

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3773464

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the THE RECEIVING PARTY NAME WAS INCORRECTLY ENTERED AS "APPLIED BIOSYSTEMS, INC.", WHEN IT IS ACTUALLY "APPLIED BIOSYSTEMS, LLC". previously recorded on Reel 030182 Frame 0719. Assignor(s) hereby confirms the THE GRANTOR HAS FULFILLED ITS OBLIGATIONS AND COMMITMENTS AND THE GRANTEE HAS AGREED TO RELEASE THE SECURITY INTEREST.

CONVEYING PARTY DATA

Name	Execution Date
BANK OF AMERICA, N.A.	05/28/2010

RECEIVING PARTY DATA

Name:	APPLIED BIOSYSTEMS, LLC
Street Address:	850 LINCOLN CENTRE DRIVE
City:	FOSTER CITY
State/Country:	CALIFORNIA
Postal Code:	94404

PROPERTY NUMBERS Total: 35

Property Type	Number
Application Number:	09352246
Application Number:	08488127
Application Number:	08446544
Application Number:	09527697
Application Number:	08730822
Application Number:	09058605
Application Number:	09086861
Application Number:	08447175
Application Number:	08844462
Application Number:	08796498
Application Number:	09233703
Application Number:	10023203
Application Number:	09590878
Application Number:	09579989
Application Number:	10356019
Application Number:	09546465

PATENT

Property Type	Number
Application Number:	10178631
Application Number:	09712882
Application Number:	09866734
Application Number:	10045518
Application Number:	10198372
Application Number:	10227088
Application Number:	10327471
Application Number:	10683794
Application Number:	10683024
Application Number:	08201906
Application Number:	90010131
Application Number:	10800388
Application Number:	12145333
Application Number:	61034104
Application Number:	61098925
Application Number:	61048808
Application Number:	61021417
Application Number:	61047549
Application Number:	61034833

CORRESPONDENCE DATA

Fax Number: (612)677-3572
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: 612-236-9942
Email: amiller1@cpaglobal.com
Correspondent Name: ANGELA MILLER
Address Line 1: C/O CPA GLOBAL
Address Line 2: P.O. BOX 52050
Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	ABS LLC 43
NAME OF SUBMITTER:	ANGELA MILLER
SIGNATURE:	/Angela Miller/
DATE SIGNED:	03/08/2016

Total Attachments: 106

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PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																																
NATURE OF CONVEYANCE:	Lien Release																																
CONVEYING PARTY DATA																																	
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<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr><td>Application Number:</td><td>11775151</td></tr> <tr><td>Application Number:</td><td>12193667</td></tr> <tr><td>Application Number:</td><td>11618663</td></tr> <tr><td>Application Number:</td><td>12206817</td></tr> <tr><td>Application Number:</td><td>11617667</td></tr> <tr><td>Application Number:</td><td>11618667</td></tr> <tr><td>Application Number:</td><td>09272097</td></tr> <tr><td>Application Number:</td><td>10014743</td></tr> <tr><td>Application Number:</td><td>11617660</td></tr> <tr><td>Application Number:</td><td>10788836</td></tr> <tr><td>Application Number:</td><td>08726462</td></tr> <tr><td>Application Number:</td><td>11618683</td></tr> <tr><td>Application Number:</td><td>11618679</td></tr> <tr><td>Application Number:</td><td>11618688</td></tr> <tr><td>Application Number:</td><td>11617650</td></tr> </tbody> </table>		Property Type	Number	Application Number:	11775151	Application Number:	12193667	Application Number:	11618663	Application Number:	12206817	Application Number:	11617667	Application Number:	11618667	Application Number:	09272097	Application Number:	10014743	Application Number:	11617660	Application Number:	10788836	Application Number:	08726462	Application Number:	11618683	Application Number:	11618679	Application Number:	11618688	Application Number:	11617650
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Application Number:	11618683																																
Application Number:	11618679																																
Application Number:	11618688																																
Application Number:	11617650																																

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PATENT
REEL: 030182 FRAME: 0677

PATENT
REEL: 038038 FRAME: 0361

Application Number:	09046203
Application Number:	11617665
Application Number:	08642330
Application Number:	10731420
Application Number:	11731192
Application Number:	08968208
Application Number:	09908994
Application Number:	11406148
Application Number:	10207263
Application Number:	11646879
Application Number:	11647064
Application Number:	11647062
Application Number:	12156583
Application Number:	10488437
Application Number:	11609174
Application Number:	12193691
Application Number:	11646089
Application Number:	11810337
Application Number:	11645964
Application Number:	11645863
Application Number:	10455263
Application Number:	10454759
Application Number:	11617661
Application Number:	10608915
Application Number:	12220763
Application Number:	10877421
Application Number:	11096282
Application Number:	12240194
Application Number:	10837983
Application Number:	11231480
Application Number:	12193655
Application Number:	11372984
Application Number:	10808228
Application Number:	12251006
Application Number:	11013940

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REEL: 038038 FRAME: 0362

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Application Number:	12246828
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Application Number:	11766119
Application Number:	11172280
Application Number:	11250192
Application Number:	10757903
Application Number:	11921114
Application Number:	10947460
Application Number:	11452443
Application Number:	11087103
Application Number:	12176656
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Application Number:	12240722
Application Number:	11232475
Application Number:	11642764
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Application Number:	11438969
Application Number:	11394147
Application Number:	11479175
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Application Number:	11558343
Application Number:	12053416
Application Number:	12165379
Application Number:	12165551
Application Number:	12119475
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Application Number:	12208277
Application Number:	12243925
Application Number:	11204773
Application Number:	07767566
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Application Number:	08255795
Application Number:	09441064
Application Number:	08021022
Application Number:	07677097
Application Number:	08589604
Application Number:	08515885
Application Number:	07973137
Application Number:	07328488
Application Number:	07361407
Application Number:	08257219
Application Number:	07328471
Application Number:	07794575
Application Number:	07216768
Application Number:	07601961
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Application Number:	07558747
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Application Number:	07321230

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Application Number:	07697916
Application Number:	08598188
Application Number:	07621485
Application Number:	08539486
Application Number:	09046114
Application Number:	08752973
Application Number:	08293637
Application Number:	08576206
Application Number:	08558047
Application Number:	07276139
Application Number:	07148757
Application Number:	07416588
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Application Number:	07601962
Application Number:	07390631
Application Number:	07562790
Application Number:	07590218
Application Number:	07432061
Application Number:	07682582
Application Number:	07438455
Application Number:	11269522
Application Number:	09580754
Application Number:	09949444
Application Number:	08905855
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Application Number:	10170044
Application Number:	10167337
Application Number:	10825074
Application Number:	10925624
Application Number:	08102372
Application Number:	08410615
Application Number:	07950863
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Application Number:	08186080
Application Number:	08129607
Application Number:	08623431
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Application Number:	08950926
Application Number:	10040539
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Application Number:	08192485
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Application Number:	08511046
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Application Number:	08302154
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Application Number:	08559405
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Application Number:	08340558
Application Number:	08558303
Application Number:	09627753
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Application Number:	10602342
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Application Number:	11362475
Application Number:	11434737
Application Number:	11431363
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Application Number:	11651318
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Application Number:	08873437
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Application Number:	08657989
Application Number:	08698608
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Application Number:	10199470
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Application Number:	09704966
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Application Number:	10272450
Application Number:	09977225
Application Number:	10837616
Application Number:	09954778
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Application Number:	08602211
Application Number:	08230766
Application Number:	10359668
Application Number:	11423070
Application Number:	11008131
Application Number:	11925002
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PATENT

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Application Number:	10302817
Application Number:	11590461
Application Number:	10402173
Application Number:	10155877
Application Number:	09939767
Application Number:	10623913
Application Number:	10455986
Application Number:	09955608
Application Number:	11646035
Application Number:	10336274
Application Number:	11031963
Application Number:	12015143
Application Number:	10628879
Application Number:	11592042
Application Number:	10303110
Application Number:	12181470
Application Number:	10279746
Application Number:	08330790
Application Number:	08468658
Application Number:	10866523
Application Number:	10730870
Application Number:	12028887
Application Number:	10843114
Application Number:	10293960
Application Number:	12099644
Application Number:	10602113
Application Number:	10440852
Application Number:	11689406
Application Number:	10309311

PATENT

REEL: 030182 FRAME: 0694

PATENT

REEL: 038038 FRAME: 0378

	10351633
Application Number:	12032310
Application Number:	10378580
Application Number:	11484093
Application Number:	10193680
Application Number:	10152280
Application Number:	11796783
Application Number:	10336706
Application Number:	10496300
Application Number:	10378694
Application Number:	11061099
Application Number:	12217410
Application Number:	10440920
Application Number:	11262036
Application Number:	10360006
Application Number:	11551165
Application Number:	11095042
Application Number:	10629281
Application Number:	10625449
Application Number:	10866624
Application Number:	10611414
Application Number:	11023329
Application Number:	10455262
Application Number:	10455264
Application Number:	10866640
Application Number:	10440719
Application Number:	11644410
Application Number:	10981440
Application Number:	11265110
Application Number:	11057321
Application Number:	10980886
Application Number:	10241751
Application Number:	10403652
Application Number:	11599460
Application Number:	10723520

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REEL: 030182 FRAME: 0695

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REEL: 038038 FRAME: 0379

	12164146
Application Number:	11189243
Application Number:	10384995
Application Number:	11781515
Application Number:	11803403
Application Number:	10913601
Application Number:	11617360
Application Number:	11455495
Application Number:	10660460
Application Number:	10660110
Application Number:	10762786
Application Number:	12159584
Application Number:	10457943
Application Number:	10713479
Application Number:	10336330
Application Number:	11089709
Application Number:	11428365
Application Number:	10403640
Application Number:	10660470
Application Number:	11532427
Application Number:	10665671
Application Number:	11615626
Application Number:	11173113
Application Number:	11758361
Application Number:	10672937
Application Number:	12138151
Application Number:	11208970
Application Number:	10866012
Application Number:	11130606
Application Number:	10444848
Application Number:	10837621
Application Number:	11899199
Application Number:	10065142
Application Number:	11690729
Application Number:	10652430

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REEL: 030182 FRAME: 0696

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REEL: 038038 FRAME: 0380

	10426587
Application Number:	10917706
Application Number:	10887477
Application Number:	11380576
Application Number:	10651561
Application Number:	10853911
Application Number:	10652361
Application Number:	10997066
Application Number:	10871081
Application Number:	11044236
Application Number:	10335690
Application Number:	10404640
Application Number:	10926530
Application Number:	10982619
Application Number:	11609776
Application Number:	11609767
Application Number:	11173609
Application Number:	11828572
Application Number:	11542584
Application Number:	10643204
Application Number:	12207909
Application Number:	10926528
Application Number:	10763537
Application Number:	10735339
Application Number:	11531548
Application Number:	10448804
Application Number:	10926534
Application Number:	11027817
Application Number:	11180034
Application Number:	11355872
Application Number:	10780963
Application Number:	11057936
Application Number:	11172753
Application Number:	11478840
Application Number:	11416591

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REEL: 030182 FRAME: 0697

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REEL: 038038 FRAME: 0381

	10805096
Application Number:	10926915
Application Number:	11096731
Application Number:	11047957
Application Number:	11119985
Application Number:	12111008
Application Number:	10929320
Application Number:	10758667
Application Number:	10926531
Application Number:	10997694
Application Number:	10762899
Application Number:	11948584
Application Number:	12188165
Application Number:	11226069
Application Number:	11059824
Application Number:	11378559
Application Number:	10879374
Application Number:	10911867
Application Number:	11383630
Application Number:	11153991
Application Number:	11166958
Application Number:	11647065
Application Number:	10805093
Application Number:	11086069
Application Number:	12156529
Application Number:	12164890
Application Number:	11119069
Application Number:	10881368
Application Number:	11035682
Application Number:	11964622
Application Number:	11090468
Application Number:	10881363
Application Number:	12139272
Application Number:	11090830
Application Number:	10891650

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REEL: 030182 FRAME: 0698

PATENT

REEL: 038038 FRAME: 0382

	10873741
Application Number:	10848593
Application Number:	10585382
Application Number:	11770443
Application Number:	11044390
Application Number:	11453340
Application Number:	11302584
Application Number:	11838793
Application Number:	11229012
Application Number:	11171492
Application Number:	10881868
Application Number:	12168197
Application Number:	11417756
Application Number:	12221604
Application Number:	11355904
Application Number:	11179060
Application Number:	11040652
Application Number:	11173112
Application Number:	10830666
Application Number:	11375825
Application Number:	11286071
Application Number:	11342012
Application Number:	11416784
Application Number:	11095407
Application Number:	11252821
Application Number:	11341321
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Application Number:	11921333
Application Number:	11118973
Application Number:	12184203
Application Number:	11086799
Application Number:	11906422
Application Number:	11106044
Application Number:	11477240
Application Number:	11086273

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REEL: 030182 FRAME: 0699

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REEL: 038038 FRAME: 0383

	11086262
Application Number:	11113447
Application Number:	11261173
Application Number:	11418387
Application Number:	11615350
Application Number:	11270263
Application Number:	11086272
Application Number:	11327195
Application Number:	11372242
Application Number:	11919965
Application Number:	11116441
Application Number:	09672726
Application Number:	11252812
Application Number:	11767327
Application Number:	11291444
Application Number:	09705043
Application Number:	09141401
Application Number:	08679522
Application Number:	08664863
Application Number:	09398539
Application Number:	08850613
Application Number:	11436919
Application Number:	12106908
Application Number:	10690359
Application Number:	09061757
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Application Number:	10441158
Application Number:	11944169
Application Number:	09589560
Application Number:	11331599
Application Number:	11377763
Application Number:	11496011
Application Number:	11375824
Application Number:	11087088

PATENT

REEL: 030182 FRAME: 0700

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REEL: 038038 FRAME: 0384

	11423403
Application Number:	11259162
Application Number:	11769784
Application Number:	11226046
Application Number:	11181591
Application Number:	11305699
Application Number:	11213355
Application Number:	11166957
Application Number:	11618531
Application Number:	11296646
Application Number:	11252915
Application Number:	11215935
Application Number:	11086072
Application Number:	11423810
Application Number:	10979645
Application Number:	11322013
Application Number:	11351706
Application Number:	11270325
Application Number:	11093587
Application Number:	11421460
Application Number:	11354618
Application Number:	11087077
Application Number:	11212535
Application Number:	11740367
Application Number:	11219225
Application Number:	11360822
Application Number:	11393061
Application Number:	11086900
Application Number:	11393083
Application Number:	11496596
Application Number:	11381711
Application Number:	11412030
Application Number:	11352143
Application Number:	11685189
Application Number:	11383140

PATENT

REEL: 030182 FRAME: 0701

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REEL: 038038 FRAME: 0385

	11086271
Application Number:	11270841
Application Number:	11388655
Application Number:	11086683
Application Number:	11327845
Application Number:	11087088
Application Number:	11424224
Application Number:	11480287
Application Number:	11086260
Application Number:	11086264
Application Number:	11426222
Application Number:	11428289
Application Number:	11559880
Application Number:	11385959
Application Number:	11086274
Application Number:	11393047
Application Number:	11087104
Application Number:	11761236
Application Number:	11086253
Application Number:	11393059
Application Number:	11488439
Application Number:	11767323
Application Number:	09467322
Application Number:	11850345
Application Number:	11470463
Application Number:	11651985
Application Number:	11450442
Application Number:	11487729
Application Number:	11086275
Application Number:	11329639
Application Number:	11092180
Application Number:	11611339
Application Number:	11458089
Application Number:	11695548
Application Number:	11380327

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REEL: 030182 FRAME: 0702

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REEL: 038038 FRAME: 0386

	11537409
Application Number:	11602149
Application Number:	11675032
Application Number:	11507735
Application Number:	11747667
Application Number:	11428293
Application Number:	11480214
Application Number:	12099745
Application Number:	11428048
Application Number:	11458081
Application Number:	11690656
Application Number:	11458086
Application Number:	11393060
Application Number:	11562359
Application Number:	11467125
Application Number:	11552853
Application Number:	11623695
Application Number:	11455668
Application Number:	11469308
Application Number:	11458077
Application Number:	11479962
Application Number:	11769308
Application Number:	11751845
Application Number:	11625688
Application Number:	11593695
Application Number:	11675546
Application Number:	11677987
Application Number:	11421449
Application Number:	11769690
Application Number:	11252914
Application Number:	11743052
Application Number:	11838639
Application Number:	11507733
Application Number:	11508044
Application Number:	11749411

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REEL: 030182 FRAME: 0703

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REEL: 038038 FRAME: 0387

	11752243
Application Number:	11743517
Application Number:	11763405
Application Number:	11965837
Application Number:	11769869
Application Number:	11768377
Application Number:	11422057
Application Number:	11673787
Application Number:	11754929
Application Number:	11768138
Application Number:	12022098
Application Number:	12022094
Application Number:	12022079
Application Number:	12022087
Application Number:	11763406
Application Number:	11770212
Application Number:	11799546
Application Number:	09274811
Application Number:	09539671
Application Number:	11493997
Application Number:	11493998
Application Number:	11493996
Application Number:	08870944
Application Number:	11617809
Application Number:	11617804
Application Number:	11617800
Application Number:	11617799
Application Number:	10208297
Application Number:	11617795
Application Number:	10209493
Application Number:	11422058
Application Number:	11714389
Application Number:	11714409
Application Number:	11714408
Application Number:	11750316

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REEL: 030182 FRAME: 0704

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REEL: 038038 FRAME: 0388

	11943851
Application Number:	11764115
Application Number:	11752502
Application Number:	11960035
Application Number:	11768369
Application Number:	11763410
Application Number:	11857419
Application Number:	11870384
Application Number:	11888656
Application Number:	10978224
Application Number:	11338620
Application Number:	11345979
Application Number:	12220201
Application Number:	12220208
Application Number:	11737308
Application Number:	11508756
Application Number:	11859180
Application Number:	11966720
Application Number:	12015414
Application Number:	11955197
Application Number:	11965807
Application Number:	11562345
Application Number:	11956100
Application Number:	12020369
Application Number:	12059744
Application Number:	12032270
Application Number:	07724423
Application Number:	07810968
Application Number:	09966062
Application Number:	09966494
Application Number:	08099867
Application Number:	08534977
Application Number:	08726519
Application Number:	08907195
Application Number:	09127435

PATENT

REEL: 030182 FRAME: 0705

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REEL: 038038 FRAME: 0389

	09160284
Application Number:	09771256
Application Number:	10354727
Application Number:	11567651
Application Number:	09669301
Application Number:	10675860
Application Number:	09815577
Application Number:	09854412
Application Number:	10355820
Application Number:	10360772
Application Number:	10460775
Application Number:	10298480
Application Number:	10360764
Application Number:	10462091
Application Number:	10667126
Application Number:	10899386
Application Number:	10786875
Application Number:	10935534
Application Number:	10955974
Application Number:	10866525
Application Number:	11020560
Application Number:	11076455
Application Number:	10863102
Application Number:	12123619
Application Number:	11130884
Application Number:	11361739
Application Number:	10420345
Application Number:	10827498
Application Number:	12147847
Application Number:	11981143
Application Number:	12128094
Application Number:	11599653
Application Number:	12034634
Application Number:	12021032
Application Number:	12026477

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REEL: 030182 FRAME: 0706

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REEL: 038038 FRAME: 0390

	12021000
Application Number:	12054174
Application Number:	12140142
Application Number:	12122274
Application Number:	11757286
Application Number:	10220785
Application Number:	12059699
Application Number:	12284109
Application Number:	11615190
Application Number:	11615374
Application Number:	11616059
Application Number:	11616071
Application Number:	11616080
Application Number:	11616110
Application Number:	11616123
Application Number:	10438962
Application Number:	10993960
Application Number:	11673809
Application Number:	11623510
Application Number:	10765267
Application Number:	11319685
Application Number:	10765458
Application Number:	10765264
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Application Number:	11458082
Application Number:	10916629
Application Number:	11871098
Application Number:	10917013
Application Number:	10999638
Application Number:	11126837
Application Number:	11800341
Application Number:	10751354

PATENT

REEL: 030182 FRAME: 0707

PATENT

REEL: 038038 FRAME: 0391

	10751387
Application Number:	12040470
Application Number:	10751388
Application Number:	12001734
Application Number:	10852730
Application Number:	10822639
Application Number:	11069277
Application Number:	11221895
Application Number:	10440572
Application Number:	08866308
Application Number:	09379593
Application Number:	09373909
Application Number:	09105988
Application Number:	09449418
Application Number:	09084236
Application Number:	09843918
Application Number:	09176106
Application Number:	09368125
Application Number:	10011977
Application Number:	09372151
Application Number:	10679514
Application Number:	09413355
Application Number:	09676526
Application Number:	11047355
Application Number:	09757632
Application Number:	09874331
Application Number:	11104327
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Application Number:	09849239
Application Number:	10126334
Application Number:	10617750
Application Number:	11103356
Application Number:	11185916
Application Number:	10558100
Application Number:	10910256

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REEL: 030182 FRAME: 0708

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REEL: 038038 FRAME: 0392

	10221734
Application Number:	09577479
Application Number:	10661558
Application Number:	09376076
Application Number:	09110877
Application Number:	08726877
Application Number:	11757620
Application Number:	11134850
Application Number:	11441457
Application Number:	11350147
Application Number:	11501675
Application Number:	10323667
Application Number:	09182416
Application Number:	08767282
Application Number:	08911271
Application Number:	09138664
Application Number:	07948423
Application Number:	08045136
Application Number:	07537788
Application Number:	08433996
Application Number:	07630635
Application Number:	08791050
Application Number:	08882330
Application Number:	07619526
Application Number:	09631300
Application Number:	07959531
Application Number:	07213344
Application Number:	07213672
Application Number:	07244006
Application Number:	07517322
Application Number:	07382125
Application Number:	08958342
Application Number:	07680783
Application Number:	08086702
Application Number:	07574787

