

1) Family number: 30063094 (US2002192808A)

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Title:	INSTRUMENT FOR MONITORING POLYMERASE CHAIN REACTION OF DNA			
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	US20160997883 20160118	US20160997832 20160118	US20160065834 20160309	
	JP20160125179 20160624			

Family:

Publication number	Publication date	Application number	Application date
AT403856 E	20080815	AT19990924365T	19990517
AT425448 E	20090315	AT19990016677T	19990517
AT498122 E	20110215	AT20040813858T	20041213
AT537438 E	20111215	AT20030738941T	20030519
AU199940884 A1	19991206	AU19990040884	19990517
AU2003243268 AA	20031202	AU20030243268	20030519
AU2003243268 AH	20031202	AU20030243268	20030519
AU2003243281 AA	20031202	AU20030243281	20030519
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AU2003245302 AA	20031202	AU20030245302	20030519
AU2003245302 AH	20031202	AU20030245302	20030519
AU759974 B2	20030501	AU19990040884	19990517
CA2328609 AA	20001110	CA19992328609	19990517
CA2566924 AA	19991125	CA19992566924	19990517
CA2566924 C	20111129	CA19992566924	19990517
CN1201016 C	20050511	CN19998006199	19990517
CN1309766 A	20010822	CN19998006199	19990517
CN1664562 A	20050907	CN200510054851	19990517
DE602004031358 D1	20110324	DE200460031358T	20041213
DE60339404 D1	20120209	DE20036039404	20030519
DE60345078 D1	20131205	DE20036045078	20030519
DE60346177 D1	20140703	DE20036046177	20030519
DE60347431 D1	20150507	DE20036047431	20030519
DE60347606 D1	20150625	DE20036047606	20030519
DE60348478 D1	20160225	DE20036048478	20030519
DE60348837 D1	20160525	DE20036048837	20030519
DE60350613 D1	20171026	DE20036050613	20030519
DE60352159 D1	20190814	DE20036052159	20030519
DE69939259 D1	20080918	DE19996039259	19990517
DE69940574 D1	20090423	DE19996040574	19990517
DE69943902 D1	20120202	DE19996043902	19990517
DE69945934 D1	20190529	DE19996045934	19990517
EP1078245 A1	20010228	EP19990924365	19990517
EP1078245 B1	20080806	EP19990924365	19990517
EP1506390 A2	20050216	EP20030738941	20030519
EP1506390 A4	20091202	EP20030738941	20030519
EP1506390 B1	20111214	EP20030738941	20030519
EP1511990 A2	20050309	EP20030753099	20030519
EP1511990 A4	20091209	EP20030753099	20030519
EP1511990 B1	20150325	EP20030753099	20030519
EP1511991 A2	20050309	EP20030753106	20030519
EP1511991 A4	20110420	EP20030753106	20030519
EP1511991 B1	20150506	EP20030753106	20030519
EP1619491 A1	20060125	EP20050016677	19990517
EP1619491 B1	20090311	EP20050016677	19990517
EP1692492 A1	20060823	EP20040813858	20041213

