONITORING FUNCTION	11/790693 04/26/2007	7777474 08/17/2010
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF CONTROLLING SEMICONDUCTOR MEMORY DEVICE	11/790974 04/30/2007	7596025 09/29/2009
SPANSION LLC	SELF-ALIGNED PATTERNING METHOD BY USING NON-CONFORMAL FILM AND ETCH BACK FOR FLASH MEMORY AND OTHER SEMICONDUCTOR APPLICATIONS	11/796582 04/26/2007	7732276 06/08/2010
SPANSION LLC	FLASH MEMORY CELL WITH A FLAIR GATE	11/801823 05/10/2007	8367537 02/05/2013
SPANSION LLC	SELF REFERENCE SENSING SYSTEM AND METHOD	11/804170 05/16/2007	
SPANSION LLC	STEP-UP/STEP-DOWN TYPE DC-DC CONVERTER, AND CONTROL CIRCUIT AND CONTROL METHOD OF THE SAME	11/812142 06/15/2007	7956586 06/07/2011
SPANSION LLC	DIE OFFSET DIE TO DIE BONDING	11/820278 06/19/2007	7554204 06/30/2009
SPANSION LLC	METHOD OF CONSTRUCTING A STACKED-DIE SEMICONDUCTOR STRUCTURE	11/821653 06/25/2007	7901955 03/08/2011

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SOFTWARE DEVELOPMENT APPARATUS AND METHOD	11/822728 07/09/2007	8079014 12/13/2011
SPANSION LLC	PROGRAM CONTROL DEVICE AND PROGRAM CONTROL METHOD	11/822730 07/09/2007	7861235 12/28/2010
SPANSION LLC	DC-DC CONVERTER	11/826261 07/13/2007	7656143 02/02/2010
SPANSION LLC	USE OF A POLYMER SPACER AND SI TRENCH IN A BITLINE JUNCTION OF A FLASH MEMORY CELL TO IMPROVE TPD CHARACTERISTICS	11/835538 08/08/2007	7776688 08/17/2010
SPANSION LLC	ORO AND ORPRO WITH BITLINE TRENCH TO SUPPRESS TRANSPORT PROGRAM DISTURB	11/835542 08/08/2007	8012830 09/06/2011
SPANSION LLC	EFFICIENT AND SYSTEMATIC MEASUREMENT FLOW ON DRAIN VOLTAGE FOR DIFFERENT TRIMMING IN FLASH SILICON CHARACTERIZATION	11/837949 08/13/2007	7558123 07/07/2009
SPANSION LLC	REGULATION OF BOOST-STRAP NODE RAMP RATE USING CAPACITANCE TO COUNTER PARASITIC ELEMENTS IN CHANNEL	11/837976 08/13/2007	7558116 07/07/2009
SPANSION LLC	CAPACITOR STRUCTURE USED FOR FLASH MEMORY	11/838483 08/14/2007	7749855 07/06/2010
SPANSION LLC	DIE STACKING IN MULTI-DIE STACKS USING DIE SUPPORT MECHANISMS	11/842655 08/21/2007	
SPANSION LLC	SACRIFICIAL NITRIDE AND GATE REPLACEMENT	11/847507 08/30/2007	7981745 07/19/2011
SPANSION LLC	GATE REPLACEMENT WITH TOP OXIDE REGROWTH FOR THE TOP OXIDE IMPROVEMENT	11/848515 08/31/2007	8455268 06/04/2013
SPANSION LLC	BACK-TO-BACK NPN/PNP PROTECTION DIODES	11/855704 09/14/2007	7573103 08/11/2009
SPANSION LLC	CONTROLLED RAMP RATES FOR METAL BITLINES DURING WRITE OPERATIONS FROM HIGH VOLTAGE DRIVER FOR MEMORY APPLICATIONS	11/872989 10/16/2007	7630250 12/08/2009
SPANSION LLC	HYBRID FLASH MEMORY DEVICE	11/873810 10/17/2007	8560756 10/15/2013
SPANSION LLC	SPLIT CHARGE STORAGE NODE INNER SPACER PROCESS	11/873822 10/17/2007	7829936 11/09/2010
SPANSION LLC	PHOTOVOLTAIC THIN COATING FOR COLLECTOR GENERATOR	11/873824 10/17/2007	8017859 09/13/2011
SPANSION LLC	SECURE PERSONALIZATION OF MEMORY-BASED ELECTRONIC DEVICES	11/874036 10/17/2007	8201258 06/12/2012
SPANSION LLC	FAST SINGLE PHASE PROGRAM ALGORITHM FOR QUADBIT	11/874076 10/17/2007	7656705 02/02/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	11/878296 08/29/2003	7410857 08/12/2008
SPANSION LLC	OPERATIONAL AMPLIFIER AND METHOD FOR CANCELING OFFSET VOLTAGE OF OPERATIONAL AMPLIFIER	11/878366 07/24/2007	7368983 05/06/2008
SPANSION LLC	ERROR PROCESSING METHOD AND INFORMATION PROCESSING APPARATUS	11/878778 07/26/2007	8032794 10/04/2011
SPANSION LLC	DEBUGGING SYSTEM, DEBUGGING CIRCUIT AND INFORMATION PROCESSING APPARATUS	11/878780 07/26/2007	7873875 01/18/2011
SPANSION LLC	CONTACT CONFIGURATION FOR UNDERTAKING TESTS ON CIRCUIT BOARD	11/881969 07/30/2007	8708710 04/29/2014
SPANSION LLC, MICRONICS JAPAN CO., LTD. & SPANSION JAPAN LIMITED	IC CARRIER, IC SOCKET AND METHOD FOR TESTING IC DEVICE	11/886139 03/13/2008	7884630 02/08/2011
SPANSION LLC	CONTROL CIRCUIT OF POWER SUPPLY UNIT WHICH CONTROLS OUTPUT POWER OF EXTERNAL POWER SUPPLY BASED UPON CURRENT FROM THE EXTERNAL POWER SUPPLY, POWER SUPPLY UNIT AND CONTROL METHOD THEREOF	11/889636 08/15/2007	7944190 05/17/2011
SPANSION LLC	APPARATUS, METHOD, AND SYSTEM FOR CONTROLLING STEPPING MOTOR	11/892841 08/28/2007	7791306 09/07/2010
SPANSION LLC	CARRIER FOR STACKED TYPE SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	11/894828 08/22/2007	7642637 01/05/2010
SPANSION LLC	EXPOSURE SYSTEM, SEMICONDUCTOR DEVICE, AND METHOD FOR FABRICATING THE SEMICONDUCTOR DEVICE	11/894921 08/22/2007	8274107 09/25/2012
SPANSION LLC	METHOD AND STRUCTURE OF MINIMIZING MOLD BLEEDING ON A SUBSTRATE SURFACE OF SEMICONDUCTOR PACKAGE	11/895901 08/28/2007	7759171 07/20/2010
SPANSION LLC	POWER SUPPLY SYSTEM AND METHOD FOR CONTROLLING OUTPUT VOLTAGE	11/898575 09/13/2007	7679343 03/16/2010
SPANSION LLC	METHOD AND CIRCUIT FOR CONTROLLING DC-DC CONVERTER	11/898690 09/14/2007	7696738 04/13/2010
SPANSION LLC	TA-LINED TUNGSTEM PLUGS FOR TRANSISTOR-LOCAL HYDROGEN GATHERING	11/899575 09/06/2007	
SPANSION LLC	METHOD OF FORMING CONTROLLABLY CONDUCTIVE OXIDE	11/899597 09/06/2007	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CONTROL CIRCUIT OF SYNCHRONOUS RECTIFICATION TYPE POWER SUPPLY UNIT, SYNCHRONOUS RECTIFICATION TYPE POWER SUPPLY UNIT AND CONTROL METHOD THEREOF	11/902706 09/25/2007	7948219 05/24/2011
SPANSION LLC	CIRCUIT FOR CORRECTING SENSOR TEMPERATURE CHARACTERISTICS	11/902798 09/25/2007	7625118 12/01/2009
SPANSION LLC	SPLIT CHARGE STORAGE NODE OUTER SPACER PROCESS	11/924169 10/25/2007	7883963 02/08/2011
SPANSION LLC	SELECTIVE SILICIDE FORMATION USING RESIST ETCHBACK	11/924823 10/26/2007	7691751 04/06/2010
SPANSION LLC	SIGNAL DESCRAMBLING DETECTOR	11/928372 10/30/2007	8638931 01/28/2014
SPANSION LLC	NON-VOLATILE MEMORY ARRAY PARTITIONING ARCHITECTURE AND METHOD TO UTILIZE SINGLE LEVEL CELLS AND MULTI-LEVEL CELLS WITHIN THE SAME MEMORY	11/928865 10/30/2007	8832408 09/09/2014
SPANSION LLC	CONTROL OF TEMPERATURE SLOPE FOR BAND GAP REFERENCE VOLTAGE IN A MEMORY DEVICE	11/929097 10/30/2007	7768856 08/03/2010
SPANSION LLC	NONVOLATILE MEMORY ARRAY PARTITIONING ARCHITECTURE AND METHOD TO UTILIZE SINGLE LEVEL CELL, AND MULTI LEVEL CELLS WITHIN THE SAME MEMORY ARRAY	11/929724 10/30/2007	7567457 07/28/2009
SPANSION LLC	MEMORY ARRAY OF PAIRS OF NONVOLATILE MEMORY CELLS USING FOWLER-NORDHEIM PROGRAMMING AND ERASING	11/929761 10/30/2007	7995385 08/09/2011
SPANSION LLC	FLASH MEMORY DEVICE HAVING IMPROVED PROGRAM RATE	11/931992 10/31/2007	7453724 11/18/2008
SPANSION LLC	PROCESSES FOR FORMING ELECTRONIC DEVICES INCLUDING POLISHING METAL-CONTAINING LAYERS	11/934628 11/02/2007	7915169 03/29/2011
SPANSION LLC	DECODING SYSTEM CAPABLE OF REDUCING SECTOR SELECT AREA OVERHEAD FOR FLASH MEMORY	11/935049 11/05/2007	7613042 11/03/2009
SPANSION LLC	CONTROLLED BIT LINE DISCHARGE FOR CHANNEL ERASES IN NONVOLATILE MEMORY	11/935717 11/06/2007	7808827 10/05/2010
SPANSION LLC	CONTROL CIRCUIT OF CURRENT MODE DC-DC CONVERTER AND CONTROL METHOD OF CURRENT MODE DC-DC CONVERTER	11/936933 11/08/2007	7733074 06/08/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CONTROL CIRCUIT FOR SYNCHRONOUS RECTIFIER-TYPE DC-DC CONVERTER, SYNCHRONOUS RECTIFIER-TYPE DC-DC CONVERTER AND CONTROL METHOD THEREOF	11/937818 11/09/2007	7843179 11/30/2010
SPANSION LLC	CONTROL CIRCUIT FOR DETECTING A REVERSE CURRENT IN A DC-DC CONVERTER	11/937822 11/09/2007	7821236 10/26/2010
SPANSION LLC	HIGH RELIABILITY AND LOW POWER STATIC RANDOM ACCESS MEMORY	11/942526 11/26/2007	7679972 03/16/2010
SPANSION LLC	A MEMORY BUFFERING SYSTEM THAT IMPROVES READ/WRITE PERFORMANCE AND PROVIDES LOW LATENCY FOR MOBILE SYSTEMS	11/943544 11/20/2007	8700830 04/15/2014
SPANSION LLC	SPI BANK ADDRESSING SCHEME FOR MEMORY DENSITIES ABOVE 128MB	11/945292 11/27/2007	7979625 07/12/2011
SPANSION LLC	SPI AUTO-BOOT MODE	11/945316 11/27/2007	7984284 07/19/2011
SPANSION LLC	MULTI-BUS ARCHITECTURE FOR MASS STORAGE SYSTEM-ON-CHIP CONTROLLERS	11/945534 11/27/2007	8898350 11/25/2014
SPANSION LLC	ROOM TEMPERATURE DRIFT SUPPRESSION VIA SOFT PROGRAM AFTER ERASE	11/945785 11/27/2007	7944746 05/17/2011
SPANSION LLC	WEAVABLE FIBER PHOTOVOLTAIC COLLECTORS	11/947424 11/29/2007	7842880 11/30/2010
SPANSION LLC	FORMING METAL-SEMICONDUCTOR FILMS HAVING DIFFERENT THICKNESSES WITHIN DIFFERENT REGIONS OF AN ELECTRONIC DEVICE	11/949637 12/03/2007	7482217 01/27/2009
SPANSION LLC	DATA TRANSMISSION SYSTEM-ON-CHIP MEMORY MODEL BASED VALIDATION	11/950006 12/04/2007	8239182 08/07/2012
SPANSION LLC	METHOD OF OPERATING A PROCESSING CHAMBER USED IN FORMING ELECTRONIC DEVICES	11/950339 12/04/2007	
SPANSION LLC	METHOD AND APPARATUS FOR HIGH VOLTAGE OPERATION FOR A HIGH PERFORMANCE SEMICONDUCTOR MEMORY DEVICE	11/950811 12/05/2007	7613044 11/03/2009
SPANSION LLC	CIRCUIT PRE-CHARGE TO SENSE A MEMORY LINE	11/951262 12/05/2007	7948820 05/24/2011
SPANSION LLC	FLEXIBLE WORD LINE BOOSTING ACROSS VCC SUPPLY	11/951263 12/05/2007	7633815 12/15/2009
SPANSION LLC	WORK FUNCTION ENGINEERING FOR FN ERASE OF A MEMORY DEVICE WITH MULTIPLE CHARGE STORAGE ELEMENTS IN AN UNDERCUT REGION	11/953690 12/10/2007	7659569 02/09/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	REFERENCE-FREE SAMPLED SENSING	11/955802 12/13/2007	7561484 07/14/2009
SPANSION LLC	PROGRAMMING IN MEMORY DEVICES USING SOURCE BITLINE VOLTAGE BIAS	11/956032 12/13/2007	7746698 06/29/2010
SPANSION LLC	CLOCK ENCODED PRE-FETCH TO ACCESS MEMORY DATA IN CLUSTERING NETWORK ENVIRONMENT	11/957027 12/14/2007	7827359 11/02/2010
SPANSION LLC	SCAN SENSING METHOD THAT IMPROVES SENSING MARGINS	11/957366 12/14/2007	7558101 07/07/2009
SPANSION LLC	SI TRENCH BETWEEN BITLINE HDP FOR BVDSS IMPROVEMENT	11/957737 12/17/2007	7951675 05/31/2011
SPANSION LLC	HETERO-STRUCTURE VARIABLE SILICON RICHNESS NITRIDE FOR MLC FLASH MEMORY DEVICE	11/957787 12/17/2007	7602067 10/13/2009
SPANSION LLC	METHODS OF FORMING ELECTRONIC DEVICES BY ION IMPLANTING	11/958223 12/17/2007	8003306 08/23/2011
SPANSION LLC	REDUCED STATE QUADBIT	11/958557 12/18/2007	7692962 04/06/2010
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	INTEGRATED CIRCUIT SYSTEM WITH MEMORY SYSTEM	11/958646 12/18/2007	
SPANSION LLC	ALGORITHM FOR CHARGE LOSS REDUCTION AND VT DISTRIBUTION IMPROVEMENT	11/959122 12/18/2007	7619932 11/17/2009
SPANSION LLC	EXTENDING FLASH MEMORY DATA RETENSION VIA REWRITE REFRESH	11/961772 12/20/2007	
SPANSION LLC	FREQUENCY DISTRIBUTED FLASH MEMORY ALLOCATION BASED ON FREE PAGE TABLES	11/962514 12/21/2007	8656083 02/18/2014
SPANSION LLC	METHOD OF FORMING AN ELECTRONIC DEVICE	11/962714 12/21/2007	8171627 05/08/2012
SPANSION LLC	DATA COMMIT ON MULTICYCLE PASS COMPLETE WITHOUT ERROR	11/963200 12/21/2007	8788740 07/22/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	11/963400 12/21/2007	7847340 12/07/2010
SPANSION LLC	METHOD FOR MANUFACTURING A SEMICONDUCTOR DEVICE	11/963415 12/21/2007	8895405 11/25/2014
SPANSION LLC	HIGH PERFORMANCE FLASH CHANNEL INTERFACE	11/963466 12/21/2007	
SPANSION LLC	CONTROLLING AC DISTURBANCE WHILE PROGRAMMING	11/963508 12/21/2007	7679967 03/16/2010
SPANSION LLC	AUTHENTICATED MEMORY AND CONTROLLER SLAVE	11/963538 12/21/2007	8694776 04/08/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	ARRAYED NEUTRON DETECTOR WITH MULTI SHIELDING ALLOWING FOR DISCRIMINATION BETWEEN RADIATION TYPES	11/966672 12/28/2007	7645993 01/12/2010
SPANSION LLC	RELOCATING DATA IN A MEMORY DEVICE	11/966923 12/28/2007	8239611 08/07/2012
SPANSION LLC	METHOD FOR PROTECTING DATA AGAINST DIFFERENTIAL FAULT ANALYSIS INVOLVED IN RIVEST, SHAMIR AND ADELMAN CRYPTOGRAPHY USING THE CHINESE REMAINDER THEOREM	11/969106 01/03/2008	8774400 07/08/2014
SPANSION LLC	LOW-H PLASMA TREATMENT FOR ELECTRONIC MEMORY DEVICES	11/971331 01/09/2008	8202810 06/19/2012
SPANSION LLC	NON-VOLATILE MEMORY DEVICE AND METHODS OF USING	11/972312 01/10/2008	7791947 09/07/2010