PATENT

REEL: 030182 FRAME: 0709

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REEL: 038038 FRAME: 0393

	08233085
Application Number:	08598353
Application Number:	07849086
Application Number:	07806928
Application Number:	07574786
Application Number:	07811620
Application Number:	08233850
Application Number:	08590352
Application Number:	08850009
Application Number:	08568260
Application Number:	08031471
Application Number:	08588810
Application Number:	08231673
Application Number:	08904847
Application Number:	09656213
Application Number:	09296539
Application Number:	08057903
Application Number:	08811539
Application Number:	09190181
Application Number:	08401285
Application Number:	09881698
Application Number:	09565202
Application Number:	08455968
Application Number:	11601326
Application Number:	10028257
Application Number:	11299124
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Application Number:	08339085
Application Number:	08547372
Application Number:	08544172
Application Number:	08874408
Application Number:	08871963
Application Number:	09157620
Application Number:	08964552
Application Number:	08545174

PATENT

REEL: 030182 FRAME: 0710

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REEL: 038038 FRAME: 0394

	09298540
Application Number:	08579787
Application Number:	10083474
Application Number:	09340726
Application Number:	08767479
Application Number:	09035620
Application Number:	09362047
Application Number:	09945661
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Application Number:	09759152
Application Number:	09654469
Application Number:	10959611
Application Number:	11730715
Application Number:	10038626
Application Number:	10679368
Application Number:	09945652
Application Number:	10246678
Application Number:	10124590
Application Number:	08186461
Application Number:	07484823
Application Number:	07265690
Application Number:	07224681
Application Number:	07317585
Application Number:	07382112
Application Number:	09086726
Application Number:	08653607
Application Number:	08659529
Application Number:	08549786
Application Number:	10230252
Application Number:	08894808
Application Number:	08993303

PATENT

REEL: 030182 FRAME: 0711

PATENT

REEL: 038038 FRAME: 0395

	08993140
Application Number:	09137822
Application Number:	09242536
Application Number:	09658759
Application Number:	08894813
Application Number:	11714222
Application Number:	10259492
Application Number:	10309729
Application Number:	11356875
Application Number:	10446107
Application Number:	10401944
Application Number:	09851058
Application Number:	09858198
Application Number:	10477619
Application Number:	07691272
Application Number:	11246722
Application Number:	11217257
Application Number:	11548311
Application Number:	11548322
Application Number:	11032376
Application Number:	11315788
Application Number:	11429371
Application Number:	11474128
Application Number:	11680221
Application Number:	11777248
Application Number:	11680196
Application Number:	11672101
Application Number:	11848717
Application Number:	10646371
Application Number:	07437047
Application Number:	10700300
Application Number:	11066341
Application Number:	10914395
Application Number:	10742423
Application Number:	11019062

PATENT

REEL: 030182 FRAME: 0712

PATENT

REEL: 038038 FRAME: 0396

	10891846
Application Number:	11882000
Application Number:	11042582
Application Number:	11104741
Application Number:	11129661
Application Number:	11129658
Application Number:	11129647
Application Number:	11129022
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Application Number:	11129204
Application Number:	11542552
Application Number:	10782374
Application Number:	09018531
Application Number:	09668905
Application Number:	10118343
Application Number:	09592436
Application Number:	10433473
Application Number:	10275990
Application Number:	09697401
Application Number:	09087909
Application Number:	09084778
Application Number:	09548281
Application Number:	09066556
Application Number:	60567817
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Application Number:	09318388
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Application Number:	10004800
Application Number:	09138312
Application Number:	08181529
Application Number:	07311500
Application Number:	08514047
Application Number:	09555656
Application Number:	09238549
Application Number:	09857234

PATENT

REEL: 030182 FRAME: 0713

PATENT

REEL: 038038 FRAME: 0397

	11280222
Application Number:	09081552
Application Number:	08728042
Application Number:	07873149
Application Number:	10318933
Application Number:	09942586
Application Number:	08961771
Application Number:	09357476
Application Number:	07994477
Application Number:	10400322
Application Number:	11173291
Application Number:	10232588
Application Number:	09845766
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Application Number:	80505422
Application Number:	10943069
Application Number:	10475295
Application Number:	10148888
Application Number:	09320658
Application Number:	08798582
Application Number:	09178094
Application Number:	09071934
Application Number:	08957936
Application Number:	09236376
Application Number:	09989882
Application Number:	10236514
Application Number:	10758511
Application Number:	10919859
Application Number:	09864878
Application Number:	10834214
Application Number:	10322464
Application Number:	10425190
Application Number:	10512766
Application Number:	10211238
Application Number:	10414491

PATENT

REEL: 030182 FRAME: 0714

PATENT

REEL: 038038 FRAME: 0398

	60461126
Application Number:	10819954
Application Number:	60688326
Application Number:	11334435
Application Number:	10310003
Application Number:	10508850
Application Number:	60384655
Application Number:	10449912
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Application Number:	10778424
Application Number:	11447785
Application Number:	60549558
Application Number:	11064089
Application Number:	11425906
Application Number:	60681947
Application Number:	60721072
Application Number:	11434814
Application Number:	10448376
Application Number:	60462746
Application Number:	60573009
Application Number:	11135490
Application Number:	60572489
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Application Number:	11133325
Application Number:	11477449
Application Number:	60651203
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Application Number:	11349337
Application Number:	60573409
Application Number:	11135426
Application Number:	11122097
Application Number:	60738986
Application Number:	11552763
Application Number:	11222971

PATENT

REEL: 030182 FRAME: 0715

PATENT

REEL: 038038 FRAME: 0399

	11622064
Application Number:	60757667
Application Number:	60758234
Application Number:	11619858
Application Number:	60806343
Application Number:	11769254
Application Number:	60740640
Application Number:	11558952
Application Number:	60686920
Application Number:	11421970
Application Number:	60742910
Application Number:	60603355
Application Number:	11567281
Application Number:	60768093
Application Number:	11669742
Application Number:	60779818
Application Number:	60686918
Application Number:	11421854
Application Number:	60771115
Application Number:	11703756
Application Number:	61025052
Application Number:	60771255
Application Number:	11703478
Application Number:	11703381
Application Number:	11774807
Application Number:	11620051
Application Number:	60756208
Application Number:	61024650
Application Number:	60885788
Application Number:	12016282
Application Number:	60765809
Application Number:	11317368
Application Number:	60807779
Application Number:	11778954
Application Number:	61025139

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	60823918
Application Number:	11846719
Application Number:	60973547
Application Number:	60887915
Application Number:	12023873
Application Number:	60826811
Application Number:	11860899
Application Number:	60867123
Application Number:	61025023
Application Number:	61025037
Application Number:	60827234
Application Number:	11839081
Application Number:	61059962
Application Number:	60976539
Application Number:	11743176
Application Number:	11842251
Application Number:	60896620
Application Number:	12034097
Application Number:	60992172
Application Number:	61038068
Application Number:	60980837
Application Number:	60986687
Application Number:	12240060
Application Number:	60989873
Application Number:	12032263
Application Number:	12035499
Application Number:	61017203
Application Number:	12102537
Application Number:	60986907
Application Number:	61057242
Application Number:	61057531
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Application Number:	09116294
Application Number:	08109548
Application Number:	08487666

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	09118793
Application Number:	09589564
Application Number:	08910552
Application Number:	08375910
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Application Number:	08317161
Application Number:	08055877
Application Number:	08457326
Application Number:	07440230
Application Number:	07633715
Application Number:	07633714
Application Number:	07633717
Application Number:	07633713
Application Number:	07295048
Application Number:	07893689
Application Number:	08717208
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Application Number:	10061612
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Application Number:	08178405
Application Number:	09755951
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PATENT

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	09352246
Application Number:	08488127
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Application Number:	08447175
Application Number:	08844462
Application Number:	08796486
Application Number:	09233703
Application Number:	10023203
Application Number:	09590878
Application Number:	09579869
Application Number:	10366019
Application Number:	09548465
Application Number:	10178631
Application Number:	09712882
Application Number:	09868734
Application Number:	10045518
Application Number:	10198372
Application Number:	10227088
Application Number:	10327471
Application Number:	10683784
Application Number:	10683024
Application Number:	08201906
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Application Number:	10800388
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Application Number:	61021417
Application Number:	61047549
Application Number:	61034833

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	61020913
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Application Number:	61032287
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Application Number:	61082803
Application Number:	61101101
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Application Number:	61038975
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Application Number:	61033602
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Application Number:	61073754
Application Number:	61089856
Application Number:	61054621
Application Number:	61083145
Application Number:	61055864

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REEL: 038038 FRAME: 0404

	61057733
Application Number:	61130811
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Application Number:	61095464
Application Number:	61100608
Application Number:	07023649
Application Number:	90007188
Application Number:	10073899
Application Number:	90007275
Application Number:	11949700
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Application Number:	09724910
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Application Number:	10959746
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Application Number:	11949729
Application Number:	11360167
Application Number:	11330360
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Application Number:	10089136
Application Number:	11549917
Application Number:	11547914
Application Number:	11712236
Application Number:	11609058
Application Number:	11609111
Application Number:	11609141
Application Number:	11421028
Application Number:	11959343
Application Number:	61014724
Application Number:	11857979
Application Number:	12165646
Application Number:	12185771
Application Number:	12109108

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PATENT
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	60984320
Application Number:	60991176
Application Number:	61032924
Application Number:	61077113
Application Number:	61133891
Application Number:	11616141
Application Number:	09897514
Application Number:	11425996
Application Number:	11651986
Application Number:	09717707
Application Number:	11457914
Application Number:	08514369

CORRESPONDENCE DATA

Fax Number: 7604766326
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Email: jdurden@cpaglobal.com
Correspondent Name: Life Technologies Corporation
Address Line 1: 5791 Van Allen Way
Address Line 2: Att: Joseph Secondine, Esq.
Address Line 4: Carlsbad, CALIFORNIA 92008

NAME OF SUBMITTER:	Lauren Sindt
Signature:	/Lauren Sindt
Date:	04/09/2013

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REEL: 038038 FRAME: 0407

**RELEASE OF SECURITY INTEREST IN PATENT AND TRADEMARK
COLLATERAL**

WHEREAS, Applied Biosystems, LLC, a Delaware limited liability company, and PerSeptive Biosystems, Inc., a Delaware corporation, which was merged into Applied Biosystems, LLC as of April 7, 2009 (the "Grantor"), entered into a Security Agreement dated as of November 21, 2008 (the "Security Agreement") with Bank of America, N.A., as Collateral Agent, (the "Grantee"), Life Technologies Corporation, a Delaware Corporation and the other parties thereto, under which the Grantor granted to the Grantee a security interest in the Collateral;

WHEREAS, in conjunction with the Security Agreement, the Grantor entered into Grants of Security Interest in United States Patents and Trademarks dated as of November 21, 2008 under which the Grantor granted a security interest in the Patent and Trademark Collateral (as hereinafter defined) (the "Security Interest");

WHEREAS, pursuant to the Security Agreement the Security Interest was recorded with the United States Patent and Trademark Office: (a) with respect to United States trademark registrations and applications, on December 5, 2008, under Reel/Frame No. 003898/0616 and under Reel/Frame No. 003902/0758, and (b) with respect to United States patents and patent applications, on December 5, 2008, under Reel/Frame No. 021976/0001 and under Reel/Frame No. 021976/0160, and on December 8, 2008, under Reel/Frame No. 021940/0920;

WHEREAS, as of the date hereof (the "Effective Date"), the Grantor has fulfilled its obligations and commitments under the Security Agreement and the Grantee has agreed to release the Security Interest;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, the Grantee agrees as follows:

1. The Grantee hereby terminates, releases, removes and otherwise eliminates and assigns its entire Security Interest in the Grantor's right, title, and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "Patent and Trademark Collateral");
 - (i) each United States patent and patent application, including each Patent and Patent Application referred to on Schedule A;
 - (ii) each United States trademark, trademark registration and trademark application, and all of the goodwill of the business connected with the use of, and symbolized by, each trademark, trademark registration and trademark application, including each Trademark, Trademark Registration and Trademark Application referred to in Schedule B; and
 - (iii) all products and proceeds of the foregoing, including any claim by the Grantor against third parties for past, present or future infringement of any Patent, or past, present or future infringement or dilution of any Trademark or Trademark registration, including any Patent or Trademark listed on Schedule

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A or Schedule B, or for injury to the goodwill associated with any Trademark or Trademark registration.

2. The Grantee hereby authorizes and requests that the Commissioner of Patents and Trademarks of the United States record the foregoing release with the United States Patent and Trademark Office.
3. This RELEASE OF SECURITY INTEREST IN PATENT AND TRADEMARK COLLATERAL has been executed and delivered by the Grantee for the purpose of terminating, releasing, removing, or otherwise eliminating the security interest of the Grantee with respect to the Patent and Trademark Collateral.
4. This RELEASE OF SECURITY INTEREST IN PATENT AND TRADEMARK COLLATERAL: (i) shall be binding upon the Grantee's legal representatives, successors, and assigns, and (ii) may be executed in several parts, each of which shall be an original and all of which taken together shall constitute one and the same agreement. Capitalized terms not defined herein shall have the meaning set forth in the Security Agreement.

IN WITNESS WHEREOF, the undersigned have executed this RELEASE OF SECURITY INTEREST IN PATENT AND TRADEMARK COLLATERAL as of the 28 day of May, 2010.

BANK OF AMERICA, N.A., as Collateral Agent, as Grantee

By: 
Name: Tiffany Strub
Title: Assistant Vice President

Schedule A-1

Patents and Patent Applications

<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
11/775151	7413708	Methods and Reagents for Combined PCR Amplification and Hybridization Probing
12/193667		Methods and Reagents for Combined PCR Amplification
11/618663	7432058	Methods Of Labeling Nucleic Acids With Transfer Dyes
12/205817		Oligonucleotides and Analogs Labeled with Energy Transfer Dyes
11/617667	7423140	Energy transfer dyes with enhanced fluorescence
11/618667		Energy transfer dyes with enhanced fluorescence
09/272097	6335440	Energy transfer dyes with enhanced fluorescence
10/014743	6849745	Energy transfer dyes with enhanced fluorescence
11/617660	7399854	Energy transfer dyes with enhanced fluorescence
10/788236	7169939	Energy transfer dyes with enhanced fluorescence
08/726462	5800996	Energy transfer dyes with enhanced fluorescence
11/618683		Energy transfer dyes with enhanced fluorescence
11/618679		Methods of Analyzing Polynucleotides Employing Energy Transfer Dyes
11/618688		Kits Useful for Sequencing Nucleic Acids
11/617650		Energy transfer dyes with enhanced fluorescence
09/046203	5945526	Energy transfer dyes with enhanced fluorescence
11/617665	7388092	Energy transfer dyes with enhanced fluorescence
08/642330	5863727	Energy transfer dyes with enhanced fluorescence
10/731420		High Density Electrophoresis Device and Method
11/731192	7414115	Length Determination of Nucleic Acid Repeat Sequences by Discontinuous Primer Extension
08/968208	6814934	Homogeneous Methods for Nucleic Acid Amplification and Detection
90/010131		Homogeneous Methods for Nucleic Acid Amplification and Detection
09/717707		Homogeneous Methods for Nucleic Acid Amplification and Detection
09/908994		Apparatus and Method for Specific Release of Captured Extension Products
11/406148		Instrument for Monitoring DNA Replication
10/207283		Sample Block Apparatus and Method for Maintaining a Microcard on a Sample Block
11/646879		Automatic Threshold Setting for Quantitative Polymerase Chain Reaction
11/647064		Automatic Threshold Setting for Quantitative Polymerase Chain Reaction
11/647062		Automatic Threshold Setting for Quantitative Polymerase Chain Reaction
12/156583		Sequencing System with Memory
10/800388		Microdevice with Integrated Memory

PATENT
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PATENT
REEL: 038038 FRAME: 0410

Serial Number	Patent Number	Title
10/488437		Matrix Storage and Retrieval System
11/609174	7422872	Thermus Thermophilus Nucleic Acid Polymerases
12/193691		Thermus Thermophilus Nucleic Acid Polymerases
11/646089		Automatic Threshold Setting and Baseline Determination for Real-Time PCR
11/810337		Automatic Threshold Setting and Baseline Determination for Real-Time PCR
11/645964		Automatic Threshold Setting and Baseline Determination for Real-Time PCR
11/645863		Automatic Threshold Setting and Baseline Determination for Real-Time PCR
10/455263		System and method for generating user interfaces for different instrument types
10/454759		System and Method for Providing a Standardized State Interface for Instrumentation
11/617661		System and Method for Discovery of Biological Instruments
10/608915		Methods for Peptide-Protein Binding Prediction
12/230763		Signal Noise Reduction for Imaging in Biological Analysis
10/877421		Fluorescent Phosphatase Assays and Compositions
11/096282		Whole Genome Expression Analysis System
12/240194		Fluorescent Polymeric Materials Containing Lipid Soluble Rhodamine Dyes
10/837983	7432298	Fluorescent Polymeric Materials Containing Lipid Soluble Rhodamine Dyes
11/231480		Methods of Using Sulfur Nucleophiles as Improved Alternatives to Sodium Bisulfite for Methylated DNA Analysis
12/193655		Modified Oligonucleotides and Applications Thereof
11/372984	7414118	Modified Oligonucleotides and Applications Thereof
10/808228		Microfluidic Device Including Displaceable Material Trap, and System
12/251006		Microfluidic Device Including Displaceable Material Trap, and System
11/013940		Automated Oligomer Synthesis
10/808229	7432106	Liquid Processing Device Including Gas Trap, and System and Method
12/246828		Liquid Processing Device Including Gas Trap, and System and Method
12/145333		Microfluidic Devices And Method For Their Use
11/086261		Inverted Orientation for a Microplate
11/766119	7429479	Inverted Orientation for a Microplate
11/172280		Analog Probe Complexes
11/250192		Modified Oligonucleotides and Applications Thereof
10/757903	7435602	Reducing Effects of Spectral Nonuniformity
11/921114		Cytometric System Including Nucleic Acid Sequence Amplification, and Method
10/947460		Methods, Compositions, and Kits Comprising Linker Probes for Quantifying Polynucleotides
11/452443		Compositions and Methods Pertaining to PNA Synthons and Oligomers Comprising a Universal Base
11/087103	7417726	Normalization of Data Using Controls

PATENT
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PATENT
REEL: 038038 FRAME: 0411

Serial Number	Patent Number	Title
12/176656		Normalization of Data
11/356497	7430048	Axial Illumination for Capillary Electrophoresis
12/240722		Axial Illumination for Capillary Electrophoresis
11/232475		Two-color Real-time/End-point Quantitation of MicroRNAs (miRNAs)
11/642764		Methods and Apparatus for Conducting Amplification Reactions on High Density Hydrophilic Patterned Microplates
11/622991		Methods, Compositions, and Kits for Forming Self-complementary Polynucleotides
11/438959		System for Detection of Nucleic Acids
11/394147		Nanowire-Based System for Analysis of Nucleic Acids
11/479175		Porous Polymer Electrodes
11/818979		Nucleic Acid Sample Preparation By Exclusion Of DNA
11/421319		Linear Amplification of Short Nucleic Acids
11/558343		Microfluidic Systems Including Porous Polymer Electrodes
61/034104		Rapid Sample Prep Procedure For Microbial Detection
61/098925		Systems and Methods for Signal Normalization Using Raman Scattering
61/048808		Unnatural Polymerase Substrates That Can Sustain Enzymatic Synthesis Of Double Stranded Nucleic Acids From A Nucleic Acid Template And Methods Of Use
		Unnatural Polymerase Substrates that Can Sustain Enzymatic Synthesis of Double Stranded DNA from a DNA Template
61/021417		Unnatural Polymerase Substrates That Can Sustain Enzymatic Synthesis Of Double Stranded Nucleic Acids From A Nucleic Acid Template And Methods Of Use
12/053416		Adaptive Thermal Block Temperature Control Method And System
12/165379		Systems And Methods For Electronic Detection With Nanofets
12/163551		Detection and Mixing in a Conduit in Integrated Bioanalysis Systems
12/167292		Devices And Methods For The Detection Of Analytes
12/119475		Apparatus and Methods for Preparation of Substantially Uniform Emulsions Containing a Particle
10/352806		Crude Biological Derivatives Competent for Nucleic Acid Detection
61/047549		Compositions, Methods, And Kits For Detecting Ribonucleic Acid
61/034833		Compositions, Methods, And Kits For Detecting Ribonucleic Acid
61/030913		Compositions, Methods, And Kits For Detecting Ribonucleic Acid
61/039460		Compositions, Methods, And Kits For Detecting Ribonucleic Acid
12/138673		5-BROMO-2'-DEOXY Labeled Nucleotide Triphosphates and Nucleic Acid Probes and Methods of Making and Using the Same
61/084701		Particles for Use in Supported Nucleic Acid Ligation and Detection Sequencing
61/032287		Pressure-Balancing Fluidic Device, Method And System
60/968196		Methods And Compositions For PCR

PATENT
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PATENT
REEL: 038038 FRAME: 0412