EP1692492 B1	20110209	EP20040813858	20041213
EP1807726 A2	20070718	EP20050849156	20051103
EP1807726 B1	20160427	EP20050849156	20051103
EP1890182 A2	20080220	EP20070120202	20051103
EP1978351 A2	20081008	EP20080011345	19990517
EP1978351 A3	20081015	EP20080011345	19990517
EP1978351 B1	20111130	EP20080011345	19990517
EP2306233 A2	20110406	EP20100075604	20051103
EP2306233 A3	20110720	EP20100075604	20051103
EP2315002 A2	20110427	EP20100012503	19990517
EP2315002 A3	20121205	EP20100012503	19990517
EP2444793 A1	20120425	EP20110193359	20030519
EP2444793 B1	20140507	EP20110193359	20030519
EP2463644 A1	20120613	EP20120156268	20030519
EP2463644 B1	20131009	EP20120156268	20030519
EP2674745 A1	20131218	EP20130184168	20030519
EP2674745 B1	20160413	EP20130184168	20030519
EP2775291 A1	20140910	EP20140167180	20030519
EP2775291 B1	20160113	EP20140167180	20030519
EP3035037 A1	20160622	EP20160150671	20030519
EP3035037 B1	20170913	EP20160150671	20030519
EP3093649 A2	20161116	EP20160172036	19990517
EP3093649 A3	20170426	EP20160172036	19990517
EP3093649 B1	20190508	EP20160172036	19990517
EP3312594 A1	20180425	EP20170190044	20030519
EP3312594 B1	20190724	EP20170190044	20030519
ES2543587 T3	20150820	ES20030753106T	20030519
JP2003524754 T2	20030819	JP20000549942T	19990517
JP2005274579 A2	20051006	JP20050119102	20050415
JP2005526252 T2	20050902	JP20040505746T	20030519
JP2005526253 T2	20050902	JP20040505747T	20030519
JP2005526254 T2	20050902	JP20040505748T	20030519
JP2008519266 T2	20080605	JP20070539342T	20051103
JP2009002955 A2	20090108	JP20080187698	20080718
JP2011039071 A2	20110224	JP20100214585	20100924
JP2011059134 A2	20110324	JP20100288958	20101224
JP2013178254 A2	20130909	JP20130080246	20130408
JP2014081391 A2	20140508	JP20140024057	20140212
JP2015072285 A2	20150416	JP20150000189	20150105
JP2016076501 A2	20160512	JP20160002231	20160108
JP2016195602 A2	20161124	JP20160125179	20160624
JP5881226 B2	20160309	JP20150000189	20150105
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US2002192808 AA	20021219	US20020216620	20020809
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US2007238161 AA	20071011	US20070804151	20070517
US2008316482 AA	20081225	US20080222820	20080818
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WO03098278 A3	20040212	WO2003US15941	20030519
WO03098279 A2	20031127	WO2003US15945	20030519
WO03098279 A3	20040408	WO2003US15945	20030519
WO05059525 A1	20050630	WO2004US41600	20041213
WO06052682 A2	20060518	WO2005US39839	20051103
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WO9960381 A1	19991125	WO1999US11088	19990517

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Designated states: AE AG AL AM AT AU AZ BA BB BE BF BG BJ BR BW BY BZ CA CF CG CH CI CM CN CO CR CU CY CZ DE DK DM DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GW HR HU ID IE IL IN IS IT JP KE KG KM KN KP KR KZ LC LI LK LR LS LT LU LV LY MA MC MD MG MK ML MN MR MW MX NA NE NG NI NL NO NZ OM PG PH PL PT RO RU SC SD SE SG SI SK SL SM SN SY SZ TD TG TI TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW

International class (IPC 8-9): B01L3/00 B01L7/00 C12M1/00 C12M1/34 C12M1/36 C12M1/40 C12M3/00 C12N15/09 C12P19/34 C12Q1/00 C12Q1/68 F21K99/00 F21V19/00 F21V23/00 F21V29/503 F21V29/54 F21V29/67 F21V29/74 F21V29/76 F21V29/90 F21V9/16 G01J1/58 G01J3/02 G01J3/10 G01J3/28 G01N1/00 G01N21/00 G01N21/01 G01N21/03 G01N21/25 G01N21/27 G01N21/63 G01N21/64 G01N21/66 G01N21/75 G01N21/76 G01N21/78 G01N33/53 G02B26/10 G05D23/00 G05D23/19 G05D23/20 G06F19/00 H01J7/24 H05B33/08 H05B37/02 (Advanced/Invention); B01L3/00 C12N15/09 C12Q1/68 F21Y101/02 G01N21/03 G01N21/25 G01N21/64 (Advanced/Non-invention); C12M1/34 C12M1/40 C12M3/00 F21V9/00 G01J1/00 G01N21/63 (Core/Invention)