SPANSION LLC	ORNAND FLASH MEMORY AND METHOD FOR CONTROLLING THE SAME	11/974295 10/11/2007	8064264 11/22/2011
SPANSION LLC	VOLTAGE DETECTOR CIRCUIT	11/975097 10/16/2007	7605616 10/20/2009
SPANSION LLC	POWER SUPPLY CIRCUIT, POWER SUPPLY CONTROL CIRCUIT, AND POWER SUPPLY CONTROL METHOD	11/976507 10/25/2007	7683598 03/23/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	11/977034 10/23/2007	7387936 06/17/2008
SPANSION LLC	IMPROVEMENT OF ERASE, PROGRAMMING AND LEAKAGE CHARACTERISTICS OF A RESISTIVE MEMORY DEVICE	11/980116 10/30/2007	7706168 04/27/2010
SPANSION LLC	METAL-INSULATOR-METAL (MIM) DEVICE AND METHOD OF FORMATION THEREOF	11/980213 10/30/2007	8445913 05/21/2013
SPANSION LLC	MEMORY CELL ARRAY WITH LOW RESISTANCE COMMON SOURCE AND HIGH CURRENT DRIVABILITY	11/983864 11/13/2007	7724563 05/25/2010
SPANSION LLC	OPERATIONAL AMPLIFIER CIRCUIT	11/984261 11/15/2007	7532071 05/12/2009
SPANSION LLC	MEMORY CELL ARRAY WITH LOW RESISTANCE COMMON SOURCE AND HIGH CURRENT DRIVABILITY	11/985018 11/13/2007	8008645 08/30/2011
SPANSION LLC	SENSE AMPLIFIERS WITH HIGH VOLTAGE SWING	11/985427 11/15/2007	7498849 03/03/2009
SPANSION LLC	NONVOLATILE STORAGE DEVICE AND CONTROL METHOD THEREOF	11/986331 11/20/2007	7835183 11/16/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	11/986370 11/20/2007	8637997 01/28/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	NONVOLATILE MEMORY DEVICE	11/986509 11/20/2007	7639543 12/29/2009
SPANSION LLC	MEMORY DEVICE WITH BARRIER LAYER	11/997464 07/21/2006	7816724 10/19/2010
SPANSION LLC	OPERATIONAL AMPLIFIER, LINE DRIVER, AND LIQUID CRYSTAL DISPLAY DEVICE	12/000995 12/19/2007	7880537 02/01/2011
SPANSION LLC	CONVEX SHAPED THIN-FILM TRANSISTOR DEVICE	12/002728 12/17/2007	8264029 09/11/2012
SPANSION LLC	METHOD TO PREVENT ALLOY FORMATION WHEN FORMING LAYERED METAL OXIDES BY METAL OXIDATION	12/004124 12/20/2007	7790497 09/07/2010
SPANSION LLC	REDUCTION OF DEFECTS FORMED ON THE SURFACE OF A SILICON OXYNITRIDE FILM	12/004676 12/20/2007	7892984 02/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE, METHOD OF CONTROLLING THE SAME, AND METHOD OF MANUFACTURING THE SAME	12/004919 12/21/2007	7902590 03/08/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	12/004920 12/21/2007	8598717 12/03/2013
SPANSION LLC	HEAT DISSIPATION METHODS AND STRUCTURES FOR SEMICONDUCTOR DEVICE	12/004960 12/20/2007	8531019 09/10/2013
SPANSION LLC	METHODS AND STRUCTURES FOR DISCHARGING PLASMA FORMED DURING THE FABRICATION OF SEMICONDUCTOR DEVICE	12/004969 12/20/2007	8749012 06/10/2014
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING MULTIPLE STORAGE REGIONS	12/005869 12/28/2007	8357965 01/22/2013
SPANSION LLC	PACKAGE-ON-PACKAGE SEMICONDUCTOR DEVICE	12/005870 12/28/2007	
SPANSION LLC	TABLE LOOKUP VOLTAGE COMPENSATION FOR MEMORY CELLS	12/006744 01/04/2008	7675805 03/09/2010
SPANSION LLC	FLIP-CHIP PACKAGE COVERED WITH TAPE	12/012388 02/01/2008	7846780 12/07/2010
SPANSION LLC	CHARGE PUMP TO SUPPLY VOLTAGE BANDS	12/012389 02/01/2008	7633824 12/15/2009
SPANSION LLC	PROGRAM AND ERASE DISABLING CONTROL OF WPCAM BY DOUBLE CONTROLS	12/012390 02/01/2008	7934051 04/26/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	12/012849 02/05/2008	8202790 06/19/2012
SPANSION LLC	IMPROVED VOLTAGE BOOSTER BY ISOLATION AND DELAYED SEQUENTIAL DISCHARGE	12/014454 01/15/2008	7760558 07/20/2010
SPANSION LLC	RETARGETING OF A WRITE OPERATION RETRY IN THE EVENT OF A WRITE OPERATION FAILURE	12/016674 01/18/2008	8694714 04/08/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY WITH A CORE-BASED VIRTUAL GROUND AND DYNAMIC REFERENCE SENSING SCHEME	12/017693 01/22/2008	7606068 10/20/2009
SPANSION LLC	ELECTRONIC DEVICE INCLUDING A GATE ELECTRODE HAVING PORTIONS WITH DIFFERENT CONDUCTIVITY TYPES AND A PROCESS OF FORMING THE SAME	12/020316 01/25/2008	7785973 08/31/2010
SPANSION LLC	DETECTION CIRCUIT	12/021007 01/28/2008	7894221 02/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR ADJUSTING REFERENCE LEVELS OF REFERENCE CELLS	12/026417 02/05/2008	7808830 10/05/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	12/026421 02/05/2008	
SPANSION LLC	SEMICONDUCTOR MANUFACTURING EQUIPMENT AND MANUFACTURING METHOD OF THE SAME	12/026425 02/05/2008	8801895 08/12/2014
SPANSION LLC	POWER SUPPLY CIRCUIT, POWER SUPPLY CONTROL CIRCUIT AND POWER SUPPLY CONTROL METHOD	12/027687 02/07/2008	7952234 05/31/2011
SPANSION LLC	MEMORY DEVICE AND METHOD THEREOF	12/030485 02/13/2008	7986579 07/26/2011
SPANSION LLC	DETECTION CIRCUIT	12/031403 02/14/2008	7982431 07/19/2011
SPANSION LLC	METHOD OF FORMING AN ELECTRONIC DEVICE INCLUDING FORMING FEATURES WITHIN A MASK AND A SELECTIVE REMOVAL PROCESS	12/031458 02/14/2008	8003545 08/23/2011
SPANSION LLC	DC-DC CONVERTER WITH A PLURALITY OF SOFT-START CONTROL CIRCUITS	12/032016 02/15/2008	7957165 06/07/2011
SPANSION LLC	POWER SUPPLY CIRCUIT, POWER SUPPLY CONTROL CIRCUIT, AND POWER SUPPLY CONTROL METHOD	12/032237 02/15/2008	7960946 06/14/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	12/032444 02/15/2008	
SPANSION LLC	DECODING SYSTEM CAPABLE OF CHARGING PROTECTION FOR FLASH MEMORY DEVICES	12/034316 02/20/2008	7948035 05/24/2011
SPANSION LLC	FRACTIONAL FREQUENCY DIVIDER PLL DEVICE AND CONTROL METHOD THEREOF	12/034348 02/20/2008	8406364 03/26/2013
SPANSION LLC	AD CONVERTER CIRCUIT AND MICROCONTROLLER	12/035899 02/22/2008	7642945 01/05/2010
SPANSION LLC	COMPUTER SYSTEM AND MEMORY SYSTEM	12/036634 02/25/2008	8423834 04/16/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SIMULATION METHOD AND SIMULATION APPARATUS	12/037297 02/26/2008	8725485 05/13/2014
SPANSION LLC	SECURE DATA TRANSFER AFTER AUTHENTICATION BETWEEN MEMORY AND A REQUESTOR	12/038059 02/27/2008	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	12/039511 02/28/2008	
SPANSION LLC	MEMORY DEVICE AND CHIP SET PROCESSOR PAIRING	12/039941 02/29/2008	8650399 02/11/2014
SPANSION LLC	POWER SUPPLY VOLTAGE REGULATOR CIRCUIT AND MICROCOMPUTER	12/043506 03/06/2008	8078887 12/13/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	12/044851 03/07/2008	7964446 06/21/2011
SPANSION LLC	IEEE 1394 TRANSMITTER, IEEE 1394 RECEIVER AND AUDIO DATA CONTENT TRANSMISSION METHOD	12/046684 03/12/2008	7801178 09/21/2010
SPANSION LLC	METHOD FOR FORMING BIT LINES FOR SEMICONDUCTOR DEVICES	12/048549 03/14/2008	7811915 10/12/2010
SPANSION LLC	CLOCK SIGNAL TRANSMISSION CIRCUIT	12/048960 03/14/2008	7649391 01/19/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/049089 03/14/2008	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/049900 03/17/2008	8492890 07/23/2013
SPANSION LLC	DC-DC CONVERTER FOR PULSE FREQUENCY MODULATION CONTROL AND POWER SUPPLY SYSTEM	12/049941 03/17/2008	8248046 08/21/2012
SPANSION LLC	IMAGE RECOGNITION DEVICE AND IMAGE ROTATING METHOD	12/050513 03/18/2008	8139895 03/20/2012
SPANSION LLC	WIRELESS MASS STORAGE FLASH MEMORY	12/050544 03/18/2008	8175528 05/08/2012
SPANSION LLC	DUAL BIT FLASH MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	12/054081 03/24/2008	7705390 04/27/2010
SPANSION LLC	SECURE MANAGEMENT OF MEMORY REGIONS IN A MEMORY	12/054740 03/25/2008	7979658 07/12/2011
SPANSION LLC	CONTROL CIRCUIT FOR STEP-DOWN DC-DC CONVERTER, STEP-DOWN DC-DC CONVERTER AND CONTROL METHOD THEREOF	12/054785 03/25/2008	8072199 12/06/2011
SPANSION LLC	AUTOMATED LOADING/UNLOADING OF DEVICES FOR BURN-IN TESTING	12/055141 03/25/2008	7567076 07/28/2009

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	DC-DC CONVERTER, POWER SUPPLY VOLTAGE SUPPLYING METHOD, AND POWER SUPPLY VOLTAGE SUPPLYING SYSTEM	12/055437 03/26/2008	7916503 03/29/2011
SPANSION LLC	FUEL CELL CATALYST REGENERATION	12/056562 03/27/2008	7981825 07/19/2011
SPANSION LLC	DC-DC CONVERTER, POWER SUPPLY SYSTEM, AND POWER SUPPLY METHOD	12/057001 03/27/2008	7714557 05/11/2010
SPANSION LLC	A BITLINE VOLTAGE DRIVER	12/057203 03/27/2008	7787313 08/31/2010
SPANSION LLC	NON-VOLATILE MEMORY DEVICE, NON-VOLATILE MEMORY SYSTEM AND CONTROL METHOD FOR THE NON-VOLATILE MEMORY DEVICE	12/058471 03/28/2008	7859914 12/28/2010
SPANSION LLC	OPERATING SYSTEM BASED DRAM AND FLASH MANAGEMENT	12/059784 03/31/2008	8738840 05/27/2014
SPANSION LLC	MEMORY RESOURCE MANAGEMENT FOR A FLASH AWARE KERNEL	12/059795 03/31/2008	8.560,761 10/15/2013
SPANSION LLC	FLASH MEMORY USABILITY ENHANCEMENTS IN MAIN MEMORY APPLICATION	12/059809 03/31/2008	8745311 06/03/2014
SPANSION LLC	SIMULATOR ENGINE DEVELOPMENT SYSTEM AND SIMULATOR ENGINE DEVELOPMENT METHOD	12/068122 02/01/2008	8527254 09/03/2013
SPANSION LLC	DIODE AND RESISTIVE MEMORY DEVICE STRUCTURES	12/072588 02/27/2008	8035099 10/11/2011
SPANSION LLC	CONNECTIONS FOR ELECTRONIC DEVICES ON DOUBLE-SIDED CIRCUIT BOARD	12/080311 04/02/2008	8228679 07/24/2012
SPANSION LLC	METHOD OF IMPROVING ADHESION OF DIELECTRIC CAP TO COPPER	12/082988 04/16/2008	8790751 07/29/2014
SPANSION LLC	SEMICONDUCTOR DEVICE SEALED IN A RESIN SECTION AND METHOD FOR MANUFACTURING THE SAME	12/098248 04/04/2008	7932616 04/26/2011
SPANSION LLC	METHOD OF FORMING AN ELECTRONIC DEVICE INCLUDING FORMING A CHARGE STORAGE ELEMENT IN A TRENCH OF A WORKPIECE	12/102488 04/14/2008	8409952 04/02/2013
SPANSION LLC	OPTICAL ERASE MEMORY STRUCTURE	12/106180 04/18/2008	7781806 08/24/2010
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	12/108256 04/23/2008	8717833 05/06/2014
SPANSION LLC	NONVOLATILE STORAGE DEVICE AND BIAS CONTROL METHOD THEREOF	12/109239 04/24/2008	7940563 05/10/2011
SPANSION LLC	STRUCTURES AND METHODS FOR STACK TYPE SEMICONDUCTOR PACKAGING	12/110181 04/25/2008	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHODS FOR FABRICATING MEMORY CELLS HAVING FIN STRUCTURES WITH SEMICIRCULAR TOP SURFACES AND ROUNDED TOP CORNERS AND EDGES	12/110974 04/28/2008	
SPANSION LLC	METHODS FOR FABRICATING MEMORY CELLS HAVING FIN STRUCTURES WITH SMOOTH SIDEWALLS AND ROUNDED TOP CORNERS AND EDGES	12/111122 04/28/2008	8563441 10/22/2013
SPANSION LLC	WORDLINE RESISTANCE REDUCTION METHOD AND STRUCTURE IN AN INTEGRATED CIRCUIT MEMORY DEVICE	12/111886 04/29/2008	7867899 01/11/2011
SPANSION LLC	BITCELL CURRENT SENSE DEVICE AND METHOD THEREOF	12/114966 05/05/2008	7804715 09/28/2010
SPANSION LLC	CONSTANT VOLTAGE CIRCUIT, CONSTANT VOLTAGE SUPPLY SYSTEM AND CONSTANT VOLTAGE SUPPLY METHOD	12/115934 05/06/2008	7990207 08/02/2011
SPANSION LLC	MEMORY DEVICE INTERCONNECTS AND METHOD OF MANUFACTURING	12/116200 05/06/2008	8669597 03/11/2014
SPANSION LLC	STRUCTURE, METHOD AND SYSTEM FOR ASSESSING BONDING OF ELECTRODES IN FCB PACKAGING	12/122556 05/16/2008	7816788 10/19/2010
SPANSION LLC	METHOD FOR BALL GRID ARRAY (BGA) SOLDER ATTACHI FOR SURFACE MOUNT	12/126600 05/23/2008	
SPANSION LLC	MULTIPLE PROGRAMMING OF SPARE MEMORY REGION FOR NONVOLATILE MEMORY	12/126686 05/23/2008	7729169 06/01/2010
SPANSION LLC	ADDRESS CACHING STORED TRANSLATION	12/127919 05/28/2008	8464021 06/11/2013
SPANSION LLC	ENHANCED ERASING OPERATION FOR NON-VOLATILE MEMORY	12/129530 05/29/2008	7679968 03/16/2010
SPANSION LLC	INSTANT HARDWARE ERASE MECHANISM FOR CONTENT RESET AND PSEUDO-RANDOM NUMBER GENERATION	12/129737 05/30/2008	8370644 02/05/2013
SPANSION LLC	METHOD FOR MANUFACTURING SEMICONDUCTOR DEVICE	12/130537 05/30/2008	7682974 03/23/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME AND SEMICONDUCTOR MANUFACTURING DEVICE	12/130577 05/30/2008	8815652 08/26/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROLLING METHOD FOR THE SAME	12/130583 05/30/2008	7787312 08/31/2010
SPANSION LLC	ULTRAVIOLET BLOCKING STRUCTURE AND METHOD FOR SEMICONDUCTOR DEVICE	12/133689 06/05/2008	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	PRECISION TRENCH FORMATION THROUGH OXIDE REGION FORMATION FOR A SEMICONDUCTOR DEVICE	12/134087 06/05/2008	7871896 01/18/2011