<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
61/028886		Methods And Kits For Extraction Of DNA
61/055845		Methods and Kits for Extraction of DNA
12/117579		Methods And Systems For Differential Extraction
12/165307		Biological Sample Preparation Devices And Methods
12/142683		Sequence Amplification With Looped Primers
12/177579		Method For Recovering Sperm Nucleic Acid From A Forensic Sample
60/983737		Methods And Kits For Multiplex Amplification Of Short Tandem Repeat Loci
12/197132		Methods of Modifying Support Surfaces for the Immobilization of Particles and the Use of the Immobilized Particles for Analyzing Nucleic Acids
12/200595		Alternative Nucleic Acid Sequencing Methods
12/036037		Compositions, Systems, And Methods For Immiscible Fluid Discrete Volume Manipulation
12/036046		Non-Continuous Addition Of Fluid To Immiscible Fluid Discrete Volumes Using An Electric Field
12/036069		Fluid Addition To Immiscible Fluid Discrete Volumes Using An Electric Field
60/982183		Amplification And Detection Of Methylated Nucleic Acids
61/026213		Service Oriented Architecture For A Life Science Instrument Infrastructures
12/130502		Devices, Systems, And Methods, For Preparing Emulsions
12/154294		Directed Assembly of Amplicons to Enhance Read Pairing Signature With Massively Parallel Short Read Sequencers
12/215145		Multi-Material Microplate And Method
12/179455		Systems And Methods For Isolating Nucleic Acids
61/039026		Systems And Methods For Isolating Nucleic Acids
61/003889		Reversible DI-Nucleotide Terminator Sequencing
61/125279		Sequence Amplification With Linear Primers
61/026085		Composition And Method For Sequencing Nucleic Acid
12/244701		Biological Analysis Systems, Devices, And Methods
12/208277		Methods and Systems for Background Correction in Tandem Mass Spectrometry Based Quantitation
61/020114		Method Of Making A Paired Tag Library For Nucleic Acid Sequencing
12/243925		Chase Ligation Sequencing
61/082803		Sequence Amplification with Target Primers
61/101101		Primer-Dimer Suppression Method
61/081468		Devices and Methods for Reagent Delivery
61/004038		Method Of Sequencing Nucleic Acids Using Elaborated Nucleotide Phosphorothiolate Compounds
61/023674		Methods Of Dissociation Melt Curve, Analysis And Calibration
61/029113		Methods And Apparatuses For Nucleic Acid Shearing By Sonication

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PATENT
REEL: 038038 FRAME: 0413

<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
61/057702		Methods and Systems for Analysis and Correction of Mass Spectrometer Data
61/038975		Automated Mixture Analysis System For Human DNA Mixed Samples
61/063173		Automated Mixture Analysis System For Human DNA Mixed Samples
61/033602		Custom Flow Cell Gasket and Assemblies and Methods Thereof
61/047651		Method Of Sequencing And Mapping Target Nucleic Acids
61/073754		Mutated and Chemically Modified Thermally Stable DNA Polymerases
61/088856		DNA Methylation Detection Methods
61/042621		Scanning Imaging For Sequencing
61/083145		Deposition of Metal Oxides onto Surfaces as an Immobilization Vehicle for Carboxylated or Phosphated Particles or Polymers
61/055864		Methods for Removing Nucleic Acids Contaminations in PCR Reagents
61/057733		Methods and Systems for Analysis of Mass Spectrometer Data and Optimization of Run Parameters
61/130811		Localization of Near-Field Resonances in Bowtie Antennas: Influence of Adhesion Layers
61/094785		Instrument Validation, Calibration and Normalization Using Synthetic Beads
61/095464		SNP Discovery In High-Throughput Resequenced Microarray-Enriched Human Genomic Loci
61/100608		High-Density Real-Time PCR Arrays
11/204773		Automated Parallel Capillary Electrophoresis System with Hydrodynamic Sample Injections
07/767566	5145772	Chemiluminescence enhancement of enzyme-activated decomposition of enzymatically cleavable chemiluminescent 1,2-dioxetanes
09/960932	6514717	Kit for conducting an assay to detect a substance using enzymatically-induced decomposition of dioxetanes
09/537693	6322727	Kit for conducting an assay to detect a substance using enzymatically-induced decomposition of dioxetanes
08/255795	5605795	Assays using chemiluminescent, enzymatically cleavable substituted 1,2-dioxetanes and kits therefor
09/441064	6555698	Chemiluminescent substrates for neuraminidase, assays for detection of neuraminidase and kits therefor
07/023649	5707559	Chemiluminescent 1,2-dioxetane compounds
08/021022	5891626	Method providing enhanced chemiluminescence from 1,2-dioxetanes
07/677097	6107024	Method and Compositions Providing Enhanced Chemiluminescence from 1,2-DIOXETANES
08/589904	5856192	Precision and accuracy of anion-exchange separation of nucleic acids
08/513885	5856429	Precision and accuracy of anion-exchange separation of nucleic acids
07/973137	5273715	Automated polypeptide synthesis apparatus.
07328488	5186898	Automated polypeptide synthesis apparatus
07/361407	5242794	Detection of specific sequences in nucleic acids.
08/257219	5521065	Detection of specific sequences in nucleic acids.

PATENT
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PATENT
REEL: 038038 FRAME: 0414

Serial Number	Patent Number	Title
07/328471	5346999	Method of nucleic acid extraction
07/784573	5258538	2,3-disubstituted-1,3,2-oxazaphosphacycloalkanes as nucleic acid linking agents JP3-Organophosphorous Linking Agents for Synthesizing Amino Derivatized Polymers D2- Novel linking agents and their phosphoramidite
07/216768	5212304	Amino-derivatized phosphoramidite linking agents
07/601961	5231191	Rhodamine phosphoramidite compounds
07/461568	5240576	Capillary electrophoresis.
08/324359	5597468	Capillary electrophoresis.
07/767345	5207886	Capillary electrophoresis.
09/281203	6175006	Automated system for polynucleotide synthesis and purification.
07/287890	5047524	Automated system for polynucleotide synthesis and purification.
08/055464	5935527	Automated system for polynucleotide synthesis and purification.
07/558747	5262530	Automated system for polynucleotide synthesis and purification.
07/561366	5239360	Lens for capillary electrophoresis and chromatography
07/696974	5489507	DNA Detection by Color Complementation
07/321230	5106583	Automated Protein Hydrolysis System
07/927254	5443791	Automated Molecular Biology Laboratory
07/697916	5124041	Biomolecule Sample Immobilization
08/598188	5841959	Robotic Interface
07/621483	5078361	Positive Opening Pinch Valve
08/539496	5653259	Valve Block
07/276139	6054266	Nucleic acid detection with separation
07/148757	5093245	Labeling by Simultaneous Ligation and Restriction
07/416588	5427729	Gel-packed columns suitable for use in chromatography
07/488893	5119431	On-Capillary Gap Junction for Fluorescence Detection in Capillary Electrophoresis
07/415050	5366860	Spectrally resolvable rhodamine dyes for nucleic acid sequence determination
07/601962	5366877	Restriction/ligation labeling for primer initiated multiple copying of DNA sequences
07/390631	5096554	Nucleic Acid Fractionation by counter-migration capillary electrophoresis
07/562790	5110424	Nucleic Acid Fractionation by counter-migration capillary electrophoresis
07/590218	5187085	Improved Nucleic Acid Sequence Analysis with NUCLEOSIDE-5'-G-(1-THIOTRIPHOSPHATES).
07/432061	5015350	Flow-rate-controlled surface-charge coating for capillary electrophoresis
07/682582	5181999	Flow-rate-controlled surface-charge coating for capillary electrophoresis
07/436433	5188934	4,7 Dichlorofluorescein Dyes
11/269522		4,7 Dichlorofluorescein Dyes as Molecular Probes
09/580754	6403812	4,7 Dichlorofluorescein Dyes

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<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
09/949444	6649598	4,7 Dichlorofluorescein Dyes
08/905855	5885778	4,7 Dichlorofluorescein Dyes
09/273655	6096723	4,7 Dichlorofluorescein Dyes as Molecular Probes
08/400780	5654442	4,7 Dichlorofluorescein Dyes
07/454666	5049507	Method of C-terminal peptide sequencing
07/547088	5041388	C-terminal peptide sequencing, activated support and reagent system therefor, and method of producing the activated support
07/472045	5164655	High viscosity polymer matrix and methods
07/936979	5338426	Horizontal polyacrylamide gel electrophoresis
07/775771	5185266	Cleavage method for acyl thiohydantoin and use of the method in C-terminal peptide sequencing
08/183104	5462748	Subunit Delivery Composition and Method
07/788322	5298259	Subunit Delivery Composition and Method
07/729492	5281701	Process and compounds for RNA synthesis
08/227914	5434664	Capillary flow cell for multiple wavelengths
08/003351	5430541	High efficiency fluorescence flow cell for capillary liquid chromatography or capillary electrophoresis
07/546303	5051368	Method for Forming an Amino Acid Thiohydantoin Using an N-Substituted Ketanimine Activator
07/731771	5126021	Low viscosity polymer solution for capillary electrophoresis
07/877956	5264101	Capillary electrophoresis molecular weight separation of biomolecules using a polymer-containing solution
07/914280	5304497	Method of Forming N-Protected Amino Acid Thiohydantoin
07/965827	5274227	Capillary detector cell having imaging elements positioned to optimize sensitivity
07/850764	5384024	Capillary Electrophoresis
08/199722	5994057	Method of Detecting Anuploidy by Amplified Short Tandem Repeats
08/643709	5777096	Method of DNA sequencing employing a mixed DNA-polymer chain probe
08/877460	5807682	Probe Composition and Method
08/800641	5989871	Kits for DNA sequencing employing a mixed DNA-polymer chain probe
07/866018	5470705	Method of DNA Sequencing Employing a Mixed DNA Polymer Chain Probe
08/447174	5624800	Method of DNA sequencing employing a mixed DNA-polymer chain probe
08/286880	5580732	Method of DNA Sequencing Employing a Mixed DNA Polymer Chain Probe
08/561478	5703222	Probe composition containing a binding domain and polymer chain and methods of use
10/170044	6756204	Probe Composition and Method
10/167337	6759202	Probe Composition and Method
10/825074	7115376	Method For Distinguishing Different-Sequence Polynucleotides
10/825624	7129030	Method For Distinguishing Different-Sequence Polynucleotides

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PATENT
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Serial Number	Patent Number	Title
08/102372	5514543	Method of DNA Sequencing Employing a Mixed DNA Polymer Chain Probe
08/410615	5759369	Viscous Electrophoresis polymer medium and method
07/950863	5290418	Viscous Electrophoresis polymer medium and method
08/123623	5468365	Viscous Electrophoresis polymer medium and method
08/059946	5372695	Application specific capillary electrophoresis
08/372737	5593559	On Line Ion Contaminant Removal Apparatus and Method for Capillary Electrophoresis
08/186080	5423966	On line ion contaminant removal apparatus and method for capillary electrophoresis
08/129607	5602207	Support and method for immobilizing polypeptides
08/623431	5717075	Immobilization of polypeptides on a polyvinylidene difluoride membrane containing ENOL ester and sulfonate groups
08/554247	5891313	Entrapment of DNA sequencing template in sample mixtures by entangled polymer networks
09/264757	6051636	Entrapment of DNA sequencing template in sample mixtures by entangled polymer networks
08/003968	5374527	High Resolution DNA Sequencing Method Using Low Viscosity Medium
08/272496	5665603	Thiohydantoin formation and selective modification of the carboxy terminus of an aspartic acid- and/or glutamic acid-containing protein
08/648975	5593826	Enzymatic Ligation of 3' Amino Substituted Oligonucleotides
08/975902	5912148	Coupled Amplification and Ligation Method
09/251565	6130073	Coupled Amplification and Ligation Method
08/930926	6355709	Polymers for separation of biomolecules by capillary electrophoresis
10/040539	7045048	Polymers for separation of biomolecules by capillary electrophoresis
08/458525	5552028	Polymers for separation of biomolecules by capillary electrophoresis
08/916751	5916426	Polymers for separation of biomolecules by capillary electrophoresis
09/228991	6358385	Polymers for separation of biomolecules by capillary electrophoresis
11/359713		Polymers for Separation of Biomolecules by Capillary Electrophoresis
08/350852	5557292	Polymers for separation of biomolecules by capillary electrophoresis
08/192485	5543026	Improved real-time scanning fluorescence electrophoresis apparatus for the analysis of polynucleotide fragments
08/583552	6100043	Recombinant Clone Selection System
08/511846	5843656	Recombinant clone selection system
08/695834	5750346	Host organism capture
09/241592	6090562	Recombinant clone selection system
08/558047	5798032	Method and apparatus for automated carbohydrate mapping and sequencing
08/576206	5625052	Solid support reagents for the synthesis of 3'-Nitrogen containing polynucleotides
08/293637	5352471	Solid support reagents for the synthesis of 3'-Nitrogen containing polynucleotides
08/752973	5928907	System for real time detection of nucleic acid amplification products
09/046114	6015674	Apparatus Method for Detecting Amplification Products

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PATENT
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Serial Number	Patent Number	Title
08/946512	5942432	An Apparatus for a Fluid Impingement Thermal Cycler
08/332674	5483075	Rotary Scanning Apparatus
08/414663	5656034	High-Pressure Micro-Volume Syringe Pump
08/302154	5468843	Acetic Anhydride Activation for C-Terminal Protein Sequencing
09/436454	6258569	Hybridization assay using self-quenching fluorescence probe
08/559405	5723591	Self quenching Fluorescent probe
09/207170	6030787	Fluorescent probe for use in nucleic acid amplification assays
08/340558	5538848	Self-Quenching Fluorescence Probe and Method
08/558303	5876930	Hybridization assay using self-quenching fluorescence probe
09/627753	6821727	Hybridization assay using self-quenching fluorescence probe
09/885292	6582597	Effluent Collection Apparatus and Method
10/602342	6787030	Effluent Collection Apparatus and Method
08/887350	6248239	Effluent Collection Apparatus and Method
08/859472	6395518	Methods and Reagents for Combined PCR Amplification and Hybridization Probing
08/710075	5691146	Methods and Reagents for Combined PCR Amplification and Hybridization Probing
08/826538	6485903	Methods and Reagents for Combined PCR Amplification and Hybridization Probing
10/946458	7241596	Methods and Reagents for Combined PCR Amplification and Hybridization Probing
08/568606	5972716	Frosted amplification and/or detection vessels
08/579204	5748491	Deconvolution Method for the Analysis of Data Resulting from Analytical Separation Processes
11/807536		Device And Method for Multiple Analyte Detection
11/341732	7381569	Device And Method for Multiple Analyte Detection
11/400611		Device And Method for Multiple Analyte Detection
11/362475	7381571	Device And Method for Analyte Detection
11/434737		Device And Method for Multiple Analyte Detection
11/431363		Device And Method for Multiple Analyte Detection
11/811501		Device And Method for Multiple Analyte Detection
11/851321		Device And Method for Multiple Analyte Detection
11/651318		Device And Method for Multiple Analyte Detection
08/831983	6126899	Device for multiple analyte detection
09/012045	6124138	Method for Multiple Analyte Detection
11/400510		Device And Method for Multiple Analyte Detection
09/628076	7235406	Nucleic Acid Analysis Device
09/627580	6825047	Device for multiple analyte detection
11/350320	7381570	Device And Method for Multiple Analyte Detection

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PATENT
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Serial Number	Patent Number	Title
11/651317		Device And Method for Multiple Analyte Detection
10/373450	7211443	Device and Method For Multiple Analyte Detection
11/029968	7244622	Device And Method for Multiple Analyte Detection
11/811504		Device And Method for Multiple Analyte Detection
11/104196		Device And Method for Multiple Analyte Detection
11/811476		Device And Method for Multiple Analyte Detection
09/191417	6176991	Serpentine electrophoresis Channel with Self-Correcting Bends
09/593312	6514599	Multiplex Polynucleotide Capture Methods and Compositions
08/873437	6124092	Multiplex Polynucleotide Capture Methods and Compositions
08/593031	5736626	Solid Support Reagents for the Direct Synthesis of 3'-Labeled Polynucleotides
08/834102	5840999	Polynucleotides labeled with asymmetric benzoxanthene dyes
10/656826	7179906	Asymmetric Benzoxanthene Dyes
08/626085	6020481	Asymmetric benzoxanthene dyes
09/976842	6617445	Asymmetric Benzoxanthene Dye Labelling Reagents
09/495111	6303775	Polynucleotides labelled with asymmetric benzoxanthene dyes
08/659115	6015667	Multicomponent Analysis Method Including the Determination of a Statistical Confidence Interval
08/596560	5716784	Fluorescence Detection Assay For Homogeneous PCR Hybridization Systems
08/672196	5847162	4,7-Dichlororhodamine Dyes
09/038191	6025503	4,7-Dichlororhodamine Dyes
09/277793	6080852	4,7-Dichlororhodamine Dyes
09/578920	6713622	4,7-Dichlororhodamine Dyes
12/199441		4,7-Dichlororhodamine Dyes
09/191421	6017712	4,7-Dichlororhodamine Dyes
08/657989	5736333	Passive internal references for the detection of nucleic acid amplification products
08/696808	5821356	Propargylethoxyamino nucleotides
09/583068	6248568	Propargylethoxyamino nucleotide primer extensions
10/192776	7019128	Propargylethoxyamino Nucleotides
08/744490	5873052	Alignment-Based Similarity Scoring Methods for Quantifying the Differences Between Related Biopolymer Sequences
11/648264		Fluid Processing Device Comprising Radial Channels
09/616596	6660147	High Density Electrophoresis Device and Method
08/785581	6017702	Chain-Termination Type Nucleic Acid Sequencing Method including 2'-Deoxyuridine-5'-Triphosphate
08/766009	5833826	Method and Apparatus for Reducing the Distortion of a Sample Zone Eluting From a Capillary Electrophoresis Capillary

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Serial Number	Patent Number	Title
08/986176	5998143	Cycle Sequencing Thermal Profiles
10/413935	6833238	Petal-Array Support for Use with Microplates
10/038974	6632660	Petal-Array Support for Use with Microplates
11/021039		Petal-Array Support for Use with Microplates
08/833855	5770716	Substituted Propargylethoxycarbonyl Nucleosides, Oligonucleotides and Methods for Using Same
09/183294	6228659	Method and Apparatus for Making Arrays
09/191390	5942609	Ligation Assembly and Detection of Polynucleotides on Solid-Support
10/892403	7294464	Length Determination of Nucleic Acid Repeat Sequences by Discontinuous Primer Extension
10/038520	6773887	Length Determination of Nucleic Acid Repeat Sequences by Discontinuous Primer Extension
08/863437	5945284	Length Determination of Nucleic Acid Repeat Sequences by Discontinuous Primer Extension
09/205114	6309829	Length Determination of Nucleic Acid Repeat Sequences by Discontinuous Primer Extension
08/987329	5972613	Methods of Nucleic Acid Isolation
09/073465	6054278	Ribosomal RNA Gene Polymorphism Based Microorganism Identification
11/592716		Determination of a Genotype of an Amplification Product at Multiple Allelic Sites
09/324709	6154707	Fluorescence Genotyping at Multiple Allelic Sites
10/104774	6884583	Determination of a Genotype of an Amplification Product at Multiple Allelic Sites
10/455150	7132239	Determination of a Genotype of an Amplification Product at Multiple Allelic Sites
08/924031	6043070	Phosphoramidate-phosphodiester Oligonucleotide Chimeras as Primers
09/271060	6030813	Phosphoramidate-phosphodiester Oligonucleotide Chimeras as Primers
08/942067	6008379	Aromatic-Substituted Xanthene Dyes
90/007188	6008379	Aromatic-Substituted Xanthene Dyes
09/130258	5972618	Improved Detection of Mutations in Nucleic Acids by Chemical Cleavage
09/199402	6111116	Dibenzorhodamine dyes
08/978775	5936087	Dibenzorhodamine Dyes
12/169624		Methods of Labelling Polynucleotide With Dibenzorhodamine Dyes
09/969430	6566071	Methods of Labelling Polynucleotides With Dibenzorhodamine Dyes
09/556040	6221606	Dibenzorhodamine dyes
09/724855	6583168	Sulfonated Diarylrhodamine Dyes
09/784943	6326153	Dibenzorhodamine Dyes
10/441950	6919445	Methods of Labelling Polynucleotides With Dibenzorhodamine Dyes
10/602974	7018431	Sulfonated diarylrhodamine dyes
09/193374	6051719	Dibenzorhodamine dyes
09/008805	6054568	Nucleobase Oligomers
09/017977	6131072	Lane Tracking System and Method