SPANSION LLC	NON VOLATILE MEMORY STRING MODULE WITH BUFFER AND METHOD	12/134898 06/06/2008	7830716 11/09/2010
SPANSION LLC	MEMORY DEVICE AND METHOD	12/134902 06/06/2008	7838342 11/23/2010
SPANSION LLC	SENSE AMPLIFIER WITH CAPACITANCE-COUPLED DIFFERENTIAL SENSE AMPLIFIER	12/134905 06/06/2008	7983089 07/19/2011
SPANSION LLC	DC-DC CONVERTER AND CONTROL METHOD THEREOF	12/136579 06/10/2008	7936156 05/03/2011
SPANSION LLC	MEMORY DEVICE WITH A SELECTION ELEMENT AND A CONTROL LINE IN A SUBSTANTIALLY SIMILAR LAYER	12/141180 06/18/2008	7696017 04/13/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/165331 06/30/2008	7892892 02/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR CONTROLLING A SEMICONDUCTOR DEVICE	12/166288 07/01/2008	7791946 09/07/2010
SPANSION LLC	METHOD AND APPRATUS FOR MANUFACTURING SEMICONDUCTOR DEVICE	12/166290 07/01/2008	
SPANSION LLC	CARRIER FOR STACKED TYPE SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING STACKED TYPE SEMICONDUCTOR DEVICE	12/166293 07/01/2008	7846771 12/07/2010
SPANSION LLC	PROBE APPARATUS, A PROCESS OF FROMING A PROBE HEAD, AND A PROCES OD FORMING AN ELECTRONIC DEVICE	12/174743 07/17/2008	8179153 05/15/2012
SPANSION LLC	SYNCHRONOUS MEMORY DEVICES AND CONTROL METHODS FOR PERFORMING BURST WRITE OPERATIONS	12/176997 07/21/2008	7821842 10/26/2010
SPANSION LLC	NONVOLATILE MEMORY DEVICE HAVING A PLURALITY OF MEMORY BLOCKS	12/177039 07/21/2008	7808808 10/05/2010
SPANSION LLC	FLASH MEMORY DEVICE WITH WORD LINES OF UNIFORM WIDTH AND METHOD FOR MANUFACTURING THEREOF	12/179400 07/24/2008	7820547 10/26/2010
SPANSION LLC	STACKED DIE PACKAGE HAVING REDUCED HEIGHT AND METHOD OF MAKING SAME	12/180185 07/25/2008	
SPANSION LLC	MIRRORBIT DEVICE HAVING THE CHARGE STORAGE REGION ON BOTH SIDES OF ONE WORD LINE	12/180306 07/25/2008	
SPANSION LLC	THERMOELECTRIC DEVICE FOR USE WITH STIRILING ENGINE	12/180910 07/28/2008	8793992 08/05/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SELF-ALIGNED CHARGE STORAGE REGION FORMATION FOR SEMICONDUCTOR DEVICE	12/183756 07/31/2008	7932125 04/26/2011
SPANSION LLC	DEVICE AND METHOD FOR PREVENTING LOST SYNCHRONIZATION	12/184075 07/31/2008	8504862 08/06/2013
SPANSION LLC	APPARATUS AND METHOD FOR A MEMORY ARRAY WITH SHALLOW TRENCH ISOLATION REGIONS BETWEEN BIT LINES FOR INCREASED PROCESS MARGINS	12/187276 08/06/2008	8507971 08/13/2013
SPANSION LLC	MULTI-LEVEL PROGRAM ALGORITHM EMPHASIZE DISTURB CONDITION	12/189746 08/11/2008	8116151 02/14/2012
SPANSION LLC	MIRROR BIT MEMEORY DEVICE APPLYING A GATE VOLTAGE ALTERNATELY TO GATE	12/192923 08/15/2008	7956424 06/07/2011
SPANSION LLC	U-SHAPED SONOS MEMORY HAVING AN ELEVATED SOURCE AND DRAIN	12/192945 08/15/2008	7825448 11/02/2010
SPANSION LLC	METHOD FOR MANUFACTURING SONOS FLASH MEMORY	12/193266 08/18/2008	8076206 12/13/2011
SPANSION LLC	PLASMA TREATED METAL SILICIDE LAYER FORMATION	12/195307 08/20/2008	7902056 03/08/2011
SPANSION LLC	SEPARATION METHODS FOR SEMICONDUCTOR CHARGE OF ACCUMULATION LAYERS AND STRUCTURES THEROF	12/195324 08/20/2008	8003468 08/23/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/196156 08/21/2008	8749039 06/10/2014
SPANSION LLC	STACKED SOLDER BALLS FOR INTEGRATED CIRCUIT DEVICE PACKAGING AND ASSEMBLY	12/196210 08/21/2008	7846829 12/07/2010
SPANSION LLC	METHOD AND APPARATUS FOR ADDRESS ALLOTING AND VERFICATION IN A SEMICONDUCTOR DEVICE	12/199684 09/18/2008	7813154 10/12/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATION	12/199690 08/27/2008	
SPANSION LLC	MEMORY DEVICE AND METHODS FOR ITS FABRICATION	12/199692 08/27/2008	7564091 07/21/2009
SPANSION LLC	A 3-D INTEGRATED CIRCUIT SYATEM AND MENTHOD	12/209478 09/12/2008	7998846 08/16/2011
SPANSION LLC	MANUFACTURING STACKED SEMICONDUCTOR DEVICE	12/210113 09/12/2008	8367466 02/05/2013
SPANSION LLC	SIMULATION OF PROGRAM EXECUTION TO DETECT PROBLEM SUCH AS DEADLOCK	12/213871 06/25/2008	
SPANSION LLC	STRUCTURE AND MANUFACTURING METHOD FOR A CHIP WHICH HAS A THROUGH-HOLE ELECTRODE	12/217096 07/01/2008	7786587 08/31/2010

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR MEASURING FLASH MEMORY CELL CURRENT	12/228691 08/15/2008	8581595 11/12/2013
SPANSION LLC	NARROW WORD LINE FORMATION BY SIDEWALL NiSi FORMATION AND SELECTIVE ETCHING FOR 22NM AND BEYOND	12/231369 09/02/2008	
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT AND DEBUG MODE DETERMINATION METHOD	12/232178 09/11/2008	7805650 09/28/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD USING STRESS INFORMATION	12/233577 09/18/2008	8064262 11/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE INCLUDING A PRESSURE- CONTACT SECTION	12/234337 09/19/2008	8269343 09/18/2012
SPANSION LLC	HIGH VT STATE USED AS ERASE CONDITION IN TRAP BASED NOR FLASH CELL DESIGN	12/234733 09/22/2008	7907455 03/15/2011
SPANSION LLC	EEPROM EMULATION IN FLASH DEVICE	12/234734 09/22/2008	7804713 09/28/2010
SPANSION LLC	DYNAMIC ERASE STATE IN FLASH DEVICE	12/234736 09/22/2008	7791954 09/07/2010
SPANSION LLC	FLASH MIRROR BIT ARCHITECTURE USING SINGLE PROGRAM AND ERASE ENTITY AS LOGICAL CELL	12/234737 09/22/2008	8004888 08/23/2011
SPANSION LLC	SECTOR CONFIGURE REGISTERS FOR A FLASH DEVICE GENERATING MULTIPLE VIRTUAL GROUND DECODING SCHEMES	12/234738 09/22/2008	7864596 01/04/2011
SPANSION LLC	QUAD + BIT STORAGE IN TRAP BASED FLASH DESIGN USING SINGLE PROGRAM AND ERASE ENTITY AS LOGICAL CELL	12/234740 09/22/2008	7881105 02/01/2011
SPANSION LLC	SONOS DEVICE WITH INSULATING STORAGE LAYER AND P-N JUNCTION ISOLATION	12/235321 09/22/2008	7910980 03/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREFOR	12/239566 09/26/2008	8039943 10/18/2011
SPANSION LLC	MECHANICAL ENHANCEMENT OF NANOPOROUS ULTRA LOW DIELECTRIC FILMS AS INTER LAYER DIELECTRIC MATERIALS FOR 40NM AND BEYOND NAND BACK-END-OF-LINE APPLICATION TO REDUCE RC OR INTERCONNECT DELAY	12/240627 09/29/2008	
SPANSION LLC	METHOD FOR DETECTING A VOID	12/240767 09/29/2008	7901954 03/08/2011
SPANSION LLC	SYSTEM AND METHOD OF OPERATION FOR RESISTIVE CHANGE MEMORY	12/243836 10/01/2008	7835172 11/16/2010
SPANSION LLC	SCALED DOWN SELECT GATES OF NAND FLASH MEMORY CELL STRINGS AND METHOD OF FORMING SAME	12/246981 10/07/2008	7907448 03/15/2011

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MULTI-LAYER GLOBAL BIT LINE APPROACH TO REDUCE RC	12/249261 10/10/2008	
SPANSION LLC	FABRICATING METHOD OF ETCHING THE INTERLAYER INSULATING FILM BY CONSIDERING THE EXTINCTION COEFFICIENT	12/253035 10/16/2008	7781320 08/24/2010
SPANSION LLC	SYSTEMS AND METHODS FOR DOWNLOADING CODE AND DATA INTO A SECURE NON-VOLATILE MEMORY	12/253207 10/16/2008	
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE WITH STACKED MEMORY CELL STRUCTURE	12/253619 10/17/2008	7894238 02/22/2011
SPANSION LLC	LINEAR DROP-OUT REGULATOR CIRCUIT (as amended)	12/255356 10/21/2008	8760133 06/24/2014
SPANSION LLC	APPARATUS AND METHOD FOR GENERATING WIDE-RANGE REGULATED SUPPLY VOLTAGES FOR A FLASH MEMORY	12/255622 10/21/2008	7848167 12/07/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/256333 10/22/2008	8637986 01/28/2014
SPANSION LLC	DC-DC CONVERTER AND CONTROL CIRCUIT FOR DC-DC CONVERTER	12/257222 10/23/2008	7777473 08/17/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREOF	12/258067 10/24/2008	7939925 05/10/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD	12/259100 10/27/2008	8421241 04/16/2013
SPANSION LLC	APPARATUS AND METHOD FOR PLACEMENT OF BOOSTING CELL WITH ADAPTIVE BOOSTER SCHEME	12/262123 10/30/2008	8094509 01/10/2012
SPANSION LLC	FABRICATING METHOD OF MIRROR BIT MEMORY DEVICE HAVING SPLIT ONO FILM WITH TOP OXIDE FILM FORMED BY OXIDATION PROCESS	12/266512 11/06/2008	8404549 03/26/2013
SPANSION LLC	ERROR CORRECTION FOR FLASH MEMORY	12/267017 11/07/2008	8296626 10/23/2012
SPANSION LLC	ELECTROPLATING APPARATUS AND METHOD WITH UNIFORMITY IMPROVEMENT	12/273289 11/18/2008	
SPANSION LLC	DC-DC CONVERTER, DC-DC CONVERTER CONTROL METHOD, AND ELECTRONIC DEVICE	12/273804 11/19/2008	8237417 08/07/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	12/275121 11/20/2008	8018767 09/13/2011
SPANSION LLC	SYSTEM AND METHOD FOR ACCESSING MEMORY	12/276010 11/21/2008	8732360 05/20/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD FOR SETTING PARAMETERS AND DETERMINING LATENCY IN A CHAINED DEVICE SYSTEM	12/276061 11/21/2008	8930593 01/06/2015
SPANSION LLC	SYSTEM AND METHOD FOR READ DATA BUFFERING WHEREIN AN ARBITRATION POLICY DETERMINES WHETHER INTERNAL OR EXTERNAL BUFFERS ARE GIVEN PREFERENCE	12/276116 11/21/2008	8601181 12/03/2013
SPANSION LLC	SYSTEM AND METHOD FOR READ DATA BUFFERING WHEREIN ANALYZING POLICY DETERMINES WHETHER TO DECREMENT OR INCREMENT THE COUNT OF INTERNAL OR EXTERNAL BUFFERS	12/276143 11/21/2008	8874810 10/28/2014
SPANSION LLC	MULTI-PHASE PROGRAMMING OF MULTI-LEVEL MEMORY	12/276604 11/24/2008	7821840 10/26/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND ITS CONTROL METHOD	12/283721 09/15/2008	7729170 06/01/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND ITS CONTROL METHOD	12/283722 09/15/2008	7821833 10/26/2010
SPANSION LLC	ELECTRICALLY PROGRAMMABLE AND ERASABLE MEMORY DEVICE AND METHOD OF FABRICATION THEREOF	12/284002 09/17/2008	8633074 01/21/2014
SPANSION LLC	RUTHENIUM INTERCONNECT WITH HIGH ASPECT RATIO CONTACT AND METHOD OF FABRICATION THEREOF	12/286149 09/29/2008	
SPANSION LLC	RESET SIGNAL GENERATION CIRCUIT	12/289030 10/17/2008	7679411 03/16/2010
SPANSION LLC	RESISTIVE MEMORY CELL ARRAY WITH COMMON PLATE	12/290179 10/28/2008	7839671 11/23/2010
SPANSION LLC	SIH4 SOAK FOR LOW HYDROGEN SIN DEPOSITION TO IMPROVE FLASH MEMEORY DEVICE PERFORMANCE	12/290916 11/05/2008	7985674 07/26/2011
SPANSION LLC	TEST STRUCTURES FOR DEVELOPMENT OF METAL-INSULATOR-METAL (MIM) DEVICES	12/313089 11/17/2008	8084770 12/27/2011
SPANSION LLC	HIGH ULTRA VIOLET ABSORBANCE OXYNITRIDE FILM FOR IMPROVED LINE-TO-LINE LEAKAGE, SCALABILITY, AND DATA RETENTION IN FLASH MEMORY DEVICE	12/313134 11/17/2008	8735960 05/27/2014
SPANSION LLC	CARRIER STRUCTURE FOR STACKED-TYPE SEMICONDUCTOR DEVICE, METHOD OF PRODUCING THE SAME, AND METHOD OF FABRICATING STACKED-TYPE SEMICONDUCTOR DEVICE	12/315417 12/03/2008	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	DIE OFFSET DIE TO DIE BONDING	12/316041 12/09/2008	7674653 03/09/2010
SPANSION LLC	DIE OFFSET DIE TO DIE BONDING	12/316042 12/09/2008	7750481 07/06/2010
SPANSION LLC	SELF-ALIGNED DOUBLE PATTERNING FOR MEMORY AND OTHER MICROELECTRONIC DEVICES	12/322105 01/28/2009	8680671 03/25/2014
SPANSION LLC	MOVING VERIFY PROGRAMMING TECHNIQUE FOR FLASH MEMORY DEVICES	12/326388 12/02/2008	8391070 03/05/2013
SPANSION LLC	STACKED ORGANIC MEMORY DEVICES AND METHODS OF OPERATING AND FABRICATING	12/327040 12/03/2008	8003436 08/23/2011
SPANSION LLC	METHOD FOR FORMING A FLASH MEMORY DEVICE WITH STRAIGHT WORD LINES	12/327641 12/03/2008	7851306 12/14/2010
SPANSION LLC	MEMORY EMPLOYING REDUNDANT CELL ARRAY OF MULTI-BIT CELLS	12/329475 12/05/2008	8072802 12/06/2011
SPANSION LLC	DETERMINISTIC-PROGRAMMING METHODOLOGY FOR FLASH MEMORY DEVICES	12/330928 12/09/2008	7872916 01/18/2011
SPANSION LLC	METHOD FOR MANUFACTURING A SEMICONDUCTOR DEVICE	12/332146 12/10/2008	7851260 12/14/2010
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT IN IN A CARRY COMPUTATION NETWORK HAVING A LOGIC BLOCKS WHICH ARE DYNAMICALLY RECONFIGURABLE	12/332673 12/11/2008	8352533 01/08/2013
SPANSION LLC	ELECTRONIC CIRCUIT	12/334221 12/12/2008	7893681 02/22/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING	12/336757 12/17/2008	7902592 03/08/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/337134 12/17/2008	8273627 09/25/2012
SPANSION LLC	STACKED SEMICONDUCTOR DEVICES AND METHOD FOR FABRICATING THE SAME	12/337396 12/17/2008	8174107 05/08/2012