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PATENT
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Serial Number	Patent Number	Title
09/135381	6232067	Adapter directed expression analysis
09/303774	6258539	Restriction enzyme mediated adapter
09/461510	6197555	Nucleotide Compounds Including a Rigid Linker
10/085561	6653462	Nucleotide Compounds including a Rigid Linker
09/172789	6096875	Nucleotide Compounds including a Rigid Linker
09/087250	5948648	Nucleotide Compounds including a Rigid Linker
09/204865	6638760	Methods and Apparatus for Flow-Through Hybridization
10/840189	7166715	Nitro-substituted non-fluorescent asymmetric cyanine dye compounds
09/357740	6348596	Non-fluorescent asymmetric cyanine dye compounds useful for quenching reporter dyes
09/012525	6080868	Nitro-substituted non-fluorescent asymmetric cyanine dye compounds
09/602544	6541618	Nitro-substituted non-fluorescent asymmetric cyanine dye compounds
10/404404	6750024	Nitro-substituted non-fluorescent asymmetric cyanine dye compounds
09/048880	5952202	Methods for Exogenous, Internal Controls During Nucleic Acid Amplification
09/301090	6171463	Electrophoresis Method and Apparatus for Separating Bio-Organic Molecules
09/062381	5993828	Electrophoresis Method and Apparatus for Separating Bio-Organic Molecules
09/385352	6358684	UV excitable fluorescent energy transfer dyes
11/372544	7402671	UV Excitable Fluorescent Energy Transfer Dyes
11/497159	7378517	UV Excitable Energy Transfer Reagents
12/176302		UV Excitable Fluorescent Energy Transfer Dyes
10/359931	7012141	UV Excitable Fluorescent Energy Transfer Dyes
12/126813		UV Excitable Fluorescent Energy Transfer Dyes
10/359826	7157572	UV Excitable Energy Transfer Reagents
09/385230	6218124	Method for Detecting Oligonucleotides Using UV Light Source
10/073899	6040586	Method and System for Velocity-Normalized Position-Based Scanning
09/073130	6040586	Method and System for Velocity-Normalized Position-Based Scanning
09/152590	6132582	Sample Handling System for a Multi Channel Capillary Electrophoresis Device
10/288405	7189279	Sample Handling System for a Multi Channel Capillary Electrophoresis Device
09/621071	6231739	Multi-Channel Capillary Electrophoresis Device Including Sheath-Flow Cuvette and Replaceable Capillary Array
09/151928	6162341	Multi-Channel Capillary Electrophoresis Device Including Sheath-Flow Cuvette and Replaceable Capillary Array
09/805624	6387236	Multi-Channel Capillary Electrophoresis Device Including Sheath-Flow Cuvette and Replaceable Capillary Array
09/812961	6413586	Apparatus and Method for Spotting a Substrate
09/270218	6296702	Apparatus and Method for Spotting a Substrate
10/209565	6579367	Apparatus and Method for Spotting a Substrate

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Serial Number	Patent Number	Title
09/813233	6467700	Apparatus and Method for Spotting a Substrate
09/812643	6440217	Apparatus and Method for Spotting a Substrate
10/419563	6849127	Apparatus and Method for Spotting a Substrate
11/038334	7211148	Apparatus and Method for Spotting a Substrate
11/683794		Apparatus and Method for Spotting a Substrate
09/292777	6143252	Reaction Device for Use with a Pipette Tip
09/250422	6635419	Polynucleotide Sequencing Method
09/846467	6355487	Apparatus and Method for Transferring Small Volumes of Substances
09/293659	6245297	Apparatus and Method for Transferring Small Volumes of Substances
10/016979	6916447	Apparatus and Method for Transferring Small Volumes of Substances
10/371985	6835827	Labelled oligonucleotides synthesized on solid-supports
09/813378	6316610	Labelled oligonucleotides synthesized on solid-supports
10/010717	6525183	Multiple-labelled oligonucleotides synthesized on solid-supports
09/256340	6255476	Methods and Compositions for Synthesis of Labelled Oligonucleotides and Analogs on Solid-Supports
10/932608		Optical Fiber Bundle for Detecting Binding of Chemical Species
09/705647	6573089	Method for Using and Making a Fiber Array
10/602960	6982149	Fiber Array and Methods for Using and Making Same
09/590761	6649404	Method for Using and Making a Fiber Array
10/877113		Integrated Optics Fiber Array
09/479181	6635470	Fiber Array and Methods for Using and Making Same
09/204858	6451525	Parallel Sequencing Method
09/251232	6432719	Matrix Storage and Dispensing System
09/955554	7101510	Matrix Storage and Dispensing System
11/436296	7361309	Matrix Storage and Dispensing System
11/120797	7019267	Sample Tray Heater Module
10/359665	6906292	Sample Tray Heater Module
09/182946	6159368	Multi-Well Microfiltration Apparatus
10/104335	6896849	Manually-operable Multi-Well Microfiltration Apparatus and Method
09/552301	6419827	Purification apparatus and method
09/565566	6338802	Multi-Well Microfiltration Apparatus
10/199743	6783732	Apparatus and method for avoiding cross-contamination due to pendent drops of fluid hanging from discharge conduits
11/338254		Sample Tray Heater Module
09/565673	6451261	Multi-well microfiltration apparatus
10/112677	7057025	Binary Probe and Clamp Composition

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Serial Number	Patent Number	Title
11/422211		Binary Probe and Clamp Composition and Methods for Target Hybridization Detection
09/233000	6432642	Binary Probe and Clamp Composition and Methods for Target Hybridization Detection
09/527791	6991712	Spectral Calibration of Fluorescent Polynucleotide Separation Apparatus
11/323620		Spectral Calibration of Fluorescent Polynucleotide Separation Apparatus
09/154178	6821482	Spectral Calibration of Fluorescent Polynucleotide Separation Apparatus
10/603049	7384606	Bead Dispensing System
09/506870	6887431	Bead Dispensing System
10/211131	7347973	Bead Dispensing System
10/990714		Bead Dispensing System
10/990722		Bead Dispensing System
09/247996	6197513	PNA and DNA conjugates and methods for preparation thereof
11/069322		Apparatus and Method for the Precise Location of Reaction Plates
10/010659	6878341	Apparatus and Method for the Precise Location of Reaction Plates
09/522640	6395486	Probe/Mobility Modifier Complexes for Multiplex Nucleic Acid Detection
09/724730	6734296	Probe/Mobility Modifier Complexes for Multiplex Nucleic Acid Detection
09/311079	6331618	Compositions of Solvents and High Concentrations of Nucleic Acid Analogs
09/325243	6248884	Nucleic Acids Labelled with Extended Rhodamine Dyes
09/780600	6781001	Nucleic acids labelled with extended rhodamine dyes
10/925411		Methods and Kits Using Extended Rhodamine Dyes
09/311036	6326147	Methods, apparatus, articles of manufacture, and user interfaces for performing automated biological assay preparation and macromolecule purification
10/281770	6969454	Apparatus for the location and concentration of polar analytes using an alternating electric field
11/288654		Methods and Apparatus for the Location and Concentration of Polar Analytes Using an Alternating Electric Field
09/522638	6537433	Methods and Apparatus for the Location and Concentration of Polar Analytes Using an Alternating Electric Field
09/498702	6221604	Electron-Deficient Nitrogen Heterocycle-Substituted Fluorescein Dyes
10/819078	8539663	Electron-Deficient Nitrogen Heterocycle-Substituted Fluorescein Dyes
10/267551	7238789	Sulfonated [8,9]benzophenoxazine Dyes and the Use of Their Labelled Conjugates
09/564417	6465644	Sulfonated [8,9]benzophenoxazine Dyes and the Use of Their Labelled Conjugates
11/824533		Sulfonated [8,9]benzophenoxazine Dyes and the Use of Their Labelled Conjugates
09/303789	6168701	Methods and Compositions for Improving the Loading of Analytical Instruments
09/477270	6716994	Mobility-Modifying Cyanine Dyes
09/373845	6316230	Polymerase Extension at 3' Terminus of PNA-DNA Chimera
09/881557	6469151	PNA-DNA chimeric probe arrays and methods of use

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Serial Number	Patent Number	Title
09/416003	6297016	Template-Dependent Ligation With PNA-DNA Chimeric Probes
09/610155	5451588	Multipartite High-Affinity Nucleic Acid Probes
09/433093	6191278	Water-soluble rhodamine dyes and conjugates thereof
11/059035		Water-Soluble Rhodamine Dyes Conjugates
09/661206	6372907	Water-Soluble Rhodamine Dye Peptide Conjugates
11/654238		Improvements In Thermal Cycler For PCR
11/057960		Improvements to Thermal Cycler for PCR
11/804298		Improvements to Thermal Cycler for PCR
09/075392	7133726	Thermal Cycler for PCR
11/654239		Improvements In Thermal Cycler For PCR
12/229404		Thermal Cycler for PCR
10/075404	7169276	Capillary electrophoresis method and apparatus for reducing peak broadening associated with the establishment of an electric field
09/361485	6372106	Capillary Electrophoresis Method and Apparatus For Reducing Peak Broadening Associated With The Establishment of an Electric Field
10/785082		Apparatus and Method for Transporting Sample Well Trays
09/606006	6719949	Apparatus and Method for Transporting Sample Well Trays
12/240924		Fluorescent Nucleobase Conjugates Having Anionic Linkers
10/977341	7429651	Fluorescent Nucleobase Conjugates Having Anionic Linkers
09/976168	6811979	Fluorescent nucleobase conjugates having anionic linkers
09/645959	6358679	Methods for External Controls for Nucleic Acid Amplification
10/099738	6890718	External control reagents for nucleic acid amplification
07/871264	5475610	Thermal cycler for automatic performance of the polymerase chain reaction with close temperature control
08/569606	5602756	Thermal cycler for automatic performance of the polymerase chain reaction with close temperature control
08/198079	5710381	Two piece holder for PCR sample tubes
11/433872		Automated Performance of PCR Thermal Cycler for Automatic Performance of the Polymerase Chain Reaction with Close Temperature Control
11/433892		Thermal Cycler For Automatic Performance Of The Polymerase Chain With Close Temperature Control
10/091186	7238517	Thermal Cycler for Automatic Performance of the Polymerase Chain Reaction with Close Temperature Control
11/999179		Thermal Cycler for Automatic Performance of the Polymerase Chain Reaction with Close Temperature Control
09/481552	6703236	Thermal cycler for automatic performance of the polymerase chain reaction with close temperature control
08/422740	6015534	PCR sample tube

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PATENT
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Serial Number	Patent Number	Title
07716719	5234778	Temperature Verification for Polymerase Chain Reaction Systems
08/199505	5656493	System for automated performance of the polymerase chain reaction
08/021624	5333675	Apparatus and method for performing automated amplification of nucleic acid sequences and assays using heating and cooling steps
07/494174	5038852	Apparatus and method for performing automated amplification of nucleic acid sequences and assays using heating and cooling steps
08/002559	5282543	Cover For Array of Reaction Tubes
08/462925	5527510	In Situ PCR Amplification System
08/525321	5681741	In Situ PCR Amplification System
08/462926	5675700	Assembly system for in situ per amplification
08/017721	5364790	In Situ PCR Amplification System
08/827353	5779977	Nucleic acid amplification reaction apparatus
08/823733	5827480	Nucleic acid amplification reaction apparatus
09/027985	6033880	Nucleic acid amplification reaction apparatus
08/299033	5720923	Nucleic acid amplification reaction apparatus
08/221163	5480783	Method for Reducing Background Signals in DNA Replication Detection Signal
08/255507	5766889	Apparatus and Method for Determining the Characteristics of the Concentration Growth of Target Nucleic Acid Molecules in a Polymerase Chain Reaction Sample
09/099501	6107061	Modified Primer Extension Reactions for Polynucleotide Sequence Detection
09/389918	6140500	Red-Emitting [8,9]Benzophenoxazine Nucleic Acid Dyes and Methods for Their Use
10/425799	6873417	Optical resonance analysis system
09/486424	6600563	Optical resonance analysis system
11/460932	7251085	Optical Resonance Analysis System
09/617549	6563581	Scanning System and Method for Scanning a Plurality of Samples
10/387755	6965105	Scanning system and method for scanning a plurality of samples
09/848270	6942837	System and Method for Filling a Substrate With a Liquid Sample
09/549382	6272939	System and Method for Filling a Substrate With a Liquid Sample
11/804151		Instrument for Monitoring Polymerase Chain Reaction of DNA
10/370846	7183103	Instrument for Monitoring Polymerase Chain Reaction of DNA
10/216620	7008789	Instrument for monitoring polymerase chain reaction of DNA
09/700536	6818437	Instrument for Monitoring Polymerase Chain Reaction of DNA
10/456196		Instrument for Monitoring Nucleic Acid Sequence Amplification Reaction
11/705856		Instrument for Monitoring Polymerase Chain Reaction of DNA
11/333483		Instrument for Monitoring Polymerase Chain Reaction of DNA
11/711416		Instrument for Monitoring Polymerase Chain Reaction of DNA
09/286718	6317206	Device for the Detection of a Fluorescent Dye

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Serial Number	Patent Number	Title
09/286849	6632601	A Device for the Detection of a Fluorescent Dye
11/193848		A Device for the Detection of a Fluorescent Dye
09/897500	6514730	PCR Sample Handling Device
10/301870	7320777	PCR Sample Handling Device
09/380011	6172785	Light-scanning device
09/367949	6211989	Light-scanning device
00/007275	6211989	A Light Scanning Device
09/367951	6229635	Light-scanning device
09/493056	6333501	Methods, Apparatus, and Articles of Manufacture for Performing Spectral Calibration
09/909601	6787310	Methods for Isolating One Strand of a Double-Stranded Nucleic Acid
11/949700		Compositions, Methods, and Kits for Isolating Nucleic Acids Using Surfactants and Proteases
10/800137	7303876	Compositions, Methods, and Kits for Isolating Nucleic Acids Using Surfactants and Proteases
09/997169	6752027	Compositions, methods, and kits for isolating nucleic acids using surfactants and proteases
09/724613	7001724	Compositions, Methods, and Kits for Isolating Nucleic Acids Using Surfactants and Proteases
09/816150	6954848	Invasion Assay
09/724766	6503716	Compositions and Methods for Extracting a Nucleic Acid
09/898323	6511810	Polynucleotide Sequence Assay
10/199470	6638761	Thermal Cycling Device with Mechanism for Ejecting Sample Well Trays
10/642418	6875604	Thermal Cycling Device with Mechanism for Ejecting Sample Well Trays
09/496408	7169355	Apparatus and Method for Ejecting Sample Well Trays
09/875211	6887664	Asynchronous Primed PCR
11/833957		Mammalian Flap-Specific Endonuclease
11/427756		Peptide Conjugates and Fluorescence Detection Methods for Intracellular Caspase Assay
11/320162		Peptide Conjugates and Fluorescence Detection Methods for Intracellular Caspase Assay
09/862224	6979530	Peptide Conjugates and Fluorescence Detection Methods for Intracellular Caspase Assay
10/096176	6942974	Selective Elution of Immobilized Multiplexed Primer Extension Products
11/006691	7252029	Dye-Labeled Ribonucleotide Triphosphates
09/886011	6887690	Dye-Labeled Ribonucleotide Triphosphates
11/797586		Dye-Labeled Ribonucleotide Triphosphates
12/098378		Non-Fluorescent Quencher Compounds and Biomolecular Assays
09/812750	6797139	Detection Cell for Guiding Excitation Light Therein and Method for Using Same
11/548210		Optical System and Method for Optically Analyzing Light From a Sample
10/773712	6927852	Optical System and Method for Optically Analyzing Light From a Sample
09/564790	6690467	Optical System and Method for Optically Analyzing Light From a Sample
11/193853	7139074	Optical System and Method for Optically Analyzing Light From a Sample

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Serial Number	Patent Number	Title
10/291088	7108775	Apparatus and Method for Confining Eluted Samples in Electrophoresis Systems
10/794486		High Speed, High Resolution Compositions, Methods and Kits for Capillary Electrophoresis
09/668960	6706162	High Speed, High Resolution Compositions, Methods and Kits for Capillary Electrophoresis
11/733014		Atropisomers Of Asymmetric Xanthen Fluorescent Dyes And Methods Of DNA Sequencing And Fragment Analysis
09/704966	6448407	Atropisomers of Asymmetric Xanthen Fluorescent Dyes and Methods of DNA Sequencing and Fragment Analysis
10/227058	6649769	Atropisomers of Asymmetric Xanthen Fluorescent Dyes and Methods of DNA Sequencing and Fragment Analysis
10/716165	7038063	Atropisomers of Asymmetric Xanthen Fluorescent Dyes and Methods of DNA Sequencing and Fragment Analysis
09/826854	6426215	PCR Plate Cover and Maintaining Device
09/850514	6841349	Methods for the Reduction of Stutter in Microsatellite Amplifications
11/742524		Methods for the Reduction of Stutter in Microsatellite Amplification
10/637466	7211385	Methods for the Reduction of Stutter in Microsatellite Amplifications
09/724910		Methods, Systems and Articles of Manufacture for Evaluating Biological Data
11/456836		Mobility-Modified Nucleobase Polymers and Methods of Using Same
09/836704	6743905	Mobility-Modified Nucleobase Polymers and Methods of Using Same
10/856752	7074569	Mobility-Modified Nucleobase Polymers and Methods of Using Same
10/306347	7208271	Compositions and Methods of Selective Nucleic Acid Isolation
11/789352		Compositions and Methods of Selective Nucleic Acid Isolation
10/272450	7407747	Method for Drying Dye-Terminator Sequencing Reagents
09/977225	6942836	System For Filling Substrate Chambers With Liquid
10/837616	7006215	Shaped Illumination Geometry and Intensity Using a Diffractive Optical Element
09/964778	6744502	Shaped Illumination Geometry and Intensity Using a Diffractive Optical Element
12/249007		Sample Block Apparatus and Method for Maintaining a Microcard on a Sample Block
09/938947	6890409	Bubble-Free and Pressure-Generating Electrodes for Electrophoretic and Electroosmotic Devices
10/984239	7357852	Bubble-Free and Pressure-Generating Electrodes for Electrophoretic and Electroosmotic Devices
10/237537	7018520	Concentration and Cleanup of Nucleic Acid Samples
11/277647		Concentration and Cleanup of Nucleic Acid Samples
09/849380	6731437	Energy Beam Guide for an Electrophoresis System
10/794463	6888628	Energy Beam Guide for an Electrophoresis System
11/796555		Universal Bases for Nucleic Acid Analyses, Methods for Using Universal Bases, and Kits Comprising Universal Bases
10/290672	7169557	Universal Nucleotides for Nucleic Acid Analysis

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Serial Number	Patent Number	Title
10/877511	7214783	Universal Bases for Nucleic Acid Analyses, Methods for Using Universal Bases, and Kits Comprising Universal Bases
11/698750		Universal Nucleotides for Nucleic Acid Analysis
10/661231	7235163	Loading Features for Channel Array
10/436415	6839179	Imaging System and Method for Reduction of Interstitial Images
10/091231	6664388	Reagents for Oligonucleotide Cleavage and Deprotection
09/846855	6596140	Multi-Channel Capillary Electrophoresis Device and Method
10/411948	7112266	Multi-Channel Capillary Electrophoresis Device and Method
11/877552		Nucleic Acid Analysis Using Non-Templated Addition
10/109104	6777189	Nucleic acid analysis using non-templated nucleotide addition
10/058927	6677151	Device and Method for Thermal Cycling
10/756219		Device and Method for Thermal Cycling
11/096341	7407798	Lens Assembly for Biological Testing
11/225968		Achromatic Lens Array
10/146066	6982166	Lens Assembly for Biological Testing
11/225934		Lens Assembly for Biological Testing
10/200581		Slip Cover for Heated Platen Assembly
09/818086	7267945	Methods of Determining the Presence of Polynucleotides Employing Amplification
10/833425	6921908	Methods for Fluorescence Detection that Minimizes Undesirable Background Fluorescence
10/030188	6905826	Methods and Compositions for Microarray Control
10/366977	7085652	Methods for Searching Polynucleotide Probe Targets in Databases
10/046730	7368296	Solid Phases Optimized for Chemiluminescent Detection
12/076235		Solid Phases Optimized for Chemiluminescent Detection
10/205028	6856390	Time-Delay Integration in a Flow Cytometry System
10/887528	7265833	Electrophoretic System with Multi-Notch Filter and Laser Excitation Source
10/887486	7280207	Time-Delay Integration in a Flow Cytometry System
12/283957		Time-Delay Integration in a Flow Cytometry System
11/012664		Time-Delay Integration in a Flow Cytometry System
11/894829		Electrophoretic System with Multi-Notch Filter and Laser Excitation Source
11/644412	7428047	Time-Delay Integration in a Flow Cytometry System
09/998887	6783940	A Method of Reducing Non-Specific Amplification in PCR
10/193776		Internal Calibration Standards for Electrophoretic Analyses
11/104130		Propargyl Substituted Nucleoside Compounds and Methods
11/015319		Propargyl Substituted Nucleoside Compounds and Methods
10/124038	6825010	Methods and Compositions for Nucleotide Analysis

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Serial Number	Patent Number	Title
10/137073		Concentration and Purification of Analytes Using Electric Fields
09/938894	7014744	Manipulation Of Analytes Using Electric Fields With A Transfer Tip
11/338255		Method of Cell Capture
10/819656		Method of Generating Long Nucleic Acid Molecules of Defined Sequence
11/770787		Method of Generating Long Nucleic Acid Molecules of Defined Sequence
11/725301		Capsule and Tray Systems for Combined Sample Collection, Archiving, Purification, and PCR
10/198832	7282128	Buffers for Electrophoresis and Use Thereof
11/706710		Buffers for Electrophoresis and Use Thereof
11/706612		Buffers for Electrophoresis and Use Thereof
10/151061	7176002	Universal-Tagged Oligonucleotide Primers and Methods of Use
11/655527		Universal-Tagged Oligonucleotide Primers and Methods of Use
09/850590	6780588	Methods for the Reduction of Stutter in Microsatellite Amplifications
09/972009	6809810	Detection Cell
08/602211	5738829	Recovery of Oligonucleotides by Gas Phase Cleavage
08/230766	5514789	Recovery of Oligonucleotides by Gas Phase Cleavage
10/359658	6833536	Non-Contact Radiant Heating and Temperature Sensing Device for a Chemical Reaction Chamber
11/423070	7294812	Non-Contact Radiant Heating and Temperature Sensing Device for a Chemical Reaction Chamber
11/006131	7173218	Non-contact radiant heating and temperature sensing device for a chemical reaction chamber
11/925002		Non-Contact Radiant Heating and Temperature Sensing Device for a Chemical Reaction Chamber
10/629524		Graft Copolymers, Their Preparation and Use in Capillary Electrophoresis
10/271477	6894264	System and Methods for Dynamic Range Extension Using Variable Length Integration Time Sampling
11/059740	7067791	System and methods for dynamic range extension using variable length integration time sampling
11/426514	7423251	System and Methods for Dynamic Range Extension Using Variable Length Integration Time Sampling
11/618501	7423255	System and Methods for Dynamic Range Extension Using Variable Length Integration Time Sampling
10/799369		Thermus Scotoductus Nucleic Acid Polymerases
11/300194		Thermus Brockianus Nucleic Acid Polymerases
10/302817	7052877	Thermus Brockianus Nucleic Acid Polymerases
11/590461		Dual Electrode Injection of Analyte Into a Capillary Electrophoretic Device
10/402173	7147764	Dual Electrode Injection of Analyte Into a Capillary Electrophoretic Device
10/155877	7188030	Automatic Threshold Setting for Quantitative Polymerase Chain Reaction

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Serial Number	Patent Number	Title
09/938767	6627433	Multi-Channel Analyte-Separation Device Employing Side-Entry Excitation
10/623913	7019831	Separation device substrate including non-fluorescent quencher dye
10/455986	7381315	Multi-Channel Analyte-Separation Device Employing Side-Entry Excitation
09/959608	6726820	Microdevice with Integrated Memory
10/959746		Microdevice with Integrated Memory
11/646035		Fluid Manipulation Assembly
10/336274	7198759	Microfluidic Devices, Methods, and Systems
11/031983	7323696	Phosphor Particle Coded Beads
12/011460		Phosphor Particle Coded Beads
12/015143		Methods for Placing, Accepting, and Filling Orders for Products and Services
10/628879	7217518	Fluorescence Polarization Assay
11/592042		Fluorescence Polarization Assay
10/303110	7148340	Thermus Thermophilus Nucleic Acid Polymerases
12/181470		A System and Method for Consensus-Calling with Per-Base Quality Values for Sample Assemblies
10/279746	7406385	A System and Method for Consensus-Calling with Per-Base Quality Values for Sample Assemblies
08/330790	5629178	Method for enhancing amplification in the polymerase chain reaction employing peptide nucleic acid (PNA)
08/468658	5656461	Method for enhancing amplification in the polymerase chain reaction employing peptide nucleic acid (PNA)
10/866523		Combinatorial Nucleobase Oligomers Comprising Universal Base Analogues and Methods for Making and Using Same
10/730870	7329391	Microfluidic Device and Material Manipulating Method Using Same
12/028887		Microfluidic Device and Material Manipulating Method Using Same
10/843114		Poly and Copoly(N-vinylamide)s and Their Use in Capillary Electrophoresis
10/293960		Mutation Detection and Identification
12/099644		Caps for Sample Wells and Microcards for Biological Materials
10/602113		Caps for Sample Wells and Microcards for Biological Materials
10/440852		Apparatus and Method for Differentiating Multiple Fluorescence Signals by Excitation Wavelength
11/668406		Sample Substrate for Use in Biological Testing and Method for Filling a Sample Substrate
10/309311	7169602	Sample Substrate for Use in Biological Testing and Method for Filling a Sample Substrate
10/351633		Sample Chamber Array and Method for Processing a Biological Sample
12/032310		Sample Substrate Having a Divided Sample Chamber and Method of Loading Thereof
10/378580	7332348	Sample Substrate Having a Divided Sample Chamber and Method of Loading Thereof
11/484093		Rotatable Sample Disk and Method of Loading a Sample Disk

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Serial Number	Patent Number	Title
10/193680	7083974	Rotatable Sample Disk and Method of Loading a Sample Disk
10/430152		Signal Processing by Iterative Deconvolution of Time Series Data
10/152280	7228237	Automatic Threshold Setting and Baseline Determination for Real-Time PCR
10/880979		Method For Activation And Immobilization Of Functionalized Polymers to Solid Supports
11/796783		Microfluidic Size-Exclusion Devices, Systems, and Methods
10/336706	7214348	Microfluidic Size-Exclusion Devices, Systems, and Methods
10/496300		Digital Assay
10/378694		Determination of Compatibility of a Set of Chemical Modifications with an Amino-Acid Chain
11/061099		Lesion Repair Polymerase Compositions
12/217410		Optical Instrument Including Excitation Source
10/440920	7410793	Optical Instrument Including Excitation Source
11/262036		Size-Exclusion Ion-Exchange Particles
10/360006		Devices and Methods for Biological Sample Preparation
11/551165		Devices and Methods for Biological Sample Preparation
11/095042		Mutant DNA Polymerases and Methods of Use
10/628281		Microfluidic Device Including Purification Column with Excess Diluent and Method
10/625449	6935617	Valve Assembly for Microfluidic Devices, and Method for Opening and The Closing Same
10/866624		Electrochemiluminescence Electrode
10/611414		A System and Method for SNP Genotype Clustering
11/023329	7379823	System and Method for Discovery of Biological Instruments
10455262	7379821	System and Method for Open Control and Monitoring of Biological Instruments
10/455264	6909974	System and Method for Discovery of Biological Instruments
10/866640		Array Electrode
10/440719	7387891	Temperature Control for Light-Emitting Diode Stabilization
11/644410		Temperature Control for Light-Emitting Diode Stabilization
10/981440		Temperature Control for Light-Emitting Diode Stabilization
11/265110	7423750	Optical Scanning Configurations, Systems, and Methods
		Optical Scanning Configurations, Systems, and Methods
11/057321		Normalization Methods for Genotyping Analysis
10/980886		Multiaxis Focusing Mechanism for Microarray Analysis
10/241751		Method for Protein Identification Using Mass Spectrometry Data
10/403652	7135147	Closing Blade for Deformable Valve in a Microfluidic Device and Method
11/598480		Closing Blade for Deformable Valve in a Microfluidic Device and Method
10/723520		Multiplex Amplification of Polynucleotides

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Serial Number	Patent Number	Title
12/164146		Combination Reader
11/188243	7135667	Array Imaging System
10/384995	6970240	Combination Reader
11/781515		Combination Reader
11/803403	7405823	Signal Noise Reduction for Imaging in Biological Analysis
10/913601	7233393	Signal Noise Reduction for Imaging in Biological Analysis
11/617360	7323681	Image Enhancement by Sub-Pixel Imaging
11/456495	7199357	Image Enhancement by Sub-Pixel Imaging
10/660460	7075059	Image Enhancement by Sub-Pixel Imaging
10/660110		System and Method for Extending Dynamic Range for a Detector
10/762786		Diffusion-Aided Loading System For Microfluidic Devices
12/156584		Diffusion-Aided Loading System For Microfluidic Devices
10/457943		Methods for Selecting Protein Binding Moieties
10/713479		Photoelectrochemical Intercalators Nucleic Acid Sequence Detection
10/336330	7041258	Micro-channel Design Features that Facilitate Centripetal Fluid Transfer
11/088709		Micro-channel Design Features that Facilitate Centripetal Fluid Transfer
11/428385		Quantitative Calibration Method And System For Genetic Analysis Instrumentation
10/403640	7201881	Actuator for Deformable Valves in a Microfluidic Device, and Method
10/650470	7110890	Auto-Analysis Framework for Sequence Evaluation
11/532427		Auto-Analysis Framework for Sequence Evaluation
10/665671	7133658	Methods and Compositions for Detecting Targets
11/615626		Methods and Compositions for Detecting Targets
11/173113	7227128	System and Methods for Improving Signal/Noise Ratio for Signal Detectors
11/758381		System and Methods for Improving Signal/Noise Ratio for Signal Detectors
10/672937		Mitochondrial DNA Autoscoring System
12/138151		Method for Improving the Performance of a Detector
11/208970	7388664	Method for Improving the Performance of a Detector
10/866012	7255994	Ligation Assay
11/130606	7323705	Liquid Level Measurement
10/444848		Ionic Liquid Apparatus and Method for Biological Samples
10/837621		Phenyl Xanthene Dyes
11/899199		Computer Algorithm for Automatic Allele Determination from Fluorometer Genotyping Device
10/085142	7272506	Computer Algorithm for Automatic Allele Determination from Fluorometer Genotyping Device
11/690729		Multiplex Detection Compositions, Methods, and Kits

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Serial Number	Patent Number	Title
10/652430	7198900	Multiplex Detection Compositions, Methods, and Kits
10/426587	6817373	One-Directional Microball Valve for a Microfluidic Device
10/917706	6901949	One-Directional Microball Valve for a Microfluidic Device
10/887477	7236776	Capillary Array Assembly for Loading Samples from a Device, and Method
11/560576		Self-Assembly of Molecules Using Combinatorial Hybridization
10/651561		Compositions, Methods, and Kits for Fabricating Coded Molecular Tags
10/853911		Emulsions of Ionic Liquids
10/652361		Compositions, Methods, and Kits for Assembling Probes Comprising Coded Molecular Tags
10/997066		Ligand-Containing Micelles and Uses Thereof
10/871081		Methods and Systems for the Analysis of Biological Sequence Data
11/044236		Methods, Compositions, and Kits for Amplifying and Sequencing Polynucleotides
10/335690		Single-Tube, Ready-To-Use Assay Kits, and Methods Using Same
10/404640		Single-Tube, Ready-To-Use Assay Kits, and Methods Using Same
10/926530	7368239	Method and Materials for Polyamine Catalyzed Bisulfite Conversion of Cytosine to Uracil
10/982619	7208278	Concatameric Ligation Products: Compositions, Methods and Kits for same
11/609776		Concatameric Ligation Products: Compositions, Methods and Kits For Same
11/609767		Concatameric Ligation Products: Compositions, Methods and Kits For Same
11/173609		Luminescence Reference Standards
11/828572		High Density Sequence Detection Methods
11/542584		Methods For Amplification Of Nucleic Acids Using Spanning Primers
10/643204		Information System for Biological and Life Sciences Research
12/07909		Information System for Biological and Life Sciences Research
10/926528		Method and Materials for Quaternary Amine Catalyzed Bisulfite Conversion of Cytosine to Uracil
10/763537		Heat Transfer for Thermal Cycling
10/735339	7119345	Excitation and Emission Filter
11/531548	7348573	Excitation and Emission Filter
10/448804		Thermal Cycling Apparatus and Method for Providing Thermal Uniformity
10/926534	7262013	Bisulfite Method
11/027817		Apparatus and Methods of Depositing Fluid
11/180034		Hypothesis Generation
11/555872		Polyelectrolyte-Coated Size-Exclusion Ion-Exchange Particles
10/780953		Polyelectrolyte-Coated Size-Exclusion Ion-Exchange Particles
11/057936		Polyelectrolyte-Coated Size-Exclusion Ion-Exchange Particles
11/172753		Synthesis of Oligomers in Arrays

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Serial Number	Patent Number	Title
11/478840		Methods and Compositions for Amplifying Nucleic Acids
11/416591		Fluorescent Detection System and Dye Set for Use Therewith
10/805096	7177023	Fluorescent Light Detection
10/926915		Thermal Device, System, and Method, for Fluid Processing Device
11/147147		Competitive Kinetic Nucleic Acid Polymerase Inhibitors
11/096731	7378260	Products and Methods for Reducing Dye Artifacts
11/047957		Systems and Methods for Aligning Multiple Point Sets
11/119985	7364835	Methods and Kits for Methylation Detection
12/111008		Methods and Kits for Methylation Detection
10/929320	7289217	Fluorescent Detector with Automatic Changing Filters
10/758667	7295316	Fluorescent Detector with Automatic Changing Filters
10/926531	7371526	Method and Materials for Bisulfite Conversion of Cytosine to Uracil
10/997694		Fluorogenic Homogeneous Binding Assay Methods and Compositions
10/762899		Non-Contact Device and Method for Collapsing Hybridization Substrate
11/948584		Non-Contact Devices And Methods For Preparation Of A Hybridization Substrate
12/188165		Fluorogenic Enzyme Activity Assay Methods and Compositions Using Fragmentable Linkers
11/226069		Multi-Chromophoric Quencher Constructs for Use in High Sensitivity Energy Transfer Probes
11/659824	7250260	Multi-Step Bioassays on Modular Microfluidic Application Platforms
11/378559		Fluid Processing Device with Captured Reagent Beads
10/879374	7221449	Apparatus for Assaying Fluorophores in a Biological Sample
10/911887	7045756	Methods and Systems for In Situ Calibration of Imaging in Biological Analysis
11/383630		Methods and Systems for In Situ Calibration of Imaging in Biological Analysis
11/153991		Method of Sequencing a Genome
11/166938		Gas Thermal Cycler
11/647065		Methods and Systems for Using RFID in Biological Field
10/805093	7187286	Methods and Systems for Using RFID in Biological Field
11/086069	7382258	Sample Carrier Device Incorporating Radio Frequency Identification, and Method
12/156,529		Sample Carrier Device Incorporating Radio Frequency Identification, and Method
12/164890		Methods and Systems for Using RFID in Biological Field
11/119069		Compositions, Methods, and Kits for (Mis)ligating Oligonucleotides
10/881368		Detection of Gene Duplications
11/035682	7304146	Fluorogenic Kinase Assays and Substrates
11/949729		Fluorogenic Kinase Assays and Substrates
11/964622		Methods and Systems for Protein and Peptide Evidence Assembly

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Serial Number	Patent Number	Title
11/090468		Encoding and Decoding Reactions for Determining Target Polynucleotides
10/881363	7399614	5-Methylcytosine Detection, Compositions and Methods Therefor
12/136272		5-Methylcytosine Detection, Compositions and Methods Therefor
11/090830		Encoding and Decoding Reactions for Determining Target Molecules
10/891650	7378259	Fluid Processing Device
10/873741		System for Thermally Cycling Biological Samples with Heated Lid and Pneumatic Actuator
10/848593		Pasting Edge Heater
10/585382		Method and Device for Detection of Nucleic Acid Sequences
11/770443		Minimizing Effects Of Dye Crossstalk
11/044390		Single Excitation Wavelength Fluorescent Detection System
11/453340		Portable Genomic Analyzer
11/002584		Cationic Liposomes And Method of Use
11/838793		Fluorescent Dye Compounds, Conjugates and Uses Thereof
11/229012	7256292	Fluorescent Dye Compounds, Conjugates and Uses Thereof
11/171492		Methods for Analyzing Short Tandem Repeats and Single Nucleotide Polymorphisms
10/881868	7394943	Methods, Software, and Apparatus for Focusing an Optical System Using Computer Image Analysis
12/166197		Methods, Software, and Apparatus for Focusing an Optical System Using Computer Image Analysis
11/417756	7446288	Device Including Inductively Heatable Fluid Retainment Region, and Method
12/221604		Device Including Inductively Heatable Fluid Retainment Region, and Method
11/355904		Mass Tags for Quantitative Analyses
11/179050		Mass Tags for Quantitative Analyses
11/040652		Identification of Informative Genetic Markers
11/360167		Method and Apparatus for Analysis of Microarray Slides
11/173112		Methods Reaction Mixtures and Kits for Ligating Polynucleotides
10/830666		Pins for Spotting Nucleic Acids
11/375825		Use of Antibody-Surrogate Antigen Systems for Detection of Analytes
11/286071		Spectral Calibration Method and System for Multiple Instruments
11/342012		Sample Preparation Devices and Methods
11/330360		Surface Tension Controlled Valves
11/416784		Materials and Kits for Use in Hot-Start PCR, and Methods of Amplifying Nucleic Acids in a Polymerase Chain Reaction
11/095407	7248359	Combining Multi-Spectral Light From Spatially Separated Sources
11/252821		Device Including A Dissolvable Structure For Flow Control

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PATENT
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Serial Number	Patent Number	Title
11/341321		Compositions and Methods for Terminating a Sequencing Reaction at a Specific Location in Target DNA Template
11/142720		Methods, Compositions, and Kits for Comprising Linker Probes for Quantifying Polynucleotides
11/921333		Microarray Microcard
11/118973	7427479	Methods and Kits for Identifying Target Nucleotides in Mixed Populations
12/184203		Methods and Kits for Identifying Target Nucleotides in Mixed Populations
11/086799		Transparent Heater for Thermocycling
11/906422		Post-Synthesis Processing System for Supported Oligonucleotides, and Method
11/106044	7408051	Modified Oligonucleotides and Applications Thereof
11/477240		Compositions, Kits and Methods Pertaining to Stability Modulation of PNA Oligomer/Nucleic Acid Complexes
11/086273		High Density Plate Filler
11/086262		Grooved High Density Plate
11/113447		System and Method for Laboratory-wide Information Management
11/261173		Fluorogenic Enzyme Assay Methods, Kits and Compositions Using Charge-Balancers
11/418387		PNA Probes, Mixtures, Methods and Kits Pertaining to the Determination of Mycoplasma and Related Mollicutes
11/615350		Methods And Apparatus for Generating Hydrophilic Patterning Of High Density Microplates Using An Amphiphilic Polymer
11/270263		Light Collection System
11/086272		High Density Plate Filler
11/327195		Polypeptides Having Nucleic Acid Binding Activity
11/372242		Methods for Multiplex Amplification
11/919965		Multiple Capillary Device and Method for Synthesis and Dispensing
11/116441	RE39566	Thermocycler and Lifting Element
09/672726	6553792	Thermocycler and Lifting Element
11/252912		Fluid Processing Device Including Size-Changing Barrier
11/767327		Systems And Methods For Cooling In A Thermal Cycler
11/291444		ID-Tag Complexes, Arrays, and Methods of Use Thereof
09/705043	6649378	Self-Contained Device Integrating Nucleic Acid Extraction Amplification and Detection
09/141401	6153425	Self-Contained Device Integrating Nucleic Acid Extraction Amplification and Detection
08/679522	5955351	Self-Contained Device Integrating Nucleic Acid Extraction Amplification and Detection
08/664863	5989813	Detection of Amplified Nucleic Acid Sequences Using Bifunctional Haptenization and Dyed Microparticles
09/398539	6258543	Quantitation of RNA transcripts using genomic DNA as the internal amplification competitor

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Serial Number	Patent Number	Title
08/830813	6063368	Quantitation of RNA Transcripts Using Genomic DNA as the Internal Amplification Competitor
11/436919	7361471	Nucleic Acid Archiving
12/106908		Nucleic Acid Archiving
10/690359	7087387	Nucleic Acid Archiving
09/061757	6291166	Nucleic Acid Archiving
09/944604	6872527	Nucleic Acid Archiving
11/176795		Methods and Devices for Multiplexing Amplification Reactions
10/441158	7087414	Methods and Devices for Multiplexing Amplification Reactions
11/044189		Methods for Multiplexing Amplification Reactions
09/589560	6605451	Methods and Devices for Multiplexing Amplification Reactions
11/331599		Compositions, Methods, and Kits for Selective Amplification of Nucleic Acids
11/377763		Compositions and Methods for Clonal Amplification and Analysis of Polynucleotides
11/496011		Detection of Polyphosphate Using Fluorescently Labeled Polyphosphate Acceptor Substrates
11/375824		Compositions and Methods for Analyzing Isolated Polynucleotides
11/087028		Vacuum Assist for a Microplate
11/423403		Method and System for Multiplex Genetic Analysis
11/259162		Method and System for Genotyping Samples in an Allelic Space
11/769784		Devices For Improving The Flatness Of High-Density Microplates
11/226046		Fluid Processing Device and Integration with Sample Preparation Processes
11/181591		Methods and Workflows for Selecting Genetic Markers Utilizing Software Tool
11/305699	7169561	Methods, Compositions, and Kits for Forming Self-complementary Polynucleotides
11/383133		Electrowetting-Based Valving and Pumping Systems
11/213355		Electrowetting Dispensing Devices and Related Methods
11/166957		Method of Extracting Intensity Data from Digitized Image
11/618531		Synthesis and Use of Cross-Linked Hydrophilic Hollow Spheres for Encapsulating Hydrophilic Cargo
11/296646		Method of Screening Urine for Organic Acids
11/252915		Fluid Processing Device Including Composite Material Flow Modulator
11/215935		Methods and Apparatus for Manipulating Separation Media
11/086072		Dual Next Microplate Spotter
11/423810		Surface Modification in A Manipulation Chamber
10/979645		Surface Modification for Non-Specific Adsorption of Biological Material
11/322013		Compositions, Methods and Kits for Real-time Enzyme Assays using Charged Molecules
11/351706		Method for Fluid Sampling Using Electronically Controlled Droplets
11/270325		Bisulfite Conversion Reagent

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PATENT
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Serial Number	Patent Number	Title
11/093587		Methods for Normalizing and for Identifying Small Nucleic Acids
11/421460		Methods for Characterizing Cells Using Amplified Micro RNAs
11/354618		Small Nucleic Acid Detection Probes and Uses Thereof
11/087077		High Density Plate Filler
11/212535		Fluid Processing Device, System, Kit, and Method
11/740367		Biomolecule Immobilization On A Surface via Hydrophobic Interactions
11/219225		Fluid Processing Device Comprising Sample Transfer Feature
11/380822		Multi-Color Light Detection with Imaging Detectors
11/393061		High Density Plate Filler
11/086800		High Density Plate Filler
11/393083		High Density Plate Filler (Overflow Control)
11/496596		Chimeric Polymerases
11/381711		Genomic DNA Sequencing Methods and Kits
11/412030		System For Genetic Surveillance and Analysis
11/352143		Compositions, Methods, and Kits for Analyzing DNA Methylation
11/585189		Methods of Detecting Target Nucleic Acids
11/383140		Low-Mass Thermal Cycling Block
11/086271	7407630	High Density Plate Filler
11/270841		Device for Monitoring Polymerase Chain Reactions
11/388655		Fluid Processing Device Including Output Interface With Analyzer
11/086683		High Density Plate Filler
11/327845		Polypeptides Having Nucleic Acid Binding Activity and Compositions and Methods For Nucleic Acid Amplification
11/087085		Pressure Chamber Clamp Mechanism
11/424224		Methods and Kits for Evaluating DNA Methylation
11/480287		Two-Dimensional Spectral Imaging System
11/086260		Normalization of Data Using Controls
11/086264		Film Preparation for Seal Applicator
11/426222		Optoelectronic Separation of Biomolecules
11/426289		Thermal-Cycling Pipette Tip
11/559880		Coded Molecules for Detecting Target Analytes
11/385959		Dispenser Array Spotting
11/086274		Spotting High Density Plate Using A Banded Format
11/393047		High Density Plate Filler
11/087104		High Speed Microplate Transfer