SPANSION LLC	SEMICONDUCTOR DIVICE AND METHOD FOR MANUFACTURING	12/337461 12/17/2008	7994007 08/09/2011
SPANSION LLC	NAND PROGRAM SEQUENCE REORDERING	12/337963 12/18/2008	8386736 02/26/2013
SPANSION LLC	FORMING METAL-SEMICONDUCTOR FILMS HAVING DIFFERENT THICKNESSES WITHIN DIFFERENT REGIONS OF AN ELECTRONIC DEVICE	12/340274 12/19/2008	7880221 02/01/2011
SPANSION LLC	RADIATION DETECTING ELECTRONIC DEVICE AND METHODS OF OPERATING	12/340288 12/19/2008	7902520 03/08/2011

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING A SIMPLIFIED STACK AND METHOD FOR MANUFACTURING THEREOF	12/341863 12/22/2008	8097961 01/17/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	12/341874 12/22/2008	7981746 07/19/2011
SPANSION LLC	METHOD OF INHIBITING FRINGE CURRENT IN MIRROR BITMEMORY DEVICE	12/341879 12/22/2008	8004901 08/23/2011
SPANSION LLC	TIME REDUCTION OF ADDRESS SETUP/HOLD TIME FOR SEMICONDUCTOR MEMORY	12/341886 12/22/2008	7889573 02/15/2011
SPANSION LLC	HTO OFFSET AND BL TRENCH PROCESS FOR MEMORY DEVICE TO IMPROVE DEVICE PERFORMANCE	12/342008 12/22/2008	7935596 05/03/2011
SPANSION LLC	HTO OFFSET SPACER AND OFF PROCESS TO DEFINE INVENTION	12/342011 12/22/2008	7943983 05/17/2011
SPANSION LLC	HTO OFFSET FOR LONG EFFECTIVE BETTER DEVICE PERFORMANCE	12/342016 12/22/2008	8653581 02/18/2014
SPANSION LLC	FLIP CHIP PACKAGE WITH SHELF AND METHOD OF MANUFACTURING THE SAME	12/343348 12/23/2008	8486756 07/16/2013
SPANSION LLC	SONOS-NAND DEVICE HAVING THE STORAGE REGION SEPARATED BETWEEN CELLS	12/343998 12/31/2008	7838406 11/23/2010
SPANSION LLC	METHOD AND APPARATUS FOR PERFORMING SEMICONDUCTOR MEMORY OPERATIONS	12/346699 12/30/2008	8040738 10/18/2011
SPANSION LLC	HIGH K STACK FOR NON-VOLATILE MEMORY	12/351553 01/09/2009	7855114 12/21/2010
SPANSION LLC	FRACTURED ERASE SYSTEM AND METHOD	12/366519 02/05/2009	
SPANSION LLC	GATE FRINGING EFFECT BASED CHANNEL FORMATION FOR SEMICONDUCTOR DEVICE	12/368023 02/09/2009	8692310 04/08/2014
SPANSION LLC	SYSTEMS AND METHODS FOR LOCATING ERROR BITS IN ENCODED DATA	12/368835 02/10/2009	8255777 08/28/2012
SPANSION LLC	POWER SUPPLY CIRCUIT, OVERCURRENT PROTECTION CIRCUIT FOR THE SAME, AND ELECTRONIC DEVICE	12/369907 02/12/2009	8233257 07/31/2012
SPANSION LLC	POWER SUPPLY CONTROL DEVICE AND POWER SUPPLY CONTROL METHOD	12/369954 02/12/2009	8299765 10/30/2012
SPANSION LLC	PIN DIODE DEVICE AND ARCHITECTURE	12/370932 02/13/2009	7916529 03/29/2011
SPANSION LLC	METHOD AND DEVICE EMPLOYING POLYSILICON SCALING	12/370950 02/13/2009	8076199 12/13/2011
SPANSION LLC	ADVANCED WORDLINE DISTURB REDUCTION USING BORN/INDIUM IMPLANT	12/390550 02/23/2009	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CORRECTING CIRCUIT, CORRECTING METHOD, AND SENSOR APPARATUS	12/399543 03/06/2009	7990134 08/02/2011
SPANSION LLC	CAPACITANCE SENSOR FOR DETECTING A CHARGE VOLTAGE OF A MULTI-CAPACITOR CIRCUIT	12/401174 03/10/2009	8283934 10/09/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	12/404146 03/13/2009	8772953 07/08/2014
SPANSION LLC	METHOD AND ARCHITECTURE FOR FAST FLASH MEMORY PROGRAMMING	12/405947 03/17/2009	7764546 07/27/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR BOOSTING WORD LINE	12/406845 03/18/2009	7791961 09/07/2010
SPANSION LLC	PARTIAL LOCAL SELF-BOOSTING OF A MEMORY CELL CHANNEL	12/407228 03/19/2009	7848146 12/07/2010
SPANSION LLC	SIGNAL RECEIVER APPARATUS AND WAVEFORM SHAPING METHOD	12/410152 03/24/2009	8582681 11/12/2013
SPANSION LLC	ELECTRONIC DEVICE, DETECTION CIRCUIT AND VOLTAGE CONTROL METHOD	12/412704 03/27/2009	8035367 10/11/2011
SPANSION LLC	GATE TRIM PROCESS USING EITHER WET ETCH OR DRY ETCH APPROACH TO TARGET CD FOR SELECTED TRANSISTORS	12/424023 04/15/2009	8067314 11/29/2011
SPANSION LLC	LINE PLOTTING METHOD	12/428212 04/22/2009	
SPANSION LLC	SONOS MEMORY CELLS HAVING NON-UNIFORM TUNNEL OXIDE AND METHODS FOR FABRICATING SAME	12/432441 04/29/2009	8487373 07/16/2013
SPANSION LLC	DIRECT POINTER ACCESS AND XIP REDIRECTOR FOR EMULATION OF MEMORY-MAPPED DEVICES	12/433159 04/30/2009	
SPANSION LLC	REPLACING RESET PIN IN BUSES WHILE GUARANTEEING SYSTEM RECOVERY	12/433499 04/30/2009	7840900 11/23/2010
SPANSION LLC	RADIATION DETECTING DEVICE AND METHOD OF OPERATING	12/468615 05/19/2009	8299439 10/30/2012
SPANSION LLC	SWITCHABLE MEMORY DIODE- A NEW MEMORY DEVICE	12/470825 05/22/2009	7981773 07/19/2011
SPANSION LLC	IMAGING DEVICE	12/472735 05/27/2009	8232515 07/31/2012
SPANSION LLC	CHARGE RETENTION FOR FLASH MEMORY BY MANIPULATING THE PROGRAM DATA METHODOLOGY	12/473037 05/27/2009	8379443 02/19/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CONTROL CIRCUIT OF DC-DC CONVERTER APPLYING OFFSET TO COIL CURRENT, DC-DC CONVERTER APPLYING OFFSET TO COIL CURRENT AND CONTROL METHOD OF DC-DC CONVERTER	12/475982 06/01/2009	8410767 04/02/2013
SPANSION LLC	DC/DC CONVERTER CONTROL CIRCUIT AND DC/DC CONVERTER CONTROL METHOD	12/479014 06/05/2009	8314599 11/20/2012
SPANSION LLC	PEAK HOLD CIRCUIT	12/483579 06/12/2009	8063667 11/22/2011
SPANSION LLC	NAND MEMORY CELL STRING HAVING A STACKED SELECT GATE STRUCTURE AND PROCESS FOR FORMING THE SAME	12/489226 06/22/2009	
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	12/491092 06/24/2009	7834470 11/16/2010
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/491970 06/25/2009	7889577 02/15/2011
SPANSION LLC	AUTOMATED LOADING/UNLOADING OF DEVICES FOR BURN-IN TESTING	12/492922 06/26/2009	8228082 07/24/2012
SPANSION LLC	AUTOMATED LOADING/UNLOADING OF DEVICES FOR BURN-IN TESTING	12/492968 06/26/2009	8105098 01/31/2012
SPANSION LLC	EMPLOYING SEPARATE DYNAMIC REFERENCE AREAS	12/494104 06/29/2009	7940570 05/10/2011
SPANSION LLC	MEMORY EMPLOYING INDEPENDENT DYNAMIC REFERENCE AREAS	12/494114 06/29/2009	7961519 06/14/2011
SPANSION LLC	PROGRAM, DESIGN APPARATUS, AND DESIGN METHOD FOR DYNAMIC RECONFIGURABLE CIRCUIT	12/497022 07/02/2009	8234613 07/31/2012
SPANSION LLC	MEMORY, MEMORY OPERATING METHOD, AND MEMORY SYSTEM	12/502592 07/14/2009	7889568 02/15/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	12/502891 07/14/2009	7977189 07/12/2011
SPANSION LLC	DATA CONVERSION APPARATUS, METHOD, AND COMPUTER-READABLE RECORDING MEDIUM STORING PROGRAM FOR GENERATING CIRCUIT CONFIGURATION INFORMATION FROM CIRCUIT DESCRIPTION	12/503455 07/15/2009	8291360 10/16/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/508319 07/23/2009	7903473 03/08/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREFOR	12/512638 07/30/2009	7969787 06/28/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/512741 07/30/2009	7978523 07/12/2011

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY DEVICE PERIPHERAL INTERCONNECTS AND METHOD OF MANUFACTURING	12/512960 07/30/2009	7951704 05/31/2011
SPANSION LLC	INTEGRATED CIRCUIT WITH CONTACT REGION AND MULTIPLE ETCH STOP INSULATION LAYER	12/539480 08/11/2009	7977797 07/12/2011
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE AND METHOD OF CONTROLLING SEMICONDUCTOR MEMORY DEVICE	12/543035 08/18/2009	7898860 03/01/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	12/543404 08/18/2009	7915661 03/29/2011
SPANSION LLC	MEMORY DEVICE	12/548034 08/26/2009	7969816 06/28/2011
SPANSION LLC	SOFTWARE OPTIMIZATION DEVICE AND SOFTWARE OPTIMIZATION METHOD	12/548751 03/08/2007	8516441 08/20/2013
SPANSION LLC	PROCESSOR SYSTEM OPTIMIZATION SUPPORTING APPARATUS AND SUPPORTING METHOD	12/549708 03/20/2007	8612805 12/17/2013
SPANSION LLC	OUTPUT CIRCUIT	12/552942 03/14/2007	8067964 11/29/2011
SPANSION LLC	VARIED SILICON RICHNESS SILICON NITRIDE FORMATION WITH ATOMIC LAYER DEPOSITION FOR NON-VOLATILE MEMORY DEVICES	12/556199 09/09/2009	
SPANSION LLC	FLASH MEMORY PROGRAMMING AND VERIFICATION WITH REDUCED LEAKAGE CURRENT	12/557721 09/11/2009	8031528 10/04/2011
SPANSION LLC	OUTPUT-VOLTAGE CONTROL DEVICE, OUTPUT-VOLTAGE CONTROL METHOD, AND ELECTRONIC APPARATUS	12/568245 09/28/2009	8436598 05/07/2013
SPANSION LLC	DISPLAY CONTROL DEVICE TO DISPLAY IMAGE DATA	12/569193 09/29/2009	
SPANSION LLC	METHOD AND APPARTATUS FOR ADAPTIVE MEMORY CELL OVERERASE COMPENSATION	12/574079 10/06/2009	7929353 04/19/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/574413 10/06/2009	7957205 06/07/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/574427 10/06/2009	7898879 03/01/2011
SPANSION LLC	NON-VOLATILE SONOS-TYPE MEMORY DEVICE	12/574884 10/07/2009	7888209 02/15/2011
SPANSION LLC	PARALLEL BITLINE NONVOLATILE MEMORY EMPLOYING CHANNEL-BASED PROCESSING TECHNOLOGY	12/575137 10/07/2009	8681558 03/25/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	INTER-BUS COMMUNICATION INTERFACE DEVICE AND DATA SECURITY DEVICE	12/580993 10/16/2009	8832460 09/09/2014
SPANSION LLC	OUTPUT VOLTAGE CONTROLLER, ELECTRONIC DEVICE, AND OUTPUT VOLTAGE CONTROL METHOD	12/605115 10/23/2009	8618781 12/31/2013
SPANSION LLC	COMMUNICATION APPARATUS, DATA COMMUNICATION METHOD, AND NETWORK SYSTEM	12/606870 10/27/2009	
SPANSION LLC	MEMORY ACCESS CONTROL CIRCUIT AND IMAGE PROCESSING SYSTEM	12/608322 10/29/2009	8462167 06/11/2013
SPANSION LLC	PLL CIRCUIT AND OSCILLATOR DEVICE	12/617234 11/12/2009	7961055 06/14/2011
SPANSION LLC	CONTROL CIRCUIT FOR DC-DC CONVERTER, CONTROL METHOD FOR DC-DC CONVERTER, AND ELECTRONIC DEVICE	12/617253 11/12/2009	8248043 08/21/2012
SPANSION LLC	DC-DC CONVERTER WITH ADAPTIVE PHASE COMPENSATION CONTROLLER	12/617427 11/12/2009	8618783 12/31/2013
SPANSION LLC	CONSTANT-VOLTAGE GENERATING CIRCUIT AND REGULATOR CIRCUIT	12/619496 11/16/2009	7948304 05/24/2011
SPANSION LLC	SEMICONDUCTOR MEMORY AND METHOD AND SYSTEM FOR ACTUATING SEMICONDUCTOR MEMORY	12/620172 11/17/2009	8107299 01/31/2012
SPANSION LLC	SUCCESSIVE APPROXIMATION A/D CONVERTER	12/620546 11/17/2009	7952509 05/31/2011
SPANSION LLC	DATA TRANSFER APPARATUS AND DATA TRANSFER METHOD	12/635148 12/10/2009	8285902 10/09/2012
SPANSION LLC	CURRENT PRODUCING CIRCUIT, CURRENT PRODUCING METHOD, AND ELECTRONIC DEVICE	12/636386 12/11/2009	7965476 06/21/2011
SPANSION LLC	POWER SUPPLY APPARATUS AND POWER SUPPLY METHOD	12/636764 12/13/2009	8324873 12/04/2012
SPANSION LLC	HIGH READ SPEED ELECTRONIC MEMORY WITH SERIAL ARRAY TRANSISTORS	12/642162 12/18/2009	8134853 03/13/2012
SPANSION LLC	SELECTIVE SILICIDE FORMATION USING RESIST ETCHBACK	12/644457 12/22/2009	8445372 05/21/2013
SPANSION LLC	LINE EDGE ROUGHNESS IMPROVEMENT FOR SMALL PITCHES	12/648059 12/28/2009	8877641 11/04/2014
SPANSION LLC	NONVOLATILE MEMORY DEVICE	12/648984 12/29/2009	7848154 12/07/2010
SPANSION LLC	CONTROLLING AC DISTURBANCE WHILE PROGRAMMING	12/650118 12/30/2009	7986562 07/26/2011
SPANSION LLC	MEMORY DEVICE	12/683732 01/07/2010	8325531 12/04/2012

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
AMD AND SPANSION LLC	MEORY DEVICE ETCH METHODS	12/688477 01/15/2010	7972951 07/05/2011
SPANSION LLC	FIELD PROGRAMMABLE REDUNDANT MEMORY FOR ELECTRONIC DEVICES	12/690590 01/20/2010	8375262 02/12/2013
SPANSION LLC	FIELD UPGRADABLE FIRMWARE FOR ELECTRONIC DEVICES	12/690617 01/20/2010	8825920 09/02/2014
SPANSION LLC	A PROGRAMMABLE READ PREABLE	12/691633 01/21/2010	8417874 04/09/2013
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	12/696409 01/29/2010	
SPANSION LLC	SELF ALIGNED NARROW STORAGE ELEMENTS FOR ADVANCED MEMORY DEVICE	12/697707 02/01/2010	8476695 07/02/2013
SPANSION LLC	SELF-ALIGNED SI RICH NITRIDE CHARGE TRAP LAYER ISOLATION FOR CHARGE TRAP FLASH MEMORY	12/699635 02/03/2010	8551858 10/08/2013
SPANSION LLC	LAYOUT TO MASK METHODOLOGY FOR LAYERS REQUIRING DOUBLE PATTERNING	12/701391 02/05/2010	
SPANSION LLC	PLANAR CELL ON CUT USING IN-SITU POLYMER DEPOSITION AND ETCH	12/703586 02/10/2010	8790530 07/29/2014
SPANSION LLC	APPARATUS AND METHOD FOR EXTENDED NITRIDE LAYER IN A FLASH MEMORY	12/706710 02/16/2010	8208296 06/26/2012