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PATENT
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Serial Number	Patent Number	Title
11/761236		Method And System For Compensating For Spatial Cross-Talk
11/086253		Normalization of Gene Expression Data
11/393059		High Density Plate Filler
11/488439		Detection of Nucleic Acid Amplification
11/767323		Cooling In A Thermal Cycler Using Heat Pipes
09/467322	6153426	Thermocycler Apparatus
11/850345		Device for Carrying Out Chemical or Biological Reactions
11/470463		Device for Carrying Out Chemical or Biological Reactions
10/089136		Device for Carrying Out Chemical or Biological Reactions
11/651985		Device for Carrying Out Chemical or Biological Reactions
11/450442		Device for Carrying Out Chemical or Biological Reactions
11/651986		Device for Carrying Out Chemical or Biological Reactions
11/487729		Fluid Processing Device and Method
11/086275		Optical Camera Alignment
11/529639		Fluid Processing Device Comprising Surface Tension Controlled Valve
11/092180		Fluid Processing Device for Oligonucleotide Synthesis and Analysis
11/611339		Method and System for Phase-Locked Sequencing
11/458089		Analyzing Messenger RNA and Micro RNA in the Same Reaction Mixture
11/695548		Reagents Useful for Synthesizing Rhodamine-Labeled Oligonucleotides
11/380327		Systems and Methods for Multiple Analyte Detection
11/537409		Compositions, Methods, and Kits for Amplifying Nucleic Acids
11/602149		Portable Preparation, Analysis, and Detection Apparatus For Nucleic Acid Processing
11/549917		Methods and Kits For Detecting Microorganisms
11/675032		Single Molecule DNA Sequencing Using FRET Based Dynamic Labeling
11/507725		Apparatus, System, And Method Using Immiscible-Fluid-Discrete-Volumes
11/747667		System And Method For Selective Retrieval Of Support Beads
11/428293		Interface Method And System For Genetic Analysis Data
11/480214	7355418	Scientist Domain-Centric User Interface and Enabling 'Soft' Translation
12/095745		Scientist Domain-Centric User Interface and Enabling 'Soft' Translation
11/428048	7398171	Automated Quality Control Method And System For Genetic Analysis
11/458081		Hot Start Reverse Transcription by Primer Design
11/690636		Triple-Stranded Nucleobase Structures and Uses Thereof
11/458086		Methods For RNA Profiling
11/395060		High Density Plate Filler
11/457914		Device and System for Continuous Air- Sampling

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PATENT
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Serial Number	Patent Number	Title
11/562359		MicroRNA and Messenger RNA Detection On Arrays
11/467125		A Method to Quantify siRNAs, miRNAs and Polymorphic miRNAs
11/552853		Devices and Methods for Optoelectronic Manipulation of Small Particles
11/623695		Thermally Conductive Microplate
11/455668		CIS-Regulatory Modules
11/469308		Method of Automated Calibration and Diagnosis of Laboratory Instruments
11/458077		Pure miRNA Sample Preparation Method
11/479962		Two Dimensional Spectral Imaging System
11/769308		Method For Storage Of Gene Expression Results
11/751845		Methods, Panels Of Identification Markers, And Kits For Identifying Forensic Samples
11/625688		Methods, Mixtures, Kits and Compositions Pertaining to Analyte Determination
11/593695		Systems and Methods for Generating Automated Software Workflow for Biological Testing
11/675546		Concentrators for Luminescent Emission
11/712236		Methods and Compositions for Affinity Chromatography and Other Applications
11/677987		Double-ligation Method for Haplotype and Large-scale Polymorphism Detection
11/421449		Multiplexed Amplification of Short Nucleic Acids
11/769890		Analyte Determination Utilizing Mass Tagging Reagents Comprising a Non-Encoded Detectable Label
11/252914		Dissolvable Valve in A Fluid Processing Device
11/743652		Methods, Compositions, and Kits for Quantizing Antibodies
11/838639		Methods For Identifying Nucleotides Of Interest In Target Polynucleotides
11/609058		Reduced Interference from Single Strand Binding Proteins
11/609111		Electrochemical Polynucleotide Detection Comprising Ligation
11/609141		Method of Enhancing Biotin/Streptavidin Binding in Microfluidic Devices
11/507733		Device, System, And Method For Depositing Processed Immiscible-Fluid-Discrete-Volumes
11/508044		Device And Method For Making Discrete Volumes Of A First Fluid In Contact With A Second Fluid, Which Are Immiscible With Each Other
11/749411		Systems, Methods And Apparatus For Single Molecule Sequencing
11/752243		Method To Render Pressure Sensitive Adhesive Compatible With Polymerase Chain Reaction Systems
11/743517		Methods, Compositions, And Kits For Detecting Protein Aggregates
11/421028		Endogenous Controls For Quantitating Micro RNAs
11/763405		Reversible Terminator Nucleotides And Methods of Use
11/965837		Methods and Systems for Detecting Nucleic Acids
11/769869		Compositions and Methods Pertaining to Gasylation of PNA Oligomers
11/959343		Consumable Device For Biological Assays And Methods For Manufacturing Said Device

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Serial Number	Patent Number	Title
61/014724		Consumable Device For Biological Assays And Methods For Manufacturing Said Device
11/768377		Heated Cover Methods and Technology
11/422057		Devices And Methods For Controlling Bubble Formation In Microfluidic Devices
11/673737		Systems And Methods For Methylation Prediction
11/754929		Tagging Reagents and Methods for Hydroxylated Compounds
11/768138		Sample Distribution Devices And Methods
12/022098		System And Method For Instrument Calibration
12/022094		System And Method For Interpolative Calibration
12/022079		Systems And Methods For Calibration Using Dye Signal Amplification
12/022087		Systems And Methods For Baseline Correction Using Non-Linear Normalization
11/763406		Methods Of Analyzing Binding Interactions
11/770212		Methods, Mixtures, Kits and Compositions Pertaining to Analyte Determination
11/799546		Variable Volume Dispenser And Method
09/274811	6086825	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
09/539671	6451188	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/493997	7364704	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/493998	7399448	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/493996	7364703	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
08/870944	6090251	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/617809	7364916	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/617804	7364915	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/617800		Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/617799	7364706	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
10/208297	7259020	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/617795	7364705	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
10/209493	6709559	Microfabricated Structures for Facilitating Fluid Introduction Into Microfluidic Devices
11/422058		Devices And Method For Positioning Dried Reagent In Microfluidic Devices
11/714389		Method And System For Generating Collective Output For Validation
11/714409		Method And System For Generating Validation Workflow
11/714408		Method And System For Generating Sample Plate Layout For Validation
11/750316		Method For Direct Amplification From Crude Nucleic Acid Samples
11/943851		Intermediates And Methods For Forming Passivated Surfaces On Oxide Layers And Articles Produced Thereby
11/764115		Conversion Of Target Specific Amplification To Universal Sequencing
11/752502		Methods And Apparatuses For Separating Biological Particles

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<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
11/960035		Devices and Methods for Flow Control in Microfluidic Structures
11/768369		Compressible Transparent Sealing for Open Microplates
11/763410		Emulsion PCR And Amplicon Capture
11/857419		Methods, Systems, And Apparatus For Light Concentrating Mechanisms
11/870384		Modified siRNA Constructs For Detecting RISCs
11/888656		Detection Of Analytes And Nucleic Acids
10/978224		Methods For Producing A Paired Tag From A Nucleic Acid Sequence And Methods Of Use Thereof
11/338620		Asymmetrical Adapters And Methods Of Use Thereof
11/345979		Reagents, Methods, and Libraries for Bead-Based Sequencing
12/220201		Reagents, Methods, and Libraries for Bead-Based Sequencing
12/220208		Reagents, Methods, and Libraries for Bead-Based Sequencing
11/737308		Reagents, Methods, And Libraries For Gel-Free Bead-Based Sequencing
11/508756		Device and Method For Microfluidic Control Of A First Fluid In Contact With A Second Fluid, Wherein The First And Second Fluids Are Immiscible
11/859180		Devices And Methods For Thermally Isolating Chambers Of An Assay Card
11/966720		Enrichment Through Heteroduplexed Molecules
11/857979		Obtaining PCR Compatible DNA Extract From Biological Samples In A Single Step
12/015414		Selective Lysis Of Sperm Cells
11/855197		Method For Amplifying Monomeric-Tailed Nucleic Acids
11/965807		Systems and Methods for Detecting Nucleic Acids
11/562345		Isothermal SNP Detection Method
11/556100		Sequencing Methods
12/020369		Differential Dissociation And Melting Curve Peak Detection
12/059744		Electrochemical Labels Derived From Siderophores
12/032270		Method For Recovering Nucleic Acid From A Mixed Cell Suspension, Without Centrifugation
07/724423	5422241	Methods for the recovery of nucleic acids from reaction mixtures
07/810968	5256555	Compositions and methods for increasing the yields of in vitro RNA transcription and other polynucleotide synthetic reactions
09/966062	6586218	Compositions and methods for increasing the yields of in vitro RNA transcription and other polynucleotide synthetic reactions
09/966494	6586219	Compositions and methods for increasing the yields of the in vitro RNA transcription and other polynucleotide synthetic reactions
08/099867	5547862	Vectors Containing Multiple Promoters in the Same Orientation
08/534977	5891629	Compositions for improving RNase cleavage of base pair mismatches in double-stranded nucleic acids

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Serial Number	Patent Number	Title
08/726519	6057134	Modulating the efficiency of nucleic acid amplification reactions with 3' modified oligonucleotides
08/907195	6365731	Stripping Nucleic Acids with Iodine and Sodium Thiosulfate
09/127435	6204375	Methods and Reagents for Preserving RNA in Cell and Tissue Samples
09/160284	6777210	Method and Reagents for Inactivating Ribonucleases RNASE A, RNASE I AND RNASE TI
09/771256	6528641	Methods and Reagents for Preserving RNA in Cell and Tissue Samples
10/354727		Methods and Reagents for Preserving RNA in Cell and Tissue
11/567651	7445901	Nuclease Inhibitor Cocktail
09/669301	6664379	Nuclease Inhibitor Cocktail
10/675860	7163793	Nuclease Inhibitor Cocktail
09/815577	6825340	Methods and Reagents for Inactivating Ribonucleases
09/854412	6812341	High efficiency mRNA isolation methods and compositions
10/355820		High Potency Simas for Reducing the Expression of Target Genes
10/360772		Methods and Compositions Relating to Labeled RNA Molecules that Reduce Gene Expression
10/460775		Methods and Compositions Relating to Polypeptides with RNASE III Domains that Mediate RNA Interference
10/298480		Methods And Compositions For Reducing Target Gene Expression Using Cocktails Of Simas Or Constructs Expressing Simas
10/360784		Compositions And Methods For Preserving RNA In Biological SA MPLES
10/462091	7250270	Method of Compositions for Preparing Tissue Samples for RNA Extraction
10/667126		Methods and Compositions for Isolating Small RNA Molecules
10/899386		Methods and Compositions for Preparing RNA from a Fixed Sample
10/786875	7264932	Nuclease Inhibitor Cocktail
10/935534	7361465	Methods and Compositions for Polyadenylation of mRNA
10/955974		Modified Surfaces as Solid Supports for Nucleic Acid Purification
10/866525		Crude Biological Derivatives Competent for Nucleic Acid Detection
11/020560		Methods and Compositions Concerning Sima's as Mediators of RNA Interference
11/076455		Enzymatic Digestion of Tissue
10/863102	6897069	System and Method for Electroporating a Sample
12/123619		System and Method for Electroporating a Sample
11/130884	7393681	System and Method for Electroporating a Sample
11/361739		Compositions and Methods of Using a Synthetic Bovine DNase I
10/420345	7067298	Compositions and Methods of Using a Synthetic Bovine DNase I
10/827498		Recombinant Reverse Transcriptases
12/147847		Chimeric Oligonucleotides for Ligation-Enhanced Nucleic Acid Detection, Methods and Compositions Therefor

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Serial Number	Patent Number	Title
11/981143		Expression Signature In Peripheral Blood For Detection Aortic Aneurysm
12/126094		Reagents, Kits And Methods, For Detecting Biological Molecules By Energy Transfer From An Activated Chemiluminescent Substrate To An Energy Acceptor Dye
11/599653		Methods For Manipulating Separation Media
12/034634		Multiplex Compositions And Methods For Quantification Of Human Nuclear DNA And Human Male DNA And Detection of PCR Inhibitors
12/021032		Robust Detection Of Variability In Multiple Sets Of Data
12/026477		System and Methods for Indel Identification Using Short Read Sequencing
12/021000		Calibrating The Positions Of A Rotating And Translating Two-Dimensional Scanner
12/054174		Method For Direct Amplification From Crude Nucleic Acid Samples
12/140142		Method And Composition For Nucleic Acid Amplification
12/165646		Microplate Sealing Cover and Apparatus
12/122274		Sample Preparation For In Situ Nucleic Acid Analysis, Methods And Compositions Therefor
12/185771		Bead Assay With Ligation of Cleaved Probes
11/757286		Systems And Methods For Cooling In Biological Analysis Instruments
12/109180		Capillary Reactor Distribution Device and Method
10/220785	7032607	Capillary Reactor Distribution Device and Method
60/984320		Preparation And Isolation Of 5' Capped mRNA
12/059699		Nucleic Acid Terminators Incorporating A Cationic Moiety And Methods For Their Use
12/284109		Methods, Systems And Apparatus For Light Concentrating Mechanisms
60/991176		Emulsion Collection Tray
61/032924		Methods and Assemblies for Collecting Liquid by Centrifugation
61/077113		Method for Direct Amplification from Crude Nucleic Acid Samples
61/133891		Methylation Analysis of Mate Pairs
11/615190		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/615374		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/616059		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/616071		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/616080		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/616110		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation
11/616123		Methods, Kits and Compositions Pertaining Combination Oligomers and Libraries for their Preparation

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Serial Number	Patent Number	Title
11/616141		Methods, Kits and Compositions Pertaining To Combination Oligomers and Libraries for their Preparation
10/436962		PNA Probe, Probe Sets, Methods And Kits Pertaining To The Determination Of Listeria
10/993960		Methods For Determining The Degradation State Or Concentration Of Nucleic Acids
11/673809		Methods, Mixtures And Kits Pertaining To Analyte Determination
11/623510		Kits Pertaining To Analyte Determination
10/765267	7195751	Compositions and Kits Pertaining To Analyte Determination
11/319685		Methods, Compositions And Kits Pertaining To Analyte Determination
10/765458		Methods and Mixtures Pertaining To Analyte Determination
10/765264		Compositions and Kits Pertaining To Analyte Determination
11/970470		Methods, Mixtures And Kits Pertaining To Analyte Determination
10/782646		Compositions and Methods for Multiplex Analysis of Polynucleotides
10/954802		Methods and Kits for Hybridizing Multiple PNA Probe Panels to Nucleic Acid Samples
11/871106		Method And Apparatus For De-Convoluting A Convolutted Spectrum
11/458082	7309858	Method And Apparatus For De-Convoluting A Convolutted Spectrum
10/916629	7105806	Method And Apparatus For De-Convoluting A Convolutted Spectrum
11/871098		Method And Apparatus For De-Convoluting A Convolutted Spectrum
10/917013		PNA Oligomers, Oligomer Sets, Methods And Kits Pertaining To The Determination Of Enterococcus Faecalis And Other Enterococcus Species
10/999638		Analysis of Mass Spectral Data in the Quiet Zones
11/1268837	7399645	Constrained CIS-Diol-Borate Bioconjugation System
11/800341		Constrained CIS-Diol-Borate Bioconjugation System
10/751354		Active Esters of N-Substituted Piperazine Acetic Acids, Including Isotopically Enriched Versions Thereof
10/751387	7355045	Isotopically Enriched N-Substituted Piperazine Acetic Acids And Methods For The Preparation Thereof
12/040470		Isotopically Enriched N-Substituted Piperazine Acetic Acids And Methods For The Preparation Thereof
10/751388	7307169	Isotopically Enriched N-Substituted Piperazines And Methods For The Preparation Thereof
12/001734		Isotopically Enriched N-Substituted Piperazines And Methods For The Preparation Thereof
10/852730		Mixtures of Isobarically Labeled Analytes And Fragments Ions Derived Therefrom
10/822639		Mixtures of Isobarically Labeled Analytes And Fragments Ions Derived Therefrom
11/069277		Determination of Analyte Characteristics Based Upon Affinity Binding Properties
11/221895		Dioxetane-Nanoparticle Assemblies For Energy Transfer Detection Systems, Methods Of Making The Assemblies, And Methods Of Using The Assemblies in Bioassays
10/440572	7361259	Capillary Array and Electrophoresis Apparatus, and Method
08/866308	6063251	Electrically Insulated Capillary Arrays for Electrophoretic Applications

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PATENT
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Serial Number	Patent Number	Title
09/375593	6354516	Electrophoretic Sample Excitation Light Assembly
09/373909	6375819	Fluid Delivery System for Capillary Electrophoretic Applications
09/105988	6027627	Automated Parallel Capillary Electrophoretic System
09/449418	6118127	Detector Having a Transmission Grating Beam Splitter for Multi-Wavelength Sample Analysis
09/084236	5998796	Detector Having a Transmission Grating Beam Splitter for Multi-Wavelength Sample Analysis
09/843918	6926815	Copolymers for Capillary Gel Electrophoresis
09/176106	6217731	Method and Apparatus for Monitoring and Displaying the Status of a Parallel Capillary Electrophoresis Device
09/388125	6352633	Automated Parallel Capillary Electrophoresis System with Hydrodynamic Sample Injection
10/811977	6933521	Automated Parallel Capillary Electrophoresis System with Hydrodynamic Sample Injection
09/372151	6365024	Motorized Positioning Apparatus Having Coaxial Carousels
10/679514	7329333	Uniform Laser Excitation and Detection in Capillary Arrayelectrophoresis System and Method
09/413353	6630063	Uniform Laser Excitation and Detection in Capillary Arrayelectrophoresis System and Method
09/676526	6863791	Method for In-Situ Calibration of Electrophoretic Analysis Systems
11/047355	7384525	Method for In-Situ Calibration of Electrophoretic Analysis Systems
		Electrophoretic Analysis System Having In-Situ Calibration
09/757632	6929729	Method for Conducting Capillary Zone Electrophoresis
09/874331	6974527	Multidimensional Separations Employing an Array of Electrophoresis Channels
11/104327		Multidimensional Separations Employing an Array of Isolated Electrophoresis Channels
10/287826	7175750	System and Method for Temperature Gradient Capillary Electrophoresis
09/849239	6982029	Electrophoretic Method and System Having Internal Lane Standards for Color Calibration
10/128334	6872530	Method for Determining the Presence of DNA Variants Using Peptide Nucleic Acid Probes
10/617750	7282126	System and Method for Determining Known DNA Variants with Temperature Gradient Electrophoresis
11/103356	7435545	Method for Sizing Polynucleotides Using Electrophoresis with Non-DNA Size Standards
11/185916		System and Method for Determining Sizes of Polynucleotides
10/558100		Electrophoresis Capillaries Having Reduced Amounts of -OH
10/910256	7303879	Determination of SNP Allelic Frequencies Using Temperature Gradient Electrophoresis
10/221734	6704104	Multi-Wavelength Array Reader for Biological Assay
09/577479	6547943	Capillary System Providing Multiple Analysis of Sample from Same Body of Liquid
10/661558		Denaturant-free Electrophoresis of Biological Molecules Under High Temperature Conditions
09/376076	6241949	Spill-Resistant Microtiter Trays and Method of Making