SPANSION LLC	CHARGING CIRCUIT	12/708332 02/18/2010	8742730 06/03/2014
SPANSION LLC	TABLE LOOKUP VOLTAGE COMPENSATION FOR MEMORY CELLS	12/710153 02/22/2010	7965574 06/21/2011
SPANSION LLC	POWER SUPPLY AND POWER CONTROL DEVICE	12/716133 03/02/2010	8319482 11/27/2012
SPANSION LLC	CONTROL CIRCUIT FOR DC-DC CONVERTER, DC-DC CONVERTER, AND METHOD FOR CONTROLLING DC-DC CONVERTER	12/717681 03/04/2010	8587265 11/19/2013
SPANSION LLC	METHOD AND APPARATUS FOR MULTI-CHIP PACKAGING	12/720547 03/09/2010	8324716 12/04/2012
SPANSION LLC	EXECUTION HISTORY TRACING METHOD	12/721667 03/11/2010	8578216 11/05/2013
SPANSION LLC	NON-VOLATILE FINFET MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	12/722083 03/11/2010	8686492 04/01/2014
SPANSION LLC	RECONFIGURABLE CIRCUIT WITH SUSPENSION CONTROL CIRCUIT	12/723320 03/12/2010	
SPANSION LLC	SYSTEM AND METHODS FOR CONTROLLING AN ELECTRONIC DEVICE	12/723582 03/12/2010	
SPANSION LLC	HOME AND BUILDING AUTOMATION	12/723590 03/12/2010	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	INTEGRATED CIRCUIT, DEBUGGING CIRCUIT, AND DEBUGGING COMMAND CONTROL METHOD	12/729864 03/23/2010	8745446 06/03/2014
SPANSION LLC	IMPROVED READ MODE FOR FLASH MEMORY	12/730452 03/24/2010	8107294 01/31/2012
SPANSION LLC	POWER SUPPLY DEVICE, CONTROL CIRCUIT AND METHOD FOR CONTROLLING POWER SUPPLY DEVICE	12/762668 04/19/2010	8344711 01/01/2013
SPANSION LLC	SIGNAL PROCESSOR AND COMMUNICATION DEVICE	12/769143 04/28/2010	8605756 12/10/2013
SPANSION LLC	METHOD FOR CONTAINING A SILICIDED GATE WITHIN A SIDEWALL SPACER IN INTEGRATED CIRCUIT TECHNOLOGY	12/770805 04/30/2010	8252676 08/28/2012
SPANSION LLC	PARTIAL LOCAL SELF BOOSTING FOR NAND	12/783351 05/19/2010	8638609 01/28/2014
SPANSION LLC	SELF-ALIGNED PATTERNING METHOD BY USING NON-CONFORMAL FILM AND ETCH FOR FLASH MEMORY AND OTHER SEMICONDUCTOR APPLICATIONS	12/788177 05/26/2010	8035153 10/11/2011
SPANSION LLC	STRAPPING CONTACT FOR CHARGE PROTECTION	12/790578 05/28/2010	8404541 03/26/2013
SPANSION LLC	MULTIPLEXING AUXILIARY PROCESSING ELEMENT AND SEMICONDUCTOR INTEGRATED CIRCUIT	12/791280 06/01/2010	
SPANSION LLC	ELECTRONIC DEVICE HAVING A MOLDING COMPOUND INCLUDING A COMPOSITE MATERIAL	12/792129 06/02/2010	
SPANSION LLC	VOLTAGE ADJUSTMENT CIRCUIT AND DISPLAY DEVICE DRIVING CIRCUIT	12/794158 06/04/2010	8593447 11/26/2013
SPANSION LLC	COMPUTER SYSTEM INCLUDING RECONFIGURABLE ARITHMETIC DEVICE WITH NETWORK OF PROCESSOR ELEMENTS (as amended)	12/795462 06/07/2010	
SPANSION LLC & HITACHI, LTD.	DC/DC CONVERTER AND DC/DC CONVERTER CONTROL METHOD	12/815126 06/14/2010	8570021 10/29/2013
SPANSION LLC	METHOD AND STRUCTURE OF MINIMIZING MOLD BLEEDING ON A SUBSTRATE SURFACE OF SEMICONDUCTOR PACKAGE	12/818866 06/18/2010	8546936 10/01/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/819071 06/18/2010	8045388 10/25/2011
SPANSION LLC	POWER CONTROL CIRCUIT PERFORMING SOFT START OPERATION, POWER SUPPLY DEVICE, AND ELECTRONIC DEVICE	12/819890 06/21/2010	8922181 12/30/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	OUTPUT CIRCUIT OF HIGH-FREQUENCY TRANSMITTER	12/822651 06/04/2010	8718571 05/06/2014
SPANSION LLC	HIGH READ SPEED MEMORY WITH GATE ISOLATION	12/824352 06/28/2010	8279674 10/02/2012
SPANSION LLC	DRIVER CIRCUIT AND ADJUSTMENT METHOD THEREFOR	12/826317 06/29/2010	8149026 04/03/2012
SPANSION LLC	METHOD AND SYSTEM FOR THIN MULTI CHIP STACK PACKAGE WITH FILM ON WIRE AND COPPER WIRE	12/826366 06/29/2010	8680686 03/25/2014
SPANSION LLC	USE OF A POLYMER SPACER AND SI TRENCH IN A BITLINE JUNCTION OF A FLASH MEMORY CELL TO IMPROVE TPD CHARACTERISTICS	12/827069 06/30/2010	7906807 03/15/2011
SPANSION LLC	ERASING FLASH MEMORY USING ADAPTIVE DRAIN AND/OR GATE BIAS	12/831085 07/06/2010	8144522 03/27/2012
SPANSION LLC	BODY-BIAS VOLTAGE CONTROLLER AND METHOD OF CONTROLLING BODY-BIAS VOLTAGE	12/835732 07/13/2010	8659346 02/25/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD TO MANUFACTURE THEREOF	12/837323 07/15/2010	8148771 04/03/2012
SPANSION LLC	METHOD FOR FABRICATING A SEMICONDUCTOR DEVICE BY CONSIDERING THE EXTINCTION COEFFICIENT DURING ETCHING OF AN INTERLAYER INSULATING FILM	12/840063 07/20/2010	8440557 05/14/2013
SPANSION LLC	SEMICONDUCTOR MEMORY COMPRISING DUAL CHARGE STORAGE NODES AND METHODS FOR ITS FABRICATION	12/840165 07/20/2010	8076712 12/13/2011
SPANSION LLC	A BITLINE VOLTAGE DRIVER	12/842409 07/23/2010	8295102 10/23/2012
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	BURIED SILICIDE LOCAL INTERCONNECT WITH SIDEWALL SPACERS AND METHOD FOR MAKING THE SAME	12/843131 07/26/2010	8049334 11/01/2011
SPANSION LLC	ELECTRONIC DEVICE INCLUDING A GATE ELECTRODE HAVING PORTIONS WITH DIFFERENT CONDUCTIVITY TYPES	12/844392 07/27/2010	8310008 11/13/2012
SPANSION LLC	SYSTEM AND METHOD FOR DETECTING PARTICLES WITH A SEMICONDUCTOR DEVICE	12/844888 07/28/2010	8436289 05/07/2013
SPANSION LLC	DC-DC CONVERTER, CONTROL CIRCUIT, AND POWER SUPPLY CONTROL METHOD	12/844928 07/28/2010	
SPANSION LLC	METHOD AND MANUFACTURE FOR HIGH VOLTAGE GATE OXIDE FORMATION AFTER SHALLOW TRENCH ISOLATION FORMATION	12/850252 08/04/2010	8114756 02/14/2012

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR MEMORY, SYSTEM, AND METHOD OF CONTROLLING SEMICONDUCTOR MEMORY	12/850470 08/04/2010	8335110 12/18/2012
SPANSION LLC	REAL-TIME DATA PATTERN ANALYSIS SYSTEM AND METHOD OF OPERATION THEREOF	12/852970 10/07/2009	8818802 08/26/2014
SPANSION LLC	BAND GAP REFERENCE CIRCUIT	12/853425 08/10/2010	8933682 01/13/2015
SPANSION LLC	STITCH BUMP STACKING DESIGN FOR OVERALL PACKAGE SIZE REDUCTION FOR MULTIPLE STACK	12/853856 08/10/2010	8357563 01/22/2013
SPANSION LLC	SYSTEM AND METHOD FOR REDUCING PROCESS-INDUCED CHARGING	12/860074 08/20/2010	8203178 06/19/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR ADJUSTING REFERENCE LEVELS OF REFERENCE CELLS	12/871693 08/30/2010	8031527 10/04/2011
SPANSION LLC	STRUCTURE, METHOD AND SYSTEM FOR ASSESSING BONDING OF ELECTRODES IN FCB PACKAGING	12/877661 09/08/2010	8274158 09/25/2012
SPANSION LLC	NONVOLATILE MEMORY DEVICE HAVING A PLURALITY OF MEMORY BLOCKS	12/878656 09/09/2010	8094478 01/10/2012
SPANSION LLC	APPARATUS AND METHOD FOR PROGRAMMABLE READ PREAMBLE	12/879936 09/10/2010	
SPANSION LLC	APPARATUS AND METHOD FOR READ PREAMBLE DISABLE	12/879992 09/10/2010	
SPANSION LLC	APPARATUS AND METHOD FOR DATA CAPTURE USING A READ PREAMBLE	12/880018 09/10/2010	8140778 03/20/2012
SPANSION LLC	APPARATUS, METHOD, AND MANUFACTURE FOR USING A READ PREAMBLE TO OPTIMIZE DATA CAPTURE	12/880021 09/10/2010	
SPANSION LLC	METHOD FOR FORMING BIT LINES FOR SEMICONDUCTOR DEVICES	12/880541 09/13/2010	7972948 07/05/2011
SPANSION LLC	METHODS FOR FORMING A MEMORY CELL HAVING A TOP OXIDE SPACER	12/891310 09/27/2010	8202779 06/19/2012
SPANSION LLC	A SELF-ALIGNED PATTERNING METHOD BY USING NON-CONFORMAL FILM AND ETCH BACK FOR FLASH MEMORY AND OTHER SEMICONDUCTOR APPLICATIONS	12/891481 09/27/2010	7906395 03/15/2011
SPANSION LLC	METHODS FOR FORMING A MEMORY CELL HAVING A TOP OXIDE SPACER	12/891532 09/27/2010	7943980 05/17/2011
SPANSION LLC	BOOSTER CIRCUIT AND SEMICONDUCTOR MEMORY	12/892251 09/28/2010	8345503 01/01/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	Transfer In Progress - Incomplete Record	12/898551 10/05/2010	7968464 06/28/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREFOR	12/898968 10/06/2010	8097518 01/17/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	12/900370 10/07/2010	8530282 09/10/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/901990 10/11/2010	8264901 09/11/2012
SPANSION LLC	METHOD AND APPARATUS FOR ADDRESS ALLOTING AND VERFICATION IN A SEMICONDUCTOR DEVICE	12/903065 10/12/2010	8023341 09/20/2011
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	12/905716 10/15/2010	8130584 03/06/2012
SPANSION LLC	SYSTEM AND METHOD FOR IMPROVING MESA WIDTH IN A SEMICONDUCTOR DEVICE	12/910331 10/22/2010	8598645 12/03/2013
SPANSION LLC	FLASH MEMORY DEVICE WITH WORD LINES OF UNIFORM WIDTH AND METHOD FOR MANUFACTURING THEREOF	12/912602 10/26/2010	8304914 11/06/2012
SPANSION LLC	MEMORY DEVICE PERIPHERAL INTERCONNECTS	12/943679 11/10/2010	8441041 05/14/2013
SPANSION LLC	CONTROL CIRCUIT FOR SWITCHING POWER SUPPLY UNIT, ELECTRONIC DEVICE AND METHOD FOR CONTROLLING SWITCHING POWER SUPPLY UNIT	12/954756 11/26/2010	8493050 07/23/2013
SPANSION LLC	METHOD AND APPARATUS FOR NAND MEMORY WITH RECESSED SOURCE/DRAIN REGION	12/960411 12/03/2010	
SPANSION LLC	DUAL SPACER FORMATION IN FLASH MEMORY	12/960437 12/03/2010	8349685 01/08/2013
SPANSION LLC	PRECISION TRENCH FORMATION THROUGH OXIDE REGION FORMATION FOR A SEMICONDUCTOR DEVICE	12/961352 12/06/2010	8354326 01/15/2013
SPANSION LLC	WORDLINE RESISTANCE REDUCTION METHOD AND STRUCTURE IN AN INTEGRATED CIRCUIT MEMORY DEVICE	12/961379 12/06/2010	
SPANSION LLC	FLIP-CHIP PACKAGE COVERED WITH TAPE	12/962479 12/07/2010	
SPANSION LLC	HIGH PERFORMANCE LOW PROFILE QFN/LGA	12/964523 12/09/2010	
SPANSION LLC	STRESS REDUCTION ON VIAS AND YIELD IMPROVEMENT IN LAYOUT DESIGN THROUGH AUTO GENERATION OF VIA FILL	12/964594 12/09/2010	8276104 09/25/2012

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	LOCAL INTERCONNECT HAVING INCREASED MISALIGNMENT TOLERANCE	12/970675 12/16/2010	8283249 10/09/2012
SPANSION LLC	LOCAL INTERCONNECT HAVING INCREASED MISALIGNMENT TOLERANCE	12/970687 12/16/2010	8314454 11/20/2012
SPANSION LLC	SELF-ALIGNED NAND FLASH SELECT-GATE WORDLINES FOR SPACER DOUBLE PATTERNING	12/971818 12/17/2010	8461053 06/11/2013
SPANSION LLC	PROCESS MARGIN ENGINEERING IN CHARGE TRAPPING FIELD EFFECT TRANSISTORS	12/973631 12/20/2010	8263458 09/11/2012
SPANSION LLC	RECONFIGURABLE CIRCUIT HAVING ROWS OF A MATRIX OF REGISTERS CONNECTED TO CORRESPONDING PORTS AND A SEMICONDUCTOR INTEGRATED CIRCUIT (as amended)	12/973730 12/20/2010	
SPANSION LLC	EDGE ROUNDED FIELD EFFECT TRANSISTORS AND METHODS OF MANUFACTURING	12/973756 12/20/2010	
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	12/974754 12/21/2010	8530307 09/10/2013
SPANSION LLC	OSCILLATING APPARATUS	12/974996 12/21/2010	8436687 05/07/2013
SPANSION LLC	METHOD OF DATA TRANSMISSION, DATA TRANSMITTING APPARATUS, AND NETWORK SYSTEM	12/976068 12/22/2010	8605733 12/10/2013
SPANSION LLC	SYSTEM, METHOD AND APPARATUS FOR REDUCING PLASMA NOISE ON POWER PATH OF ELECTROSTATIC CHUCK	12/979654 12/28/2010	
SPANSION LLC	SPLIT CHARGE STORAGE NODE OUTER SPACER PROCESS	12/980716 12/29/2010	8039891 10/18/2011
SPANSION LLC	MEMORY WITH EXTENDED CHARGE TRAPPING LAYER	12/982006 12/30/2010	8441063 05/14/2013
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	GAP-FILLING WITH UNIFORM PROPERTIES	12/982364 12/30/2010	8415256 04/09/2013
SPANSION LLC	TIME REDUCTION OF ADDRESS SETUP/HOLD TIME FOR SEMICONDUCTOR MEMORY	12/987466 01/10/2011	8031537 10/04/2011
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE FEATURING SELECTIVE DATA STORAGE IN A STACKED MEMORY CELL	13/005456 01/12/2011	8289750 10/16/2012
SPANSION LLC	NON-VOLATILE FINFET MEMORY ARRAY AND MANUFACTURING METHOD THEREOF	13/006339 01/13/2011	8598646 12/03/2013
SPANSION LLC	CONTROL CIRCUIT FOR STEP-DOWN AND BOOST TYPE SWITCHING SUPPLY CIRCUIT AND METHOD FOR SWITCHING SUPPLY CIRCUIT	13/008374 01/18/2011	8638082 01/28/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SYSTEM AND METHOD FOR ADDRESSING THRESHOLD VOLTAGE SHIFTS OF MEMORY CELLS IN AN ELECTRONIC PRODUCT	13/011706 01/21/2011	8345483 01/01/2013
SPANSION LLC	SEMICONDUCTOR DEVICE, METHOD OF CONTROLLING THE SAME, AND METHOD OF MANUFACTURING THE SAME	13/012664 01/24/2011	8716082 05/06/2014
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT, OPERATING METHOD OF SEMICONDUCTOR INTEGRATED CIRCUIT, AND DEBUG SYSTEM	13/014318 01/26/2011	8595562 11/26/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	13/015072 01/27/2011	8446015 05/21/2013