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Serial Number	Patent Number	Title
09/110877	5916428	Automated System for Multi-Capillary Electrophoresis Having a Two-Dimensional Array of Capillary Ends
08/726877	5885430	Capillary Tube Holder for an Electrophoretic Apparatus
11/757620		Expression Quantification Using Mass Spectrometry
11/134850		Expression Quantification Using Mass Spectrometry
11/441457		Expression Quantification Using Mass Spectrometry
11/350147		Amine-containing Compound Analysis Methods
11/501675		Thyroxine-containing Compound Analysis Methods
10/323667	6913897	Kit For Conducting An Assay To Detect A Substance Using Enzymatically-Induced Decomposition Of Dioxetanes
09/182416	6113816	Kit for conducting an assay to detect a substance using enzymatically-induced decomposition of dioxetanes
08/767282	5866389	Kit for conducting an assay to detect a substance using enzymatically-induced decomposition of dioxetanes
08/911271	5869705	Enzyme-activated 1,2-dioxetanes
09/138664	6124478	Methods of using 1,2-dioxetanes and kits therefore
07/948423	5637747	Synthesis of 1,2-DIOXETANES and Intermediates Therefor
08/045136	5648555	Synthesis of 1,2-DIOXETANES and Intermediates Therefor
07/537788	5177241	Synthesis of 1,2-DIOXETANES and intermediates therefor
08/433996	5679802	1,2-dioxetanes useful in chemiluminescent immunoassays
07/630635	5756770	Synthesis of stable, water-soluble chemiluminescent 1,2-dioxetanes and intermediates therefor
08/791050	5777133	Synthesis of 1,2-DIOXETANES and Intermediates Therefor
08/882330	5856522	Method of using synthesis of 1,2-dioxetanes and kits therefore
07/619526	5625077	1,2-dioxetanes
09/631300	6417380	Synthesis of 1,2-dioxetanes and intermediates therefor
07/959531	5639907	Synthesis of 1,2-dioxetanes and intermediates therefor
07/213344	4931223	Methods of Using Chemiluminescent 1,2-Dioxetanes
07/213672	4952707	Enzymatically-cleavable chemiluminescent fused polycyclic ring-containing 1,2-dioxetanes
07/244006	4931569	Purification of stable water-soluble dioxetanes
07/517322	5342956	Purification of Stable Water-Soluble Dioxetanes
07/382125	4978614	Method of Detecting a Substance Using Enzymatically-Induced Decomposition of DIOXETANES
08/958342	RE36536	Method of Detecting a Substance Using Enzymatically-Induced Decomposition of DIOXETANES
07/680783	5225584	Synthesis of Stable, Water Soluble Chemiluminescent 1, 2-Dioxetanes & Intermediates Therefor

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Serial Number	Patent Number	Title
08/086702	5763681	Synthesis of Stable, Water Soluble Chemiluminescent 1, 2-Dioxetanes & Intermediates Therefor
07/574787	5220003	Substituted adamantyl dioxetanes
08/233085	5543295	Chemiluminescent 3-(Substituted adamant-2'-ylidene) 1,2-Dioxetanes
08/598353	5831102	Chemiluminescent 3-(substituted adamant-2'-ylidene) 1,2-dioxetanes
07/849086	5326882	Chemiluminescent 3-(substituted Adamant-2'-Ylidene) 1,2-dioxetanes
07/806928	5330900	Chemiluminescent 3-(substituted adamant-2'-ylidene) 1,2-dioxetanes
07/574786	5112960	Chemiluminescent 3-(substituted adamant-2'-ylidene) 1,2-dioxetanes
07/811620	5336596	Membrane for chemiluminescent blotting applications
08/233850	5593828	Membrane for chemiluminescent blotting applications
08/590353	5827650	Membrane for chemiluminescent blotting applications
08/850009	5994073	Enhancement of Chemiluminescence in Assays
08/588250	5654154	Enhancement of chemiluminescent 1,2-dioxetane-based assays and kits for conducting said assays
08/031471	5547836	Enhancement of Chemiluminescence in Assays
08/588810	5851771	Chemiluminescent 1,2-dioxetanes
08/231673	5582980	Chemiluminescent 1,2-dioxetanes
08/904847	6022964	Chemiluminescent 1,2-dioxetanes
08/656213	6346615	Chemiluminescent 1,2-dioxetanes
09/296539	6140495	Chemiluminescent 1,2-dioxetanes
08/057903	5538847	Chemiluminescent 1,2-dioxetanes
08/811539	5849495	Chemiluminescent Energy Transfer Assays
09/190181	6287767	Chemiluminescent Energy Transfer Assays
08/401285	5753436	Chemiluminescent Energy Transfer Assays
09/881898	6504024	Propargylethoxyamino nucleotide primer extensions
09/565202	6506343	Multi-well microfiltration apparatus and method for avoiding cross-contamination
08/455968	5874283	Mammalian Flap-Specific Endonuclease
11/601336		Analytical Device with Lightguide Illumination of Capillary and Microgroove Arrays
10/028257	7189361	Analytical Device with Lightguide Illumination of Capillary and Microgroove Arrays
11/299124		DNA Polymerases Having Improved Labeled Nucleotide Incorporation Properties
09/041878	6265193	DNA Polymerases Having Improved Labeled Nucleotide Incorporation Properties
08/339085	5773628	1,2-dioxetane compounds with haloalkoxy groups, methods preparation and use
08/547372	5679803	1,2 chemiluminescent dioxetanes of improved performance
08/544172	5840919	Chemiluminescent 1,2-dioxetanes
08/874408	5847161	1,2 Chemiluminescent DIOXETANES of Improved Performance
08/871963	5869699	1,2 Chemiluminescent DIOXETANES of Improved Performance

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Serial Number	Patent Number	Title
09/157620	5981768	1,2 Chemiluminescent DIOXETANES of Improved Performance
08/964552	6132956	Chemiluminescent 1,2-DIOXETANES
08/545174	5783381	Chemiluminescent 1,2-DIOXETANES
09/256540	6602658	Multiple Reporter Gene Assay
08/579787	6602657	Multiple Reporter Gene Assay
10/083474	7053208	Dioxetane Labeled Probes and Detection Assays Employing the Same
09/340736	6451531	Dioxetane Labeled Probes and Detection Assays Employing the Same
08/767479	5800999	Dioxetane Labeled Probes and Detection Assays Employing the Same
09/035820	6243980	Protease Inhibitor Assay
09/362047	6355441	Benzothiazole Dioxetanes
09/945661	6852548	Benzothiazole Dioxetanes
09/148782	6183978	Luciferase assay, compositions and kits for use in connection therewith
09/459982	6386196	Multiple Enzyme Assays
09/307797	6686171	Competitive chemiluminescent assay for cyclic nucleotide monophosphates
11/251873		Luminescence Detection Workstation
09/621961	6518068	Luminescence Detection Workstation
09/759152	6800445	Systems for sensitive detection of G-protein coupled receptor and orphan receptor function using reporter enzyme mutant complementation
09/654499	6893827	Systems for Sensitive Detection of G-Protein Coupled Receptor and Orphan Receptor Function Using Reporter Enzyme Mutant Complementation
10/959611	7235374	Systems for Sensitive Detection of G-Protein Coupled Receptor and Orphan Receptor Function Using Reporter Enzyme Mutant Complementation
11/730715		Dendritic Chemiluminescent Substrates
10/038626	7214546	Dendritic Chemiluminescent Substrates
10/679368	7112413	Heteroaryl Substituted Benzothiazole Dioxetanes
09/945652	6660529	Heteroaryl Substituted Benzothiazole Dioxetanes
10/246678	6933126	Membrane Transportable Fluorescent Substrates
10/124590	6794156	Cell growth, induction and lysis in an antibody-coated microplate for use in an ELISA
08/186461	5652345	1,2-dioxetane compound
07/484923	5386017	Alkenes for producing chemiluminescent 1, 2-dioxetane compounds
07/265890	6133459	Method and Compositions Providing Enhanced Chemiluminescence from 1,2-Dioxetanes
07/224681	5004565	Method and compositions providing enhanced chemiluminescence from 1,2-dioxetanes
07/317585	4999182	Method and compositions providing enhanced chemiluminescence from 1,2-dioxetanes
07/382112	5094939	Chemiluminescence assays using stabilized dioxetane derivatives
09/086,726	6346378	Nucleic acid analogs with a chelating functionality
08/653607	5843663	Methods of capturing nucleic acid analogs and nucleic acids on a solid support

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PATENT
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<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
08/659529	5861250	Protecting nucleic acids and methods of analysis
08/549786	5912145	Nucleic acid analogue assay procedures and kits
10/230252	7125972	Solid carriers with peptide nucleic acid probes and methods for regeneration
08/894808	6475721	Sequence specific detection of nucleic acids using a solid carrier bound with nucleic acid analog probes
08/993303	6020132	Method of analysis using signal amplification
08/993140	6027893	Method of identifying a nucleic acid using triple helix formation of adjacently annealed probes
09/137822	6979936	Small triplex forming PNA oligos
09/242536	6233476	Process for detecting nucleic acids by mass determination
09/655759	6521744	2- or 3-dimensional geometric structures
09/897514	6310179	2- or 3-dimensional geometric structures
08/894813		Modulation Of The Binding Properties Of Nucleic Acid Binding Partners
11/714,222		Multi-Capillary Array Electrophoresis Device
		Multi-Capillary Array Electrophoresis Device
10/259492	7250098	Multi-Capillary Array Electrophoresis Device
10/309729		Multi-Capillary Electrophoresis Apparatus
11/356875		Refractive Index Matching in Capillary Illumination
10/446107	7217352	Capillary Electrophoresis Device
10/401944	7064319	Mass Spectrometer
09/851058	7045296	Process for analyzing protein samples
09/858198	7183116	Methods for isolation and labeling of sample molecules
10/477619	7364911	Methods for Isolating and Labeling Sample Molecules
07/691272	5300774	Time of Flight Mass Spectrometer w/ Aperture Enabling Trade of Transmission Efficiency/Res
11/246722		Method and System for Identifying Polypeptides
11/217257		Methods and Systems for Discovering Protein Modifications and Mutations
11/548311		Methods and Apparatus for Time-of-Flight Mass Spectrometer
11/548322		Methods and Apparatus for Time-of-Flight Mass Spectrometer
11/032376	7256395	Method and Apparatus for Improved Sensitivity in a Mass Spectrometer
11/315788	7259371	Method and Apparatus for Improved Sensitivity in a Mass Spectrometer
11/429371		Power Supply Regulation Using a Feedback Circuit Comprising an AC and DC Component
11/474128		Methods and Systems for Mass Defect Filtering of Mass Spectrometry Data
11/580221		Methods for the Development of a Biomolecule Assay
11/777348		Methods And Systems For Sequence-Based Design Of Multiple Reaction Monitoring Transitions And Experiments

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<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
11/680196		Method and Apparatus for Generating Ions for Mass Analysis
11/672101		Chemical Noise Reduction for Mass Spectrometry
11/848717		Methods For Data Processing
10/646371	6940065	Method for Characterizing Biomolecules Utilizing A Result Driven Strategy
07/437/047	4963736	Mass Spectrometer and Method with Improved Ion Transmission (Collisional Focusing)
10/700300	6953928	Ion source and methods for MALDI mass spectrometry
11/065341	7109480	Ion Source and Methods for MALDI Mass Spectrometry
10/914395	6995363	Reduction of Matrix Interference for MALDI Mass Spectrometry Analysis
10/742423	7030373	MALDI Plate Construction with Grid
11/019062		Improved Matrix with Noise Reduction Additive and Disposable Target Containing the Same
10/891646		Fluid Processing Device
11/862000		Ion Optics Systems
11/042592	7351958	Ion Optics Systems
11/104741		Identification of modified peptides using a MALDI TOF mass spectrometer
11/129661	7385186	Methods of Operating Ion Optics for Mass Spectrometry
11/129658	7176454	Ion Sources for Mass Spectrometry
11/129647	7405396	Sample Handling Mechanisms and Methods for Mass Spectrometry
11/129022	7265368	Ion Optical Mounting Assemblies
11/042191		Ion Optics Systems
11/129204	7351959	Mass Analyzer Systems and Methods for Their Operation
11/542552		Classification of Patients Having Diffuse Large B-cell Lymphoma Based upon Gene Expression
10/792374	7332280	Classification of Patients Having Diffuse Large B-cell Lymphoma Based upon Gene Expression
11/425996		Cellular Micro RNA Profiles and Methods of Making and Using Same
09/016531	6146511	Electrophoretic Nucleic Acid Purification Method
09/666905	6827830	Electrophoretic Nucleic Acid Purification Method

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Schedule A-2

Patents and Patent Applications

<u>Patent Title</u>	<u>Serial No.</u>	<u>Patent No.</u>
A Method of and apparatus for ionizing an analyte and ion source probe for use therewith	10/118,343	6,759,850
Analysis Technique, Incorporating Selectively Induced Collision Dissociation and Subtraction of Spectra (MS/MS ANALYSIS)	09/592,436	6,992,385
Apparatus and Method for MS-Nth in Tandem Mass Spectrometry	10/433,473	7,145,133
Atmospheric Pressure Ion Lens for Generating a Larger and more Stable Ion Flux	10/275,990	7,067,804
Atmospheric Pressure Photoionization (APPI)	09/697,401	6,534,765
Axial Ejection in a Multipole Mass Spectrometer (Virus)	09/087,909	6,177,668
Boundary Activated Dissociation in Rod-Type Mass Spectrometer	09/084,778	6,015,972
High Intensity Ion Source	09/548,281	6,585,731
High Pressure MS/MS System	09/066,556	6,093,929
Method and Apparatus for improving duty cycle in Mass Spectrometry (Title: Time of Flight Mass Spectrometer)	60/567,817	
Ion Guide For Mass Spectrometer	11/122,034	
Method and Apparatus for Improving Duty Cycle in Mass Spectrometry	60/567,817	
MS/MS Scan Methods for a Quadrupole/Time of Flight Tandem Mass Spectrometer	09/316,388	6,285,027
Parent Ion Scan Method	09/864,872	6,507,019
Ion Mobility Spectrometer Incorporating an Ion Guide in Combination with an MS Device	10/004,800	6,744,043
Ion Source	09/136312	6,184,522
Ion Spray with Intersecting Flow	08/181,529	5,412,208
Liquid Junction Coupling for Capillary Zone Electrophoresis	07/311,500	4,994,165
Mass Spectrometer and Method with Improved Ion Transmission	07/437,047	4,963,736
Mass Spectrometer with Radial Ejection (Quadrupole with Radial Ejection)	08/314,369	5,576,540
Method and Apparatus for Selective Collision Induced Disassociation of Ions in a Quadrupole Ion Guide	09/555,686	6,512,226
Quadrupole Mass Analyzer and Method of Operation in RF only Mode to Reduce Background Signal	09/238,549	6,194,717
Method and Apparatus for Multiple Stages of Mass Spectrometry	09/857,234	6,833,544
Improved Ion Selection in Pseudo Neutral Loss Scan	11/260,222	7,417,223
Method for Improved Signal To Noise for Multiply Charged Ions	09/081,552	6,166,378
Method for Improving Signal To Noise Ratios for Atmospheric Pressure Ionization Mass Spectrometry	09/726,042	6,700,120
Method for Increase Resolution in Tandem Mass Spectrometry	07/873,149	5,248,875
Method of Chemical Ionization at Reduced Pressure	10/316,933	6,969,848
Method of Mass Spectrometry, To Enhance Separation of Ions with Different Charges (Multiply Charged Enhancement Scan for Ion Traps) (Working Title) (Virus) (Charge Separation)	09/942,586	7,041,987
Method of Operating a Mass Spectrometer Including a Low Level Resolving DC Input To Improve Signal To Noise Ratio	08/961,771	5,998,787
Method of Protein Analysis	09/357,476	6,440,687 B1
Protein Sequencing by Mass Spectrometry (Trypsin)	07/994477	5,952,653
Method and System for High Throughput Quantitation of Small Molecules using Laser Desorption and Multiple-Reaction Monitoring	10/400,322	6,930,305
Method and System for High Throughput Quantitation of Small Molecules using laser desorption and multi-reaction-monitoring	11/073,291	7,388,194
Method of Reducing Space Charge in a Linear Ion Trap Mass Spectrometry (Virus)	10/232,588	6,627,876
Method of Reduction of Chemical Background in Electrospray Mass Spectrometry	09/845,766	6,590,204

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Patent Title	Serial No.	Patent No.
Multipole Inlet System for Ion Traps	749,369	5,179,278
Method and Apparatus for providing two dimensional substantially Quadrupole fields having selected Hexapole components	60/505,422	
Method and Apparatus for providing two dimensional substantially Quadrupole fields having selected Hexapole components	10/943,069	7,141,789
High Throughput Ion Source with Multiple Sprayers and Ion Lenses	10/475,255	7,399,961
Parallel sample introduction electrospray mass spectrometer with electronic indexing through multiple ion entrance orifices	10/148,888	6,784,422
Quadrupole Mass Spectrometer with an Ion Trap to Enhance Sensitivity (Virus)	09/320,668	6,504,148
Spectrometer with Axial Field (Linac)	08/796,582	5,847,386
Quadrupole with Axial DC Field	09/176,094	6,111,250
Rf - Only Mass Spectrometer with Auxiliary Excitation	09/071,934	6,114,691
Resolving RF Mass Spectrometer	08/957,936	6,028,368
Spectrometer Provided with Pulsed Ion Source and Transmission Device to Damp Ion Motion and Method Use (Maldi Time of Flight with Quadrupole Rod Set)	09/236,376	6,331,702
Spectrometer Provided with Pulsed Ion Source and Transmission Device to Damp Motion and Method of Use (Maldi - Time of Flight with Quadrupole Rod Set) CONTINUATION	09/989,882	6,680,475
Spectrometer Provided with Pulsed Ion Source and Transmission Device to Damp Ion Motion and Method Use	10/236,514	RE39,099
Spectrometer Provided with Pulsed Ion Source and Transmission Device to Damp Ion Motion and Method of Use	10/758,511	6,833,543
Spectrometer Provided with Pulsed Ion Source and Transmission Device to Damp Ion Motion and Method of Use	10/919,859	7,189,963
Triple Quadrupole Mass Spectrometer with Capability to Perform Multiple Mass Analysis Steps (Virus)	09/864,878	6,720,554
Triple Quadrupole Mass Spectrometer with Capability to Perform Multiple Mass Analysis Steps (Virus)	10/834,214	7,060,972
Use of Notched Broadband Waveforms in a Linear Ion Trap	10/322,464	6,815,673
Broad Ion Fragmentation Coverage in Mass Spectrometry By Varying The Collision Energy	10/425,190	7,199,361
Broad Ion Fragmentation Coverage in Mass Spectrometry By Varying The Collision Energy (virus) (qtrap) (stepping CE)	10/512,766	7,351,957
Geometry For Generating a Two-Dimensional Substantially Quadrupole Field	10/211,238	6,897,438
Axial Ejection with Improved Geometry For Generating a Two-Dimensional Substantially Quadrupole Field	10/414,491	7,045,797
Dynamic Background Subtraction (DBS) FOR Independent Data Acquisition on QTRAP (Virus)	60/461,126	
Dynamic Background Subtraction (DBS) for Independent Data Acquisition (IDA) on QTRAP (VIRUS)	10/819,354	7,009,174
Dynamic Background Subtraction (DBS) for Independent Data Acquisition (IDA) on QStar	60/688,326	
Dynamic Background Signal Exclusion In Chromatography / Mass Spectrometry Data-Dependent Data Acquisition	11/334,435	7,351,956
Fragmentation of Ions By Resonant Excitation In A High Order Multipole Field, Low Pressure Ion Trap (LIT) (Virus)	10/310,003	7,049,580
Fragmentation of Ions By Resonant Excitation In A High Order Multipole Field, Low Pressure Ion Trap (LIT) (Virus)	10/508,950	7,227,137
Methods And Apparatus For Reducing Artifacts In Mass Spectrometers (Virus) (LIT) (Artifact Fix)	60/384,555	
Methods And Apparatus For Reducing Artifacts In Mass Spectrometers (Virus) (LIT) (Artifact Fix)	10/449,912	6,909,089
Improved Axial Ejection Resolution In Multipole Mass Spectrometers (virus) (LIT) (Ramping Voltage)	10/159,766	6,703,607

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<u>Patent Title</u>	<u>Serial No.</u>	<u>Patent No.</u>
Sample Introduction Device for Mass Spectrometry Using a Fast Fluidic System to Synchronize Multiple Parallel Liquid Sample Streams (Multi-Sprayer) (DEVICE)	10/432,965	6,841,774
Atmospheric Pressure Interface Particle Discriminator for Mass Spectrometry Particle Discriminator for Atmospheric Pressure Interface	10/778,424 11/447,785	7,098,452
Multi-Stroke TOF MS	60/549,558	
Multi-Stroke TOF MS	11/064,089	7,126,114
Multi-Stroke TOF MS	11/425,906	
Mass Selective Axial Field (Phoenix)	60/681,547	
Method And Apparatus For Mass Selective Axial Transport Using Quadrupolar DC	60/721,072	
Method and Apparatus for Mass Selective Axial Transport Using Quadrupolar DC System and Method for Modifying the Fringing Fields of a Radio Frequency Multipole	11/434,814 10/448,376	7,019,290
Steroid Hormone Analysis by Mass Spectrometry	60/462,746	
Frontal Affinity Chromatography/MALDI Tandem Mass Spectrometry	60/573,009	
Capillary Scale Frontal Affinity	11/135,490	7,317,187
Method for providing barrier fields at the entrance and exit end of a mass spectrometer	60/572,489	
Method and System for providing barrier fields at the entrance and exit end of a mass spectrometer	60/572,490	
Method for providing barrier fields at the entrance and exit end of a mass spectrometer	11/133,325	7,227,130
Method for providing barrier fields at the entrance and exit end of a mass spectrometer	11/477,449	7,365,319
Method and Apparatus for Sample Deposition	60/651,203	
Method and Apparatus for Sample Deposition	60/651,362	
Method and Apparatus for Sample Deposition	11/349,337	
Tilted Rod Linear Ion Trap	60/573,409	
Tilted Rod Linear Ion Trap	11/135,426	7,288,761
Axial ejection with AC barrier	11/122,097	7,084,398
Method and Apparatus for Improved Sensitivity in a Mass Spectrometer System	11/032,376	7,256,395
Method for Scanning an Ion Trap Mass Spectrometer	60/738,986	
Method for Scanning an Ion Trap Mass Spectrometer	11/552,763	
Method and Apparatus for Multi Path Ion Guide	11/222,971	7,358,488
Fragmenting Ions in Mass Spectrometry	11/622,064	
Fragmenting Ions in Mass Spectrometry	60/757,867	
Systems and Methods for Calculating Ion Flux in Mass Spectrometry	60/756,234	
Systems and Methods for Calculating Ion Flux in Mass Spectrometry	11/619,858	
Method for Storing and Reacting Ions in a Mass Spectrometer	60/806,343	
Method for Storing and Reacting Ions in a Mass Spectrometer	11/769,254	
Linear ion trap for precursor ion multiplexing	60/740,640	
Method and Apparatus for Mass Selective Axial Transport Using Pulsed Axial Field	11/558,952	
Enhanced LC/MS target analysis through multiple standard additions	60/686,920	
System and Method for Analysis of Compounds Using A Mass Spectrometer	11/421,970	
Automated Analysis of Complex Matrices Using Mass Spectrometer	60/742,910	
Automated Analysis of Complex Matrices Using Mass Spectrometer	60/803,355	
Automated Analysis of Complex Matrices Using Mass Spectrometer	11/567,281	
Method and apparatus for improving thermal stability in mass spectrometer	11/548,311	
Mass spectrometer method for thermal stability compensation	11/548,322	
Ion trap for positive and negative ions.	60/788,093	
Ion trap for positive and negative ions.	11/689,742	
Method and Apparatus for Reducing Contamination in a Mass Spectrometer	60/779,818	
Method and Apparatus for Reducing Contamination in a Mass Spectrometer	11,680,196	
Scan Time Data Pre-organization for Fast Post Scan Processing and Archival	60/686,918	