SPANSION LLC	SEMICONDUCTOR MEMORY	13/020636 02/03/2011	8385128 02/26/2013
SPANSION LLC	SEMICONDUCTOR MANUFACTURING APPARATUS AND CONTROL SYSTEM AND CONTROL METHOD THEREFOR	13/020692 02/03/2011	8577494 11/05/2013
SPANSION LLC	SEMICONDUCTOR MEMORY INCLUDING PROGRAM CIRCUIT OF NONVOLATILE MEMORY CELLS AND SYSTEM	13/022410 02/07/2011	8514632 08/20/2013
SPANSION LLC	PATTERNED DUMMY WAFERS LOADING IN BATCH TYPE CVD	13/022517 02/07/2011	8809206 08/19/2014
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT DEVICE	13/024979 02/10/2011	8379464 02/19/2013
SPANSION LLC	PROCESSES FOR FORMING ELECTRONIC DEVICES INCLUDING POLISHING METAL-CONTAINING LAYERS	13/025979 02/11/2011	8232209 07/31/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD THEREFOR	13/026075 02/11/2011	8369161 02/05/2013
SPANSION LLC	SEMICONDUCTOR CIRCUIT AND DESIGNING APPARATUS	13/028840 02/16/2011	
SPANSION LLC	REDUCTION OF DEFECTS FORMED ON THE SURFACE OF A SILICON OXYNITRIDE FILM	13/032191 02/22/2011	8158534 04/17/2012
SPANSION LLC	CONTROL CIRCUIT AND ELECTRONIC DEVICE	13/035485 02/25/2011	8928177 01/06/2015
SPANSION LLC	A/D CONVERTER	13/036429 02/28/2011	8368577 02/05/2013
SPANSION LLC	REFERENCE VOLTAGE CIRCUIT AND SEMICONDUCTOR INTEGRATED CIRCUIT	13/036956 02/28/2011	8786358 07/22/2014
SPANSION LLC	DATA-PROCESSING METHOD, PROGRAM, AND SYSTEM	13/039839 03/03/2011	8868822 10/21/2014
SPANSION LLC	SEMICONDUCTOR DEVICE WITH VOID DETECTION MONITOR	13/043383 03/08/2011	8344510 01/01/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	METHOD OF FORMING NARROW STRUCTURES IN A SEMICONDUCTOR DEVICE	13/044313 03/09/2011	8901720 12/02/2014
SPANSION LLC	MIXED WIRE BONDING PROFILE AND PAD- LAYOUT CONFIGURATIONS IN IC PACKAGING PROCESSES FOR HIGH-SPEED ELECTRONIC DEVICES	13/046433 03/11/2011	
SPANSION LLC	PROGRAM AND ERASE DISABLING CONTROL OF WPCAM BY DOUBLE CONTROLS	13/052486 03/21/2011	8219743 07/10/2012
SPANSION LLC	SEMICONDUCTOR DEVICE SEALED IN RESIN SECTION AND METHOD FOR MANUFACTURING THE SAME	13/052865 03/21/2011	8900993 12/02/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THEREOF	13/069269 03/22/2011	8389361 03/05/2013
SPANSION LLC	HTO OFFSET AND BL TRENCH PROCESS FOR MEMORY DEVICE TO IMPROVE DEVICE PERFORMANCE	13/069710 03/23/2011	8330209 12/11/2012
SPANSION LLC	METHOD AND MANUFACTURE FOR HIGH VOLTAGE GATE OXIDE FORMATION AFTER SHALLOW TRENCH ISOLATION FORMATION	13/071385 03/24/2011	8652907 02/18/2014
SPANSION LLC	RECONFIGURABLE CIRCUIT USING VALID SIGNALS AND METHOD OF OPERATING RECONFIGURABLE CIRCUIT	13/073691 03/28/2011	
SPANSION LLC	JUNCTION LEAKAGE SUPPRESSION IN MEMORY DEVICES	13/074836 03/29/2011	8536011 09/17/2013
SPANSION LLC	DUAL CHARGE STORAGE NODE MEMORY DEVICE AND METHODS FOR FABRICATING SUCH DEVICE	13/075047 03/29/2011	8183623 05/22/2012
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING LAMINATED ELECTRONIC CONDUCTOR ON BIT LINE	13/081777 04/07/2011	8278171 10/02/2012
SPANSION LLC	CONTROL CIRCUIT FOR POWER SUPPLY INCLUDING A DETECTION CIRCUIT AND A REGULATION CIRCUIT FOR REGULATING SWITCHING TIMING	13/088328 04/15/2011	
SPANSION LLC	FLASH MEMORY PROGRAMMING POWER REDUCTION	13/090981 04/20/2011	8462564 06/11/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND MANUFACTURING METHOD THEREFOR	13/094668 04/26/2011	8481366 07/09/2013
SPANSION LLC	SELF-ALIGNED CHARGE STORAGE REGION FORMATION FOR SEMICONDUCTOR DEVICE	13/094744 04/26/2011	8319273 11/27/2012
SPANSION LLC	FLASH MEMORY WRITE ALGORITHM WITH PULSE SKIPPING FOR FAST BITS	13/098364 04/29/2011	8498162 07/30/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND APPARATUS FOR TEMPERATURE COMPENSATION FOR PROGRAMMING AND ERASE DISTRIBUTIONS IN A FLASH MEMORY	13/098378 04/29/2011	8542537 09/24/2013
SPANSION LLC	APPARATUS AND METHOD FOR EXTERNAL CHARGE PUMP ON FLASH MEMORY MODULE	13/098389 04/29/2011	8638633 01/28/2014
SPANSION LLC	MICROCOMPUTER OUTPUTTING FAILURE DETECTION RESULT	13/102158 11/13/2008	8522081 08/27/2013
SPANSION LLC	TABLE LOOKUP VOLTAGE COMPENSATION FOR MEMORY CELLS	13/107724 05/13/2011	8189421 05/29/2012
SPANSION LLC	SELECTION OF A LOOKUP TABLE WITH DATA MASKED WITH A COMBINATION OF AN ADDITIVE AND MULTIPLICATIVE MASK	13/111421 05/19/2011	8705731 04/22/2014
SPANSION LLC	OUTPUT SWITCHING CIRCUIT	13/117717 05/27/2011	
SPANSION LLC	REAL-TIME DATA PATTERN ANALYSIS SYSTEM AND METHOD OF OPERATION THEREOF	13/123698 10/07/2009	
SPANSION LLC	METHOD OF DETECTING AN OPERATING CONDITION OF AN ELECTRIC STEPPER MOTOR	13/125462 07/22/2011	8841874 09/23/2014
SPANSION LLC	SACRIFICIAL NITRIDE AND GATE REPLACEMENT	13/153558 06/06/2011	8329598 12/11/2012
SPANSION LLC	DETERMINING A LOGIC STATE BASED ON CURRENTS RECEIVED BY A SENSE AMPLIFIER	13/154616 06/07/2011	8514631 08/20/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	13/155278 06/07/2011	8379472 02/19/2013
SPANSION LLC	METHOD TO SEPERATE STORAGE REGIONS IN THE MIRROR BIT DEVICE	13/156122 06/08/2011	8318566 11/27/2012
SPANSION LLC	CONTROLLING AC DISTURBANCE WHILE PROGRAMMING	13/156763 06/09/2011	8264898 09/11/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	13/156766 06/09/2011	8669606 03/11/2014
SPANSION LLC	FUEL CELL CATALYST REGENERATION	13/156768 06/09/2011	8440357 05/14/2013
SPANSION LLC	OSCILLATION CIRCUIT	13/158054 06/10/2011	8508307 08/13/2013
SPANSION LLC	NONVOLATILE SEMICONDUCTOR STORAGE DEVICE AND DATA WRITE METHOD FOR THE SAME	13/158179 06/10/2011	8611160 12/17/2013
SPANSION LLC	METHOD, APPARATUS, AND MANUFACTURE FOR STAGGERED START FOR MEMORY MODULE	13/162520 06/16/2011	8625353 01/07/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SIH4 SOAK FOR LOW HYDROGEN SIN DEPOSITION TO IMPROVE FLASH MEMEORY DEVICE PERFORMANCE	13/165522 06/21/2011	8309455 11/13/2012
SPANSION LLC	RESISTIVE MEMORY ARRAY USING P-I-N DIODE SELECT DEVICE AND METHODS OF FABRICATION THEREOF	13/165652 06/21/2011	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	13/165689 06/21/2011	8466552 06/18/2013
SPANSION LLC	SWITCHING REGULATOR	13/173926 06/30/2011	8698473 04/15/2014
SPANSION LLC	A 3-D INTEGRATED CIRCUIT SYATEM AND MENTHOD	13/183373 07/14/2011	
SPANSION LLC	METHOD AND MANUFACTURE FOR EMBEDDED FLASH TO ACHEIVE HIGH QUALITY SPAERS FOR CORE AND HIGH VOLTAGE DEVICES AND LOW TEMPERATURE SPACERS FOR HIGH PERFORMANCE LOGIC DEVICES	13/185390 07/18/2011	8598005 12/03/2013
SPANSION LLC	SWITCHING REGULATOR	13/187013 07/20/2011	8878504 11/04/2014
SPANSION LLC	ORO AND ORPRO WITH BITLINE TRENCH TO SUPRESS TRANSPORT PROGRAM DISTURB	13/190565 07/26/2011	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	13/195722 08/01/2011	8325523 12/04/2012
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING	13/206380 08/09/2011	8552523 10/08/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND RESET CONTROL METHOD IN SEMICONDUCTOR DEVICE	13/213241 08/19/2011	8819401 08/26/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR CONTROLLING	13/216142 08/23/2011	8537622 09/17/2013
SPANSION LLC	METHOD OF FORMING A DAMASCENE INTERCONNECT ON A BARRIER LAYER (as amended)	13/217172 08/24/2011	
SPANSION LLC	LEVEL SHIFT CIRCUIT AND SEMICONDUCTOR DEVICE	13/218154 08/25/2011	8542051 09/24/2013
SPANSION LLC	NODE SYSTEM AND SUPERVISORY NODE	13/219211 08/26/2011	8718038 05/06/2014
SPANSION LLC	SMART VCC TRIP POINT MEASUREMENT	13/249069 09/29/2011	8536908 09/17/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	13/253634 10/05/2011	8351268 01/08/2013
SPANSION LLC	CONTROL OF SEMICONDUCTOR MANUFACTURING PROCESSES	13/269423 10/07/2011	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	DIODE AND RESISTIVE MEMORY DEVICE STRUCTURES	13/271129 10/11/2011	8803120 08/12/2014
SPANSION LLC	SONOS FLASH MEMORY DEVICE	13/275989 10/18/2011	
SPANSION LLC	GATE TRIM PROCESS USING EITHER WET ETCH OR DRY ETCH APPROACH TO TARGET CD FOR SELECTED TRANSISTORS	13/278343 10/21/2011	8409994 04/02/2013
SPANSION LLC	COMMUNICATION NETWORK DEVICE THAT COMPARES FIRST AND SECOND IDENTIFICATION NUMBER OF PACKET TO DETERMINE IF THEY ARE IN CONFORMANCE OR NON-CONFORMANCE WITH SELF-ID PACKET	13/279679 10/24/2011	8914554 12/16/2014
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	BURIED SILICIDE LOCAL INTERCONNECT WITH SIDEWALL SPACERS AND METHOD FOR MAKING THE SAME	13/281491 10/26/2011	8368219 02/05/2013
SPANSION LLC	RESISTIVE CHANGING MEMORY CELL ARCHITECTURE HAVING A SELECT TRANSISTOR COUPLED TO A RESISTANCE CHANGING MEMORY ELEMENT (as amended)	13/289553 11/04/2011	
SPANSION LLC	METHOD AND DEVICE EMPLOYING POLYSILICON SCALING	13/294098 11/10/2011	8637918 01/28/2014
SPANSION LLC	DEVICE HAVING MULTIPLE WIRE BONDS FOR A BOND AREA AND METHODS THEREOF	13/306390 11/29/2011	8791007 07/29/2014
SPANSION LLC	COMMUNICATION DEVICE, COMMUNICATION SYSTEM, AND COMMUNICATION METHOD	13/309904 12/02/2011	8699549 04/15/2014
SPANSION LLC	PLL	13/310069 12/02/2011	8339206 12/25/2012
SPANSION LLC	HIGH SPEED SERIAL PERIPHERAL INTERFACE MEMORY SUBSYSTEM	13/313699 12/07/2011	
SPANSION LLC	CAPACITIVE ELEMENT USING MOS TRANSISTORS	13/314932 12/08/2011	8698280 04/15/2014
SPANSION LLC	METHOD OF MANUFACTURING SEMICONDUCTOR DEVICE	13/315060 12/08/2011	8642422 02/04/2014
SPANSION LLC	SWITCHABLE MEMORY DIODES BASED ON FERROELECTRIC/CONJUGATED POLYMER HETEROSTRUCTURES AND/OR THEIR COMPOSITES	13/316137 12/09/2011	8710628 04/29/2014
SPANSION LLC	SEMICONDUCTOR DEVICE	13/316517 12/11/2011	8621643 12/31/2013
SPANSION LLC	REFERENCE VOLTAGE CIRCUIT AND SEMICONDUCTOR INTEGRATED CIRCUIT	13/316522 12/11/2011	8513938 08/20/2013

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING A SIMPLIFIED STACK AND METHOD FOR MANUFACTURING THEREOF	13/323370 12/12/2011	8361857 01/29/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND FABRICATION METHOD THEREFOR	13/323538 12/12/2011	
SPANSION LLC	SYSTEM FOR PROGRAMMING A PHASE CHANGE MEMORY DEVICE INCLUDING PROVIDING A SECOND ERASE ACTIVATION ENERGY GREATER THAN A FIRST ERASE ACTIVATION ENERGY THAT CORRESPONDS TO A PROGRAM ENERGY	13/324310 12/13/2011	
SPANSION LLC	METHOD OF PROGRAMMING, ERASING AND REPAIRING A MEMORY DEVICE	13/324759 12/13/2011	8482959 07/09/2013
SPANSION LLC	METHOD OF MANUFACTURING A SEMICONDUCTOR DEVICE HAVING LOWER LEAKAGE CURRENT BETWEEN SEMICONDUCTOR SUBSTRATE AND BIT LINES	13/326012 12/14/2011	8536638 09/17/2013
SPANSION LLC	CONTROL CIRCUIT, ELECTRONIC DEVICE, AND METHOD FOR CONTROLLING POWER SUPPLY	13/328775 12/16/2011	8823344 09/02/2014
SPANSION LLC	MEMORY DEVICE HAVING TRAPEZOIDAL BITLINES AND METHOD OF FABRICATING SAME	13/357252 01/24/2012	
SPANSION LLC	CONTINUOUS READ BURST SUPPORT AT HIGH CLOCK RATES	13/357842 01/25/2012	8806071 08/12/2014
SPANSION LLC	METHOD FOR FORMING A SEMICONDUCTOR LAYER WITH IMPROVED GAP FILLING PROPERTIES	13/362899 01/31/2012	8647899 02/11/2014
SPANSION LLC	MOTOR CONTROL DEVICE, CONTROL PROGRAM THEREFOR, AND METHOD FOR THE CONTROL	13/371533 02/13/2012	8674632 03/18/2014
SPANSION LLC	REDUNDANCY LOADING EFFICIENCY	13/399537 02/17/2012	8799598 08/05/2014
SPANSION LLC	MULTIPLE COMMUNICATION CHANNELS ON MMC OR SD CMD LINE	13/410630 03/02/2012	8386681 02/26/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	13/413527 03/06/2012	8705303 04/22/2014
SPANSION LLC	METHODS FOR FORMING A MEMORY CELL HAVING A TOP OXIDE SPACER	13/428848 03/23/2012	8384146 02/26/2013
SPANSION LLC	A LOW PIN COUNT HIGH SPEED PERIPHERAL INTERFACE	13/435445 03/30/2012	
SPANSION LLC	ADAPTIVELY PROGRAMMING OR ERASING FLASH MEMORY BLOCKS	13/437324 04/02/2012	8724388 05/13/2014
SPANSION LLC	ELECTRONIC DEVICES WITH ULTRAVIOLET BLOCKING LAYERS (as amended)	13/465600 05/07/2012	8643083 02/04/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING CONTACT TO A FIRST POLYSILICON LAYER IN A FLASH MEMORY DEVICE	13/465649 05/07/2012	8507969 08/13/2013