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<u>Patent Title</u>	<u>Serial No.</u>	<u>Patent No.</u>
Scan Time Data Pre-organization for Fast Post Scan Processing and Archival	11/421,854	7,391,015
Device for Generation of an Axial Gas Flow through an RF Multipole	60/771,115	
Device for Generation of an Axial Gas Flow through an RF Multipole	11/703,756	
High-throughput Screening of Biological Disorders Using A Laser Desorption Ion Source Coupled To A Mass Analyzer	61/025,052	
Multiple Ion Guides for Improved Ion Sampling Efficiency	11/315,788	7,259,371
Improved Quadrupole Mass Analyzer with a Hexapole Field	60/771,255	
Linear quadrupoles with added hexapole field and method of building and operating same	11/703,478	
Method of Operating Quadrupoles with Added Multipole Fields To Provide Mass Analysis in Islands of Stability	11/703,381	
Confining Ions with Fast Oscillating Electric Fields	11/774,807	
Mass Defect Triggered Information Dependent Acquisition	11/620,061	
Mass Defect Triggered Information Dependent Acquisition	60/756,208	
Potential lift for tandem mass spectrometry	61/024,650	
Ion source with collisional cooling	60/885,788	
Apparatus And Method For Cooling Ions	12/016,282	
Method of Disulfide noise reduction (Chemical Noise Reduction for Mass Spectrometry)	60/765,809	
Chemical Noise Reduction For Mass Spectrometry	11/672,101	
Laser Desorption Ion Source With Ion Guide Coupling For Ion Mass Spectroscopy	11/317,368	7,405,397
Resonant excitation ion transfer	60/807,779	
Resonant excitation ion transfer	11/778,954	
Methods for cooling ions in a linear ion trap	61/025,139	
Capitalizing on the unequal distribution of ion intensity across multiple anodes	60/823,918	
Capitalizing on the unequal distribution of ion intensity across multiple anode	11/846,719	
Collision Cell For Mass Spectrometer	60/973,547	
Method for removing noise from mass spectra	60/887,915	
Systems And Methods For Reducing Noise From Mass Spectra	12/023,873	
Apparatus and Methods for Mass Calibrant Introduction	60/826,811	
Multiple Sample Sources For Use With Mass Spectrometers, And Apparatus, Devices, And Methods Therefor	11/860,859	
Apparatus and Methods for Mass Calibrant Introduction	60/867,123	
Methods for Fragmenting Ions in a Linear Ion Trap	61/025,023	
Method of Operating a Linear Ion Trap to Provide Low Pressure Short Time High Amplitude Excitation	61/025,037	
Axial Ejection and In-Trap Fragmentation Using Auxiliary Electrodes in a Multipole Mass Spectrometer	60/827,234	
Methods for Data Processing	11/848,717	
Method for Axial Ejection and In-Trap Fragmentation Using Auxiliary Electrodes in a Multipole Mass Spectrometer	11/839,081	
A Multipole Ion Guide for Providing an Axial Electric Field whose Strength Increases with Radial Position, and a Method of Operating a Multipole Ion Guide Having Such an Axial Electric Field	61/059,962	
LC/MS/MS Analysis of Conjugated Metabolites of Alcohol Consumption	60/976,339	
Multipole Mass Filter Having Improved Mass Resolution	11/743,176	
Method for Enhancing Mass Assignment Accuracy	11/842,251	
Method for Enhancing the Duty Cycle of an Ion Trap Mass Spectrometer	60/896,620	
Method for Enhancing the Duty Cycle of an Ion Trap Mass Spectrometer	12/034,697	
Systems and Method of Analyzing Substances Using a Mass Spectrometer	60/992,172	
Systems and Methods for Analyzing Substances Using a Mass Spectrometer	61/038068	
Interface between DMA and mass spectrometer	60/980,837	

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REEL: 030182 FRAME: 0771

PATENT
REEL: 038038 FRAME: 0455

<u>Patent Title</u>	<u>Serial No.</u>	<u>Patent No.</u>
High resolution excitation/isolation of ions in a low pressure linear ion trap	60/986,687	
High resolution excitation/isolation of ions in a low pressure linear ion trap	12/240,060	
Interface between DMA and mass spectrometer	60/989,873	
Method of Quantitation by Mass Spectrometry	12/032,263	
Method of Improving Signal-to-Noise for Quantitation by Mass Spectrometry	12/035,499	
Method and Apparatus for Reducing Space Charge in an Ion Trap	61/017,203	
Relative Noise	12/102,537	
Linear Fains power supply	60/986,907	
Vacuum Driven Differential Mobility Spectrometer/Mass Spectrometer Interface with Adjustable Resolution and Selectivity	61/057,242	
Method and System for metering Modifier in Differential Mobility Spectrometer/Mass Spectrometer	61/057,531	
Method of Operating a Linear Ion Trap to Provide Low Pressure Short Time High Amplitude Excitation with Pulsed Pressure	61/025,057	

PATENT
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PATENT
REEL: 038038 FRAME: 0456

Schedule A-3

1. The agreement titled PE Sciex Joint Venture Extension and Other Commercial Matters between the Perkin-Elmer Corporation (now Applied Biosystems Inc.) and MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit) dated June 25, 1998.
2. The agreement titled Joint Venture Name Change Amendment Agreement among PE (Canada) Limited (now Applied Biosystems (Canada) Limited, MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit), PE Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) and PE Corporation (NY) (now Applied Biosystems Inc.) dated July 7, 2000.
3. The agreement titled Extended Amended and Restated Joint Venture Agreement among Applied Biosystems (Canada) Limited, MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit) and PE Corporation (NY) (now Applied Biosystems Inc.) dated October 1, 2001.
4. The agreement titled Technology License Agreement among Applied Biosystems (Canada) Limited, MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit), PE Corporation (NY) (now Applied Biosystems Inc.) and Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) dated October 1, 2001.
5. The agreement titled Distribution Agreement between Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) and PE Corporation (NY) (now Applied Biosystems Inc.) dated October 1, 2001.
6. The agreement titled Purchase Agreement between Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) and MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit), dated October 1, 2001.
7. The agreement titled Services Agreement among PE Corporation (NY) (now Applied Biosystems Inc.), MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit), and Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) dated October 1, 2001.
8. The agreement titled Amendment No. 1 to the Extended Amended and Restated Joint Venture Agreement and Related Agreements among Applied Biosystems (Canada) Limited, Applera Corporation (the successor of PE Corporation(NY)) through its Applied Biosystems Group (now Applied Biosystems Inc.), MDS Inc. through its MDS Sciex Division (now through its MDS Analytical Technologies business unit), and Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) dated October 22, 2004.
9. The agreement titled Second Name Change Agreement among Applied Biosystems (Canada) Limited, Applera Corporation through its Applied Biosystems Group (now

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REEL: 030182 FRAME: 0773

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Applied Biosystems Inc.), MDS Inc. through its business unit MDS Analytical Technologies and Applied Biosystems/MDS Sciex Instruments (now Applied Biosystems/MDS Analytical Technologies Instruments) dated January 31, 2008.

PATENT
REEL: 030182 FRAME: 0774

PATENT
REEL: 038038 FRAME: 0458

Schedule A-4

Patents and Patent Applications

<u>Serial Number</u>	<u>Patent Number</u>	<u>Title</u>
09/116294	6025140	Membrane-Permeable Constructs for Transport Across a Lipid Membrane
08/109548	5527675	Method and Apparatus for Degradation and Sequencing of Polymers Which Sequentially Eliminate Terminal Residues
08/487666	6133444	Synthons for the synthesis and deprotection of peptide nucleic acids under mild conditions
09/116793	6172226	Synthons for the synthesis and deprotection of peptide nucleic acids under mild conditions
09/569564	6265559	PNA synthons
08/910552	6063569	Methods for automated synthesis of PNA-DNA chimeras and compositions thereof
08/375910	5605623	Perfusive Chromatography (POROS)
08/806785	5833861	Perfusive Chromatography (POROS)
08/317161	5552041	Perfusive Chromatography (POROS)
08/005877	5234586	On-Line Product Identification in a Chromatography Effluent by Subtraction
08/457326	5641539	Molecular Imaging
07/440230	4958529	Interface for Coupling Liquid Chromatography to Solid or Gas Phase Detectors
07/633715	5095932	Check Valve for Fluid Delivery System
07/633714	5095938	Injector for Fluid Delivery System
07/633717	5111845	Partition Valve for Fluid Delivery System
07/633713	5123443	Fluid Delivery System
07/295048	5187270	Racemization Free Attachment of Amino Acids to a Solid Phase
07/893689	5254476	Method and System for Analysis of Peptides and Proteins
08/717208	5861351	Automated Allyl Deprotection in Solid-Phase Synthesis
08/803557	5777077	Automated Allyl Deprotection in Solid-Phase Synthesis
09/267993	6358692	High Speed, Automated, Continuous Flow, Multi-Dimensional Molecular Selection and Analysis
10/006630	6794148	High speed, automated, continuous flow, multi-dimensional molecular selection and analysis
08/425828	5630924	Compositions, Methods and Apparatus for Ultrafast Electro-separation Analysis
08/853031	5948231	Compositions, Methods and Apparatus for Ultrafast Electro-separation Analysis
08/425290	5757482	Module for Optical Detection in Microscale Fluidic Analyses

PATENT
REEL: 030182 FRAME: 0775

PATENT
REEL: 038038 FRAME: 0459

Serial Number	Patent Number	Title
08/726090	5885775	Methods for Determining Sequence Information in Polynucleotides using Mass Spectrometry
09/293314	6605475	Apparatus and Methods for Sample Delivery
09/293313	6375817	Apparatus and Methods for Sample Analysis
08/792933	5958202	Capillary Electrophoresis Enzyme Immunoassay
09/261013	6319476	Microfluidic Connector
09/345072	6193471	Pneumatic Control of Formation and Transport of Small Volume Liquid Samples
10/061985	6662818	Programmable tracking pressure regulator for control of higher pressures in microfluidic circuits
10/424326	6993958	Capillary Column Chromatography Process and System
10/061612	6581441	Capillary Column Chromatography Process and System
10/327342	7166441	Method and Apparatus for the Identification and Quantification of Biomolecules
08/278405	5498545	Mass Spectrometer System and Method for Matrix-Assisted Laser Desorption Measurements
09/755951	RE39353	Mass Spectrometer System and Method for Matrix-Assisted Laser Desorption Measurements
09/038324	RE37485	Mass Spectrometer System and Method for Matrix-Assisted Laser Desorption Measurements
09/352246	6057543	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
08/488127	5627369	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
08/446544	5625184	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
09/527697	6281493	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
08/730822	5760393	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
09/058605	6002127	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
09/086861	6541765	Improvements in Time of Flight Mass Spectrometry Analysis of Biomolecules
08/447175	5869240	Methods and Apparatus for Sequencing Polymers with a Statistical Certainty using Mass Spectrometry
08/844462	5821063	Methods and Apparatus for Sequencing Polymers with a Statistical Certainty using Mass Spectrometry
08/796598	5827659	Methods and Apparatus for Sequencing Polymers with a Statistical Certainty using Mass Spectrometry
09/233703	6348688	A Tandem Time-of-Flight Mass Spectrometer with Delayed Extraction and Method for Use

PATENT
REEL: 030182 FRAME: 0776

PATENT
REEL: 038038 FRAME: 0460

Serial Number	Patent Number	Title
10/023203	6770870	Tandem time-of-flight mass spectrometer with delayed extraction and method for use
09/590878	6534764	A Tandem Time-of-Flight Mass Spectrometer with Damping in Collision Cell and Method for Use
09/579989	6504150	Method and Apparatus for Determining Molecular Weight of Labile Molecules
10/356019	6670606	Preparation of Ion Pulse for Time-of-Flight and for Tandem Time-of-Flight Mass Analysis
09/546465	6545268	Preparation of ion pulse for time-of-flight and for tandem time-of-flight mass analysis
10/178631	6512225	A Tandem Time-of-Flight Mass Spectrometer with Improved Mass Resolution
09/712882	6441369	A Tandem Time-of-Flight Mass Spectrometer with Improved Mass Resolution
09/886734	6936224	Apparatus And Process for Transporting Sample Plates
10/045518	6672344	Robotic system having positionally adjustable multiple probes
10/198372	6621074	Tandem time-of-flight mass spectrometer with improved performance for determining molecular structure
10/227088	6900061	MALDI Plate and Process for Making a MALDI Plate
10/327471	6933497	Time-of-flight mass analyzer with multiple flight paths
10/683794	6844545	MALDI Plate with Removable Insert
10/683024	6825478	Maldi Plate with Removable Magnetic Insert
08/201906	5563933	Covalently Bonded Coatings

PATENT
REEL: 030182 FRAME: 0777

PATENT
REEL: 038038 FRAME: 0461

Schedule B-1

Trademarks and Trademark Applications

<u>Trademark</u>	<u>Serial Number</u>	<u>Reg. Number</u>
PREPSEQ	77531927	
THEY HIDE. YOU SEQ.	77531923	
ab Applied Biosystems	73759481	2389619
ab Applied Biosystems	75879270	2521732
ABI LV40	74596163	1985080
ABI PRISM (Wordmark w/Design)	74579590	2077830
ABI PRISM (Wordmark w/Design)	74692472	2038222
ABI PRISM (Wordmark w/Design)	76005678	2,889,452
ABI PRISM (Wordmark)	74538428	2109389
ABI PRISM (Wordmark)	74692474	2036533
ABI PRISM (Wordmark)	76005681	2652380
ABI PRISM (Wordmark)	76005680	2,845,210
ACCURT	78014560	2,973,961
ACCUSEQ	77419854	
AMPFLSTR	75635750	2152826
AMPFLSTR	76199497	2709887
AMPFLSTR COPIER	75489655	2507408
AMPLITYPE (Stylized)	74002714	1,641,691
AMPLIWAX (Stylized)	74133143	1,839,802
AMPPD	73804694	1,583,184
Applied Biosystems	75419172	2260626
Applied Biosystems	75419173	2369769
Applied Biosystems	76082124	2,896,016
Applied Biosystems	77379613	
Applied Biosystems (Design)	76085548	2,860,548
Applied Biosystems (Wordmark w/Design)	78066936	2,891,811
Applied Biosystems (Wordmark w/Design)	76977625	3,127,465
Applied Biosystems (Wordmark w/Design)	77379627	
Applied Biosystems (Wordmark w/Design)	77379619	
Applied Biosystems (Wordmark w/Design)	77379624	
APPLIEDBIO	77491265	
APPLIEDBIO.COM	77491262	

PATENT
REEL: 030182 FRAME: 0778

PATENT
REEL: 038038 FRAME: 0462

Trademark	Serial Number	Reg. Number
ASSAYS-BY-DESIGN	78133621	2,870,442
ASSAYS-BY-DESIGN	78089866	2,809,322
ASSAYS-ON-DEMAND	78095933	2,944,738
BigDye (Wordmark)	76294542	2552631
BIGDYE XTERMINATOR	78/827961	3,424,424
BIOASSURANCE	78153407	2,826,489
BioBest	75559725	2451476
BIOITRAQ	78/565157	3,395,829
BIOITRAQ (stylized)	78/565160	3,419,895
BIOMAINTEANCE	78153410	2,885,088
BIOMONITOR	78/214992	2,940,748
BIOPARTS	78153414	2,948,654
BIOQUALIFICATION	78158926	3,159,683
BIOREPAIR	78153417	2,949,655
BLOODFREP	78/225372	2,958,625
CAMP-SCREEN	75/657995	2,727,439
CAMP-SCREEN DIRECT	78116589	2,789,773
CARD (Design)	73839973	2501391
CDP-STAR	75/007515	2,056,849
CENTRIRED	76075993	2626044
COPIER	75489654	2536378
CONSIDER THE EVIDENCE	78/827987	
COPYCALLER	77/404413	
CSPD	74/217144	1,740,741
DUAL-LIGHT	75/241107	2,130,554
EXPLORE THE STORE	78/749795	
EXPLORE THE STORE... AND MORE	78/777574	
PASTPHORAMIDITE	74414781	1897918
FMAT (Wordmark)	75540070	2443097
FMAT (Wordmark)	75540069	2562126
GALACTON	75/038590	2,015,773
GALACTON-PLUS	75/038591	2,015,774
GALACTON-STAR	75/075396	2,052,448
GENEAMP	74/077210	1,788,777
GENEAMP (Stylized)	73/757793	1,572,682
GeneKeeper	75786380	2605258

PATENT
REEL: 030182 FRAME: 0779

PATENT
REEL: 038038 FRAME: 0463

Trademark	Serial Number	Reg. Number
GENEMAPPER	76026757	2,798,153
GLUCURON	75/038593	2,052,212
HID & DESIGN	78/827953	3,455,505
Hot Start, Strong Finish	75812623	2,897,523
IDENTIFILER	75863453	2579574
InteraX	76315876	
ITRAQ	78/331745	3,206,615
LANE GUIDE	75738297	2646212
LIFE EVEN BETTER	77/386944	
LIZ	76111009	2526139
LUC-SCREEN	75/544640	2,425,580
MABCAPTURE	78/866284	
METHYLSEQR	78/827970	3,332,166
MicroAmp	74297021	1761179
MICROAMP	78/697313	3,291,785
Microbiology Goes Molecular	78/169145	2,801,501
MicroSeq (Design)	75664482	2502554
MicroSeq (Design)	75664484	2574135
MicroSeq (Wordmark)	75318351	2564896
MT NAVIGATOR	75676477	2543309
MTRAQ	78/912653	
NANOAMP	78/600080	3319867
NA-STAR	76/073377	2,660,258
NUCPREP	78126788	2,841,573
OneStep	74414780	1897917
OPC	74381787	1859527
PET	75908408	2696150
POP-37	76179333	2,867,114
PrepMan	75868427	2,875,885
PREPSEQ	77/419882	
Primer Express	74688397	2186161
PRIMER FOCUS	78074151	2,867,681
ProBlot	74242414	1725313
PROFILER	75244316	2371414
PROFILER PLUS	76324190	2677012
ProSorb	74676444	2196154

PATENT
REEL: 030182 FRAME: 0780

PATENT
REEL: 038038 FRAME: 0464

Trademark	Serial Number	Reg. Number
PROTEINSEQ	77/419869	
QUANTIBLOT	74/429294	1,889,139
QUANTIFILER	78227107	2,960,890
QUANTIFY WITH QUANTIFILER	78/827966	
RESDNASEQ	77/419866	
SCIENCE FOR LIFE	75783675	3,079,994
SCIENCE FOR LIFE	75783506	3,009,029
SEQ	77/419875	
SEQSCAPE	76199495	2636865
SEQUENCEPRO	76143321	2572147
SGM PLUS	75526880	2510843
SNAPSHOT	75676530	2396513
SNFLEX	78/200643	3,133,672
SOLID	77/073741	
SOLID (Stylized)	77/075203	
SQL*LIMS	75922676	2,826,800
STEPONE	77/050760	
STOCKMARKS	74589267	1950675
STEPONEPLUS	77/050762	
Synthasist	74349144	1791436
TARGETSEQ	78/749841	
TEMPUS	78/227773	3,107,491
TROPIX	73/804699	1,583,186
True Allele	75349074	2336527
VARIANT REPORTER	77/244612	
VARIANTSEQR	78/296724	3,437,505
VERITI	78/946610	3,486,513
VIC	75575904	2520577
VIRALSEQ	77/419861	
XTERMINATOR	77/050759	
YFILER	78/509363	3,181,688
Y-FILER	78321133	3,090,992
ZIPCHUTE	78200609	3,090,892

PATENT
REEL: 030182 FRAME: 0781

PATENT
REEL: 038038 FRAME: 0465

Schedule B-2

Trademarks and Trademark Applications

<u>Trademark</u>	<u>Serial Number</u>	<u>Reg. Number</u>
CYTOFLUOR	74153631	1,824,134
FRACTAL DESIGN	74137570	1,564,900
PERFUSION CHROMATOGRAPHY	74137381	1,583,653
PERSEPTIVE BIOSYSTEMS	74137573	1,571,028
POROS	73831040	1,529,879
POROSZYME	75212374	2,116,299
SELF PACK	747616617	1,945,535

RECORDED: 04/09/2013

PATENT
REEL: 030182 FRAME: 0782

RECORDED: 03/08/2016

PATENT
REEL: 038038 FRAME: 0466