SPANSION LLC	POWER SUPPLY DEVICE, CONTROL CIRCUIT, ELECTRONIC DEVICE AND CONTROL METHOD FOR POWER SUPPLY	13/471604 05/15/2012	8593126 11/26/2013
SPANSION LLC	SOFT ERROR RESISTANT CIRCUITRY	13/471854 05/15/2012	
SPANSION LLC	TABLE LOOKUP VOLTAGE COMPENSATION FOR MEMORY CELLS	13/481582 05/25/2012	8456941 06/04/2013
SPANSION LLC	METHOD, APPARATUS, AND MANUFACTURE FOR FLASH MEMORY ADAPTIVE ALGORITHM	13/486972 06/01/2012	8842477 09/23/2014
SPANSION LLC	AUCOUSTIC PROCESSING UNIT	13/489799 06/06/2012	
SPANSION LLC	ACOUSTIC PROCESSING UNIT INTERFACE	13/490124 06/06/2012	
SPANSION LLC	ARITHMETIC LOGIC UNIT ARCHITECTURE	13/490129 06/06/2012	8924453 12/30/2014
SPANSION LLC	SEMICONDUCTOR DEVICE WITH STOP LAYERS AND FABRICATION METHOD USING CERIA SLURRY	13/523568 06/14/2012	
SPANSION LLC	POWER-EFFICIENT VOICE ACTIVATION	13/524584 06/15/2012	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	13/526321 06/18/2012	
AMD AND SPANSION LLC	DAMASCENE METAL-INSULATOR-METAL (MIM) DEVICE WITH IMPROVED SCALEABILITY	13/529284 06/21/2012	
SPANSION LLC	AUTOMATED LOADING/UNLOADING OF DEVICES FOR BURN-IN TESTING	13/538646 06/29/2012	
SPANSION LLC	RELOCATING DATA IN A MEMORY DEVICE	13/539688 07/02/2012	
SPANSION LLC	APPARATUS AND METHOD FOR ROUNDED ONO FORMATION IN A FLASH MEMORY DEVICE	13/540373 07/02/2012	
SPANSION LLC	LEAKAGE REDUCING WRITELINE CHARGE PROTECTION CIRCUIT	13/545469 07/10/2012	
SPANSION LLC	IMAGING DEVICE	13/556819 07/24/2012	8803066 08/12/2014
SPANSION LLC	A/D CONVERTER	13/558093 07/25/2012	8830097 09/09/2014
SPANSION LLC	BITLINE VOLTAGE REGULATION IN NON-VOLATILE MEMORY	13/563206 07/31/2012	8699273 04/15/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	SEMICONDUCTOR DEVICE AND VOLTAGE DIVIDER	13/564357 08/01/2012	8928397 01/06/2015
SPANSION LLC	POWER SAVINGS APPARATUS AND METHOD FOR MEMORY DEVICE USING DELAY LOCKED LOOP	13/566187 08/03/2012	
SPANSION LLC	METHOD AND SYSTEM FOR PROVIDING CONTACT TO A FIRST POLYSILICON LAYER IN A FLASH MEMORY DEVICE	13/566741 08/03/2012	8329530 12/11/2012
SPANSION LLC	CONTROLLING AC DISTURBANCE WHILE PROGRAMMING	13/569442 08/08/2012	8559255 10/15/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	13/572487 08/10/2012	8691645 04/08/2014
SPANSION LLC	CLOCK DATA RECOVERY CIRCUIT AND CLOCK DATA RECOVERY METHOD	13/589354 08/20/2012	
SPANSION LLC	MITIGATE FLASH WRITE LATENCY AND BANDWIDTH LIMITATION VIA CACHING AND DATA CAPACITY OF A BUFFER	13/590294 08/21/2012	8756376 06/17/2014
SPANSION LLC	HIGH READ SPEED MEMORY WITH GATE ISOLATION	13/600527 08/31/2012	8520437 08/27/2013
SPANSION LLC	LOCAL INTERCONNECT HAVING INCREASED MISALIGNMENT TOLERANCE	13/608698 09/10/2012	8617983 12/31/2013
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	13/610368 09/11/2012	8611167 12/17/2013
SPANSION LLC	RADIATION DETECTING DEVICE AND METHOD OF OPERATING	13/613448 09/13/2012	8581203 11/12/2013
SPANSION LLC	ERROR CORRECTION FOR FLASH MEMORY	13/616379 09/14/2012	
SPANSION LLC	LOCAL INTERCONNECT HAVING INCREASED MISALIGNMENT TOLERANCE	13/616719 09/14/2012	
AMD AND SPANSION LLC	ETCH STOP LAYER FOR MEMORY CELL RELIABILITY IMPROVEMENT	13/617291 09/14/2012	8658496 02/25/2014
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE FEATURING SELECTIVE DATA STORAGE IN A STACKED MEMORY CELL STRUCTURE	13/622796 09/19/2012	8773885 07/08/2014
AMD AND SPANSION LLC	INTEGRATED CIRCUIT WITH METAL AND SEMI-CONDUCTING GATE	13/644387 10/04/2012	8815727 08/26/2014
SPANSION LLC	SUPPLY POWER DEPENDENT CONTROLLABLE WRITE THROUGHPUT FOR MEMORY APPLICATIONS	13/644895 10/04/2012	
SPANSION LLC	PROPOSED DUAL SPACER FORMATION	13/644901 10/04/2012	8836012 09/16/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FLASH MEMORY DEVICE WITH WORD LINES OF UNIFORM WIDTH AND METHOD FOR MANUFACTURING THEREOF	13/657047 10/22/2012	
SPANSION LLC	WEAR LEVELING IN FLASH MEMORY DEVICES WITH TRIM COMMANDS	13/669633 11/06/2012	
SPANSION LLC	SENONE SCORING FOR MULTIPLE INPUT STREAMS	13/669907 11/06/2012	
SPANSION LLC	RECOGNITION OF SPEECH WITH DIFFERENT ACCENTS	13/669926 11/06/2012	
SPANSION LLC	DISTRIBUTION OF GAS OVER A SEMICONDUCTOR WATER IN BATCH PROCESSING	13/678025 11/15/2012	
SPANSION LLC	CONTROL OF SEMICONDUCTOR PROCESSING TOOLS USING A HIERARCHICAL ORGANIZATION OF DATA	13/678255 11/15/2012	
SPANSION LLC	LOW OVERHEAD FLASH BLOCK REFRESH	13/680507 11/19/2012	
SPANSION LLC	METHOD TO IMPROVE CHARGE TRAP FLASH MEMORY CORE CELL PERFORMANCE AND RELIABILITY	13/680726 11/19/2012	8835277 09/16/2014
SPANSION LLC	INTER-LAYER INSULATOR FOR ELECTRON DEVICES	13/682826 11/21/2012	
SPANSION LLC	FORMING A SUBSTANTIALLY UNIFORM WING HEIGHT AMONG ELEMENTS IN A CHARGE TRAP SEMICONDUCTOR DEVICE	13/685222 11/26/2012	
SPANSION LLC	METHOD FOR FORMING CHARGE TRAP SEPARATION IN A FLASH MEMORY SEMICONDUCTOR DEVICE	13/685286 11/26/2012	
SPANSION LLC	CONTROL CIRCUIT OF STEP-DOWN DC-DC CONVERTER, CONTROL CIRCUIT OF STEP-UP DC-DC CONVERTER AND STEP-UP/STEP-DOWN DC-DC CONVERTER	13/685827 11/27/2012	8680832 03/25/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF CONTROLLING THE SAME	13/692736 12/03/2012	8787089 07/22/2014
SPANSION LLC	THREE DIMENSIONAL CAPACITOR	13/715181 12/14/2012	
SPANSION LLC	CHARGE TRAPPING SPLIT GATE DEVICE AND METHOD OF FABRICATING SAME	13/715185 12/14/2012	
SPANSION LLC	INTEGRATED CIRCUITS WITH NON-VOLATILE MEMORY AND METHODS FOR MANUFACTURE	13/715565 12/14/2012	8836006 09/16/2014
SPANSION LLC	MEMORY FIRST PROCESS FLOW AND DEVICE	13/715577 12/14/2012	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	CHARGE TRAPPING SPLIT GATE EMBEDDED FLASH MEMORY AND ASSOCIATED METHODS	13/715582 12/14/2012	
SPANSION LLC	USE DISPOSABLE GATE CAP TO FORM TRANSISTORS, AND SPLIT GATE CHARGE TRAPPING MEMORY CELLS	13/715673 12/14/2012	
SPANSION LLC	PROCESS CHARGING PROTECTION FOR SPLIT GATE CHARGE TRAPPING FLASH	13/715705 12/14/2012	8816438 08/26/2014
SPANSION LLC	CHARGE TRAPPING DEVICE WITH IMPROVED SELECT GATE TO MEMORY GATE ISOLATION	13/715729 12/14/2012	
SPANSION LLC	HIGH VOLTAGE GATE FORMATION	13/715739 12/14/2012	8822289 09/02/2014
SPANSION LLC	MEMORY GATE LANDING PAD MADE FROM DUMMY FEATURE	13/715828 12/14/2012	
SPANSION LLC	CHIP POSITIONING IN MULTI-CHIP PACKAGE	13/724897 12/21/2012	8901756 12/02/2014
SPANSION LLC	HYBRID HASHING SCHEME FOR ACTIVE HMMS IN SPEECH RECOGNITION	13/725173 12/21/2012	
SPANSION LLC	HISTOGRAM BASED PRE-PRUNING SCHEME FOR ACTIVE HMMS (as amended)	13/725224 12/21/2012	
SPANSION LLC	HIDDEN MARKOV MODEL ACCELERATOR FOR SPEECH RECOGNITION	13/725260 12/21/2012	
SPANSION LLC	MEMORY DEVICE INTERNAL DATA SEARCH	13/725415 12/21/2012	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	13/725637 12/21/2012	
SPANSION LLC	FLASH MEMORY CELL WITH A FLAIR GATE	13/725654 12/21/2012	
SPANSION LLC	STORAGE DEVICE, CONTROL METHOD OF STORAGE DEVICE, AND CONTROL METHOD OF STORAGE CONTROL DEVICE	13/725749 12/21/2012	8811107 08/19/2014
SPANSION LLC	DESIGN FOR TEST (DFT) READ SPEED THROUGH TRANSITION DETECTOR IN BUILT-IN SELF-TEST (BIST) SORT	13/729153 12/28/2012	
SPANSION LLC AND ADVANCED MICRO DEVICES, INC.	VOID FREE INTERLAYER DIELECTRIC	13/732096 12/31/2012	8614475 12/24/2013
SPANSION LLC	BURIED HARD MASK FOR EMBEDDED SEMICONDUCTOR DEVICE PATTERNING	13/735156 01/07/2013	
SPANSION LLC	MULTI-CHIP PACKAGE ASSEMBLY WITH IMPROVED BOND WIRE SEPARATION	13/735650 01/07/2013	
SPANSION LLC	DISTRIBUTED SPEECH RECOGNITION SYSTEM	13/736618 01/08/2013	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	PROGRAMMABLE AND FLEXIBLE REFERENCE CELL SELECTION METHOD FOR MEMORY DEVICES	13/737321 01/09/2013	
SPANSION LLC	TABLE LOOKUP OPERATION ON MASKED DATA	13/738797 01/10/2013	8855298 10/07/2014
SPANSION LLC	ANALOG CIRCUIT CELL ARRAY HAVING A PLURALITY OF TRANSISTORS EACH INCLUDING TWO CONNECTED GATE ELECTRODES AND TWO CONNECTED SOURCE REGIONS (as amended)	13/746477 01/22/2013	
SPANSION LLC	SEMICONDUCTOR MEMORY	13/749246 01/24/2013	
SPANSION LLC	NON-VOLATILE MEMORY WITH SILICIDED BIT LINE CONTACTS	13/753676 01/30/2013	8866213 10/21/2014
SPANSION LLC	MANUFACTURING OF FET DEVICES HAVING LIGHTLY DOPED DRAIN AND SOURCE REGIONS	13/756134 01/31/2013	
SPANSION LLC	IMPROVED NON-VOLATILE MEMORY DEVICE	13/761217 02/07/2013	
SPANSION LLC	RAPID MEMORY BUFFER WRITE STORAGE SYSTEM AND METHOD	13/764602 02/11/2013	
SPANSION LLC	MEMORY DEVICE WITH SOURCE-SIDE SENSING	13/769398 02/18/2013	8760930 06/24/2014
SPANSION LLC	APPARATUS AND METHODS TO REDUCE BIT LINE DISTURBS	13/769403 02/18/2013	
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	13/771043 02/19/2013	8699283 04/15/2014
SPANSION LLC	FABRICATING METHOD OF MIRROR BIT MEMORY DEVICE HAVING SPLIT ONO FILM WITH TOP OXIDE FILM FORMED BY OXIDATION PROCESS	13/776310 02/25/2013	8610199 12/17/2013
SPANSION LLC	FABRICATING METHOD OF MIRROR BIT MEMORY DEVICE HAVING SPLIT ONO FILM WITH TOP OXIDE FILM FORMED BY OXIDATION PROCESS	13/776337 02/25/2013	8669161 03/11/2014
SPANSION LLC	NON-VOLATILE MEMORY BASED RAM	13/781396 02/28/2013	
SPANSION LLC	A CHARGE STORAGE DEVICE FOR DETECTING ALPHA PARTICLES (as amended)	13/786216 03/05/2013	8748800 06/10/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THEREOF	13/786252 03/05/2013	
SPANSION LLC	PIPELINING IN A MEMORY	13/790979 03/08/2013	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MODIFIED LOCAL SEGMENTED SELF-BOOSTING OF MEMORY CELL CHANNEL	13/856313 04/03/2013	
SPANSION LLC	ACOUSTIC PROCESSING UNIT WITH PARALLEL SPEAKER ADAPTATION	13/856614 04/04/2013	
SPANSION LLC	AUTHENTICATION FOR RECOGNITION SYSTEMS	13/856671 04/04/2013	
SPANSION LLC	ERASE VERIFICATION CIRCUITRY FOR SIMULTANEOUSLY AND CONSECUTIVELY VERIFYING A PLURALITY OF ODD AND EVEN-NUMBERED FLASH MEMORY TRANSISTORS AND METHOD THEREOF	13/856816 04/04/2013	8848452 09/30/2014
SPANSION LLC	RESTORING ECC SYNDROME IN NON-VOLATILE MEMORY DEVICES	13/860542 04/11/2013	
SPANSION LLC	DEVICE AND METHOD FOR PREVENTING LOST SYNCHRONIZATION	13/863946 04/16/2013	8775853 07/08/2014
SPANSION LLC	DIE SEAL LAYOUT FOR VFTL DUAL DAMASCENE IN A SEMICONDUCTOR DEVICE	13/865714 04/18/2013	8912093 12/16/2014
SPANSION LLC	METAL-INSULATOR-METAL (MIM) DEVICE AND METHOD OF FORMATION THEREOF	13/866898 04/19/2013	8828837 09/09/2014
AMD AND SPANSION LLC	METHOD AND APPARATUS FOR PROTECTION AGAINST PROCESS-INDUCED CHARGING	13/866915 04/19/2013	
SPANSION LLC	CHARGE-TRAP NOR WITH SILICON-RICH NITRIDE AS A CHARGE TRAP LAYER	13/867618 04/22/2013	
SPANSION LLC	SELF-ALIGNED NAND FLASH SELECT-GATE WORDLINES FOR SPACER DOUBLE PATTERNING	13/894218 05/14/2013	8874253 10/28/2014
SPANSION LLC	DIFFERENTIAL FILE SYSTEM FOR COMPUTER MEMORY	13/901167 05/23/2013	
SPANSION LLC	PROGRAMMABLE LATENCY COUNT TO ACHIEVE HIGHER MEMORY BANDWIDTH	13/913909 06/10/2013	
SPANSION LLC	SCREENING FOR REFERENCE CELLS IN A MEMORY	13/917141 06/13/2013	
SPANSION LLC	FLIP CHIP PACKAGE WITH SHELF AND METHOD OF MANUFACTURING THEREOF	13/918674 06/14/2013	8796864 08/05/2014
SPANSION LLC	SONOS MEMORY CELLS HAVING NON-UNIFORM TUNNEL OXIDE AND METHODS FOR FABRICATING SAME	13/919655 06/17/2013	8742496 06/03/2014
SPANSION LLC	FLASH MEMORY DEVICES AND METHODS FOR FABRICATING THE SAME	13/920742 06/18/2013	8748972 06/10/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	13/921956 06/19/2013	8586412 11/19/2013
SPANSION LLC	DEVICE AND METHOD FOR PREVENTING LOST SYNCHRONIZATION	13/927831 06/26/2013	8850257 09/30/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	OSCILLATION CIRCUIT	13/937904 07/09/2013	8922289 12/30/2014
SPANSION LLC	ADJUSTING APPARATUS AND ADJUSTMENT METHOD	13/942018 07/15/2013	
SPANSION LLC	APPARATUS AND METHOD FOR A METAL OXIDE SEMICONDUCTOR FIELD EFFECT TRANSISTOR WITH SOURCE SIDE PUNCH-THROUGH PROTECTION IMPLANT	13/964958 08/12/2013	8633083 01/21/2014
SPANSION LLC	HEAT DISSIPATION METHODS AND STRUCTURES FOR SEMICONDUCTOR DEVICE	13/966069 08/13/2013	8759157 06/24/2014
SPANSION LLC	SEMICONDUCTOR DEVICE AND PROGRAMMING METHOD	13/969207 01/17/2006	8900923 12/02/2014
SPANSION LLC	APPARATUS AND METHOD FOR SMART VCC TRIP POINT DESIGN FOR TESTABILITY	13/972008 08/21/2013	
SPANSION LLC	SELF-ALIGNED SI RICH NITRIDE CHARGE TRAP LAYER ISOLATION FOR CHARGE TRAP FLASH MEMORY	14/019192 09/05/2013	
SPANSION LLC	DUAL STORAGE NODE MEMORY	14/033170 09/20/2013	
SPANSION LLC	BURIED TRENCH ISOLATION IN INTEGRATED CIRCUITS	14/048527 10/08/2013	
SPANSION LLC	SELF-ALIGNED TRENCH ISOLATION IN INTEGRATED CIRCUITS	14/048863 10/08/2013	
SPANSION LLC	MULTI-PASS SOFT PROGRAMMING	14/050490 10/10/2013	
SPANSION LLC	NON-VOLATILE FINFET MEMORY ARRAY AND MANUFACTURING METHOD THEREOF	14/051584 10/11/2013	
SPANSION LLC	SPACER FORMATION WITH STRAIGHT SIDEWALL	14/051828 10/11/2013	
SPANSION LLC	ION IMPLANTATION-ASSISTED ETCH-BACK PROCESS FOR IMPROVING SPACER SHAPE AND SPACER WIDTH CONTROL	14/051859 10/11/2013	
SPANSION LLC	METHOD FOR PROVIDING READ DATA FLOW CONTROL OR ERROR REPORTING USING A READ DATA STROBE	14/054265 10/15/2013	
SPANSION LLC	MANAGED-NAND WITH EMBEDDED RANDOM-ACCESS NON-VOLATILE MEMORY	14/054312 10/15/2013	
SPANSION LLC	MEMORY PROGRAM UPON SYSTEM FAILURE	14/054880 10/16/2013	
SPANSION LLC	HIDDEN MARKOV MODEL PROCESSING ENGINE	14/054884 10/16/2013	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MULTIPLE PHASE-SHIFT PHOTOMASK AND SEMICONDUCTOR MANUFACTURING METHOD	14/056547 10/17/2013	
SPANSION LLC	THREE-DIMENSIONAL CHARGE TRAPPING NAND CELL WITH DISCRETE CHARGE TRAPPING FILM	14/056577 10/17/2013	
AMD AND SPANSION LLC	CONTACTS FOR SEMICONDUCTOR DEVICES	14/059077 10/21/2013	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	14/067717 10/30/2013	8765529 07/01/2014
SPANSION LLC	EXECUTION HISTORY TRACING METHOD	14/068652 10/31/2013	
SPANSION LLC	POWER SUPPLY DEVICE, CONTROL CIRCUIT, ELECTRONIC DEVICE AND CONTROL METHOD FOR POWER SUPPLY	14/069979 11/01/2013	
AMD AND SPANSION LLC	MEMORY DEVICE WITH CHARGE TRAP	14/076415 11/11/2013	
SPANSION LLC	MULTI-CHIP MODULE AND METHOD OF MANUFACTURE	14/076706 11/11/2013	
SPANSION LLC	SEMICONDUCTOR INTEGRATED CIRCUIT, OPERATING METHOD OF SEMICONDUCTOR INTEGRATED CIRCUIT, AND DEBUG SYSTEM	14/080844 11/15/2013	
SPANSION LLC	SEMICONDUCTOR DEVICE AND CONTROL METHOD OF THE SAME	14/081987 11/15/2013	
SPANSION LLC	SIGNAL PROCESSOR AND COMMUNICATION DEVICE	14/085013 11/20/2013	
SPANSION LLC	VOLTAGE ADJUSTMENT CIRCUIT AND DISPLAY DEVICE DRIVING CIRCUIT	14/089048 11/25/2013	
SPANSION LLC	PROCESSOR SYSTEM OPTIMIZATION (as amended)	14/091470 11/27/2013	
SPANSION LLC	AUTO RESUME OF IRREGULAR ERASE STOPPAGE OF A MEMORY SECTOR	14/092554 11/27/2013	
SPANSION LLC	GENERATION OF WAKE-UP WORDS	14/093703 12/02/2013	
SPANSION LLC	REDUCTION OF CHARGING INDUCED DAMAGE IN PHOTOLITHOGRAPHY WET PROCESS	14/095150 12/03/2013	
SPANSION LLC	METHOD AND APPARATUS FOR STAGGERED START-UP OF A PREDEFINED, RANDOM, OR DYNAMIC NUMBER OF FLASH MEMORY DEVICES	14/099340 12/06/2013	
SPANSION LLC	SCATTERING BAR OPTIMIZATION APPARATUS AND METHOD	14/100673 12/09/2013	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	MEMORY DEVICE INTERCONNECTS AND METHOD OF MANUFACTURE	14/102446 12/10/2013	
SPANSION LLC	MEMORY DEVICE INTERCONNECTS AND METHOD OF MANUFACTURE	14/102450 12/10/2013	
SPANSION LLC	OUTPUT VOLTAGE CONTROLLER, ELECTRONIC DEVICE, AND OUTPUT VOLTAGE CONTROL METHOD	14/107729 12/16/2013	
SPANSION LLC	PROCESS FOR FORMING EDGE WORLDLINE IMPLANTS ADJACENT EDGE WORDLINES	14/108780 12/17/2013	
SPANSION LLC	HTO OFFSET FOR LONG EFFECTIVE BETTER DEVICE PERFORMANCE	14/109157 12/17/2013	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF MANUFACTURING THE SAME	14/109464 12/17/2013	
SPANSION LLC	INCREASING LITHOGRAPHIC DEPTH-OF-FOCUS WINDOW USING WAFER TOPOGRAPHY	14/132422 12/18/2013	
SPANSION LLC	PARTIAL LOCAL SELF BOOSTING FOR NAND	14/132430 12/18/2013	
SPANSION LLC	CT-NOR DIFFERENTIAL BITLINE SENSING ARCHITECTURE	14/135863 12/20/2013	
SPANSION LLC	GATE FORMATION MEMORY BY PLANARIZATION	14/136358 12/20/2013	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	14/136977 12/20/2013	
SPANSION LLC	DC-DC CONVERTER WITH ADAPTIVE PHASE COMPENSATION CONTROLLER	14/137203 12/20/2013	
SPANSION LLC	FORMATION OF GATE SIDEWALL STRUCTURE	14/143317 12/30/2013	
SPANSION LLC	INTEGRATING TRANSISTORS WITH DIFFERENT POLY-SILICON HEIGHTS ON THE SAME DIE	14/149521 01/07/2014	
SPANSION LLC	MULTI-LAYER INTER-GATE DIELECTRIC STRUCTURE	14/149628 01/07/2014	
SPANSION LLC	ELECTRICALLY PROGRAMMABLE AND ERASEABLE MEMORY DEVICE	14/153900 01/13/2014	
SPANSION LLC AND GLOBAL FOUNDRIES	SYSTEM AND METHOD FOR MANUFACTURING SELF-ALIGNED STI WITH SINGLE POLY	14/167845 01/29/2014	
SPANSION LLC	PARALLEL BITLINE NONVOLATILE MEMORY EMPLOYING CHANNEL-BASED PROCESSING TECHNOLOGY	14/169549 01/31/2014	
SPANSION LLC	NON-VOLATILE FINFET MEMORY DEVICE AND MANUFACTURING METHOD THEREOF	14/171312 02/03/2014	8785275 07/22/2014

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	GATE FRINGING EFFECT BASED CHANNEL FORMATION FOR SEMICONDUCTOR DEVICE	14/179316 02/12/2014	
SPANSION LLC	AUTHENTICATED MEMORY AND CONTROLLER SLAVE	14/180444 02/14/2014	
SPANSION LLC	METHOD FOR MANUFACTURING A SEMICONDUCTOR DEVICE	14/184191 02/19/2014	
SPANSION LLC	MEMORY SUBSYSTEM WITH WRAPPED-TO-CONTINUOUS READ	14/188048 02/24/2014	
SPANSION LLC	MEMORY ACCESS BASES ON ERASE CYCLE TIME	14/199837 03/06/2014	
SPANSION LLC	SELF-ALIGNED DOUBLE PATTERNING FOR MEMORY AND OTHER MICROELECTRONIC DEVICES	14/204373 03/11/2014	
SPANSION LLC	BURIED TRENCH ISOLATION IN INTEGRATED CIRCUITS	14/207303 03/12/2014	
SPANSION LLC	CONVEX SHAPED THIN-FILM TRANSISTOR DEVICE	14/215468 03/17/2014	
SPANSION LLC	DEBUG CONTROL CIRCUIT	14/218169 03/18/2014	
SPANSION LLC	CONTROL CIRCUIT OF STEP-DOWN DC-DC CONVERTER, CONTROL CIRCUIT OF STEP-UP DC-DC CONVERTER AND STEP-UP/STEP-DOWN DC-DC CONVERTER	14/220628 03/20/2014	
SPANSION LLC	NODE SYSTEM AND SUPERVISORY NODE	14/221011 03/20/2014	8897289 11/25/2014
SPANSION LLC	SWITCHABLE MEMORY DIODES BASED ON FERROELECTRIC/CONJUGATED POLYMER HETEROSTRUCTURES AND/OR THEIR COMPOSITES	14/222258 03/21/2014	
SPANSION LLC	SEMICONDUCTOR DEVICE, METHOD OF CONTROLLING THE SAME, AND METHOD OF MANUFACTURING THE SAME	14/222399 03/21/2014	
SPANSION LLC	CONTACT CONFIGURATION FOR UNDERTAKING TESTS ON CIRCUIT BOARD	14/222446 03/21/2014	
SPANSION LLC	MEMORY BUFFERING SYSTEM THAT IMPROVES READ/WRITE PERFORMANCE AND PROVIDES LOW LATENCY FOR MOBILE SYSTEMS	14/250113 04/10/2014	
SPANSION LLC	SEMICONDUCTOR MEMORY DEVICE	14/251448 04/11/2014	
SPANSION LLC	OPERATING SYSTEM BASED DRAM AND FLASH MANAGEMENT	14/253056 04/15/2014	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	FLASH MEMORY CELLS HAVING TRENCHED STORAGE ELEMENTS	14/254237 04/16/2014	
SPANSION LLC	DATA PATTERN ANALYSIS (as amended)	14/258076 04/22/2014	
SPANSION LLC	MITIGATE FLASH WRITE LATENCY AND BANDWIDTH LIMITATION	14/269299 05/05/2014	
SPANSION LLC	METHOD TO IMPROVE CHARGE TRAP FLASH MEMORY TOP OXIDE QUALITY	14/270700 05/06/2014	
SPANSION LLC	SEMICONDUCTOR DEVICE HAVING CHIP MOUNTED ON AN INTERPOSER (as amended)	14/271115 05/06/2014	
SPANSION LLC	TILTED IMPLANT FOR POLY RESISTORS	14/278114 05/15/2014	
SPANSION LLC	METHODS, CIRCUITS, DEVICES, AND SYSTEMS FOR SENSING AN NVM CELL	14/284632 05/22/2014	
SPANSION LLC	OFFSET COMPENSATED HIGH SPEED LOW POWER SENSE AMPLIFIER	14/284727 05/22/2014	
SPANSION LLC	HV STITCHING PROTECTED CURRENT CONTROLLED LEVEL SHIFTER	14/284812 05/22/2014	
SPANSION LLC	INTER-BUS COMMUNICATION INTERFACE DEVICE	14/297200 06/05/2014	
SPANSION LLC AND GLOBAL FOUNDRIES	METHOD OF DEPOSITING COPPER USING PHYSICAL VAPOR DEPOSITION	14/313751 06/24/2014	
SPANSION LLC AND GLOBAL FOUNDRIES	METHOD OF DEPOSITING COPPER USING PHYSICAL VAPOR DEPOSITION	14/315003 06/25/2014	
SPANSION LLC	CONTROL CIRCUIT AND CONTROL METHOD FOR DIMMING A LIGHTING DEVICE	14/315713 06/26/2014	
SPANSION LLC	BOOTING AN APPLICATION FROM MULTIPLE MEMORIES	14/319079 06/30/2014	
SPANSION LLC	DETECTING THE DRIFT OF THE DATA VALID WINDOW IN A TRANSACTION	14/339377 07/23/2014	
SPANSION LLC	HIGH VOLTAGE GATE FORMATION	14/340054 07/24/2014	
SPANSION LLC	CRYSTAL OSCILLATION CIRCUIT	14/446678 07/30/2014	
SPANSION LLC	CONTROL APPARATUS, BUCK-BOOST POWER SUPPLY AND CONTROL METHOD	14/447688 07/31/2014	
SPANSION LLC	CONTROL APPARATUS, SWITCHING POWER SUPPLY AND CONTROL METHOD	14/448442 07/31/2014	
SPANSION LLC	SPLIT-GATE SEMICONDUCTOR DEVICE WITH L-SHAPED GATE	14/450727 08/04/2014	
SPANSION LLC	HOST/CLIENT SYSTEM HAVING A SCALABLE SERIAL BUS INTERFACE	14/453306 08/06/2014	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	INTEGRATION OF SEMICONDUCTOR MEMORY CELLS AND LOGIC CELLS	14/458542 08/13/2014	
SPANSION LLC	METAL-INSULATOR-METAL (MIM) DEVICE AND METHOD OF FORMATION THEREOF	14/460205 08/14/2014	
SPANSION LLC	SWITCHING CIRCUIT	14/464783 08/21/2014	
SPANSION LLC	TEST CONTROL CIRCUIT, SEMICONDUCTOR MEMORY DEVICE AND METHOD FOR TESTING THE SAME	14/472043 08/28/2014	
SPANSION LLC	INTEGRATED CIRCUITS WITH NON-VOLATILE MEMORY AND METHODS FOR MANUFACTURE	14/484417 09/12/2014	
SPANSION LLC	METHOD TO IMPROVE CHARGE TRAP FLASH MEMORY CORE CELL PERFORMANCE AND RELIABILITY	14/486421 09/15/2014	
SPANSION LLC	NON-VOLATILE MEMORY WITH SILICIDED BIT LINE CONTACTS	14/501536 09/30/2014	
SPANSION LLC	ANALOG-DIGITAL CONVERSION SYSTEM AND METHOD FOR CONTROLLING THE SAME	14/503585 10/01/2014	
SPANSION LLC	CRYSTAL OSCILLATOR START-UP CIRCUIT	14/513314 10/14/2014	
SPANSION LLC	SYSTEM-ON-CHIP VERIFICATION	14/513361 10/14/2014	
SPANSION LLC	SIMULTANEOUS PROGRAMMING OF MANY BITS IN FLASH MEMORY	14/517201 10/17/2014	
SPANSION LLC	LINE EDGE ROUGHNESS IMPROVEMENT FOR SMALL PITCHES	14/517470 10/17/2014	
SPANSION LLC	OVERLAID ERASE BLOCK MAPPING	14/518560 10/20/2014	
SPANSION LLC	STORAGE SYSTEM AND METHOD	14/520016 10/21/2014	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	14/521181 10/22/2014	
SPANSION LLC	CHARGE-TRAPPING MEMORY DEVICE	14/527797 10/30/2014	
SPANSION LLC	CHIP POSITIONING IN MULTI-CHIP PACKAGE	14/532039 11/04/2014	
SPANSION LLC	PROTECTING CIRCUIT AND INTEGRATED CIRCUIT	14/536015 11/07/2014	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THE SAME	14/539410 11/12/2014	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD OF FABRICATING THE SAME	14/540803 11/13/2014	

Registered Owner	Title	Application No. Filing Date	Patent No. Issue Date
SPANSION LLC	TEMPERATURE DETECTION CIRCUIT AND TEMPERATURE MEASUREMENT CIRCUIT	14/551149 11/24/2014	
SPANSION LLC	METHODS, CIRCUITS, DEVICES, SYSTEMS AND MACHINE EXECUTABLE CODE FOR READING FROM A NON-VOLATILE MEMORY ARRAY	14/562789 12/08/2014	
SPANSION LLC	DIE SEAL LAYOUT FOR VFTL DUAL DAMASCENE IN A SEMICONDUCTOR DEVICE	14/566462 12/10/2014	
SPANSION LLC	CONTROLLING THE LATCHUP EFFECT	14/570801 12/15/2014	
SPANSION LLC	PARTIAL-PARTIAL-HEIGHT GATE REPLACEMENT FOR SEMICONDUCTOR DEVICE FABRICATION	62/040583 08/22/2014	
SPANSION LLC	PULSE DRIVEN SYNCHRONIZER	62/044609 09/02/2014	
SPANSION LLC	OUTPUT SWITCHING CIRCUIT	14/598,647 01/16/2015	
SPANSION LLC	METHOD OF FORMING CONTROLLABLY CONDUCTIVE OXIDE	14/612,083 02/02/2015	
SPANSION LLC	CONTROL CIRCUIT	14/619,592 02/11/2015	
SPANSION LLC	FORMING CHARGE TRAP SEPARATION IN A FLASH MEMORY SEMICONDUCTOR DEVICE	14/626,815 02/19/2015	
SPANSION LLC	SEMICONDUCTOR DEVICE AND METHOD FOR MANUFACTURING THEREOF	14/628,939 02/23/2015	
SPANSION LLC	FRACTURED ERASE SYSTEM AND METHOD	14/630,238 02/24/2015	
SPANSION LLC	VOLTAGE DETECTOR AND METHOD FOR DETECTING VOLTAGE	14/635,459 03/02/2015	