International class (IPC 1-7): C12M1/00 C12M1/34 C12N15/09 C12P19/34 C12Q1/68 F21V9/16 G01N21/01 G01N21/25 G01N21/64 G01N21/65 G01N21/78 G02B

CPC: G01N2021/6478 G01N2021/6471 G01N21/278 G01N21/6456 G01N2201/0612 G01N21/6486 G01N2201/0627 F21V29/763 B01L2300/1805 F21K9/00 F21V29/54 F21V29/677 F21V29/74 G01J3/0286 G01J3/10 G01N2201/062 G01N2201/1211 G05D23/1919 G05D23/20 G01N21/64 G01N2201/0638 F21Y2115/10 F21K9/64 Y10S435/808 Y10S435/809 B01L3/5085 B01L7/52 C12Q1/686 C12Q2545/101 G01N21/274 G01N21/6428 G01N21/645 G01N21/6452 G01N2021/6419 G01N2021/6421 G01N2021/6439 G01N2021/6441 G01N2021/6463 G01N2021/6482 G01N2201/0245 G01N2201/0628 G01N2201/0635 B01L2200/10 B01L2300/0654 B01L2300/0663 B01L2300/1811 G01N2201/06113 G01N2201/0636 G01N2201/068 G01N21/0303

European class: B01L7/00D B01L7/52 F21K9/00 G01N21/03A G01N21/27E G01N21/64H G01N21/64P G01N21/64P2 G01N21/64P4 G05D23/20E L01L3/5085 L01L7/52 M12Q545/101 R21Y101/02 S01N201/024B S01N201/062 S01N201/062K S01N201/062L S01N201/063G S01N201/121B S01N21/03A S01N21/27E3

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US class:

1/1 250/458.1 250/458.100P 250/458.100S 250/459.1 250/459.100S 250/461.1 250/461.2 250/462.1
250/483.1 315/112 315/112S 315/118 315/118S 356/244 356/244S 356/317 356/317P 356/417
356/417P 356/72 356/73 359/35 359/350 359/350S 378/42 378/44 378/45 422/63 422/63S 422/82.05
422/82.050S 422/82.08 422/82.080P 422/82.080S 435/286.1 435/286.100P 435/287.1 435/287.2
435/287.200P 435/287.200S 435/287.3 435/287.300S 435/288.3 435/288.4 435/288.400S 435/288.7
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435/6.11 435/6.110S 435/6.12 435/6.13 435/6.130P 435/6.16 435/6.160P 435/6P 435/6S 435/808
435/809 435/91.2 435/91.200P 436/172 436/172S 702/20 702/20S

[Classification Explorer](#)

Cited documents:

WO9960381 A1, WO9960381 A1, WO9950916 A1, WO9923474 A1, WO9912008 A1, WO9909455 A1,
WO9909455 A1, WO9908096 A1, WO9857151 A1, WO9853301 A2, WO9850782 A2, WO9850782 A2,
WO9848262 A1, WO9848262 A1, WO9841854 A1, WO9841854 A1, WO9828075 A1, WO9828075 A1,
WO9817992 A2, WO9817992 A2, WO9813683 A1, WO9812536 A1, WO9812536, WO9807022 A1,
WO9807022 A1, WO98012536, WO9746708 A1, WO9746708 A1, WO9746707 A2, WO9739330 A1,
WO9734171 A2, WO9734171, WO9732197 A1, WO9732197 A1, WO9723649 A1, WO9721089 A1,
WO9719342 A1, WO9714026 A2, WO9714026 A2, WO9708523 A1, WO97046708, WO97034171,
WO9607888 A1, WO9605488 A1, WO9602824, WO9530139 A1, WO9530139 A1, WO9523348 A1,
WO9511961 A1, WO9511961 A1, WO90007275, WO8909437 A1, WO60092785, WO04074820 A2,
WO04074820, WO03098279 A2, WO03098278 A2, WO03023829 A2, WO03021212 A1, WO03010524 A1,
WO0223163 A1, WO0217219 A1, WO02059577 A2, WO0196837 A1, WO0184463 A2, WO0184463 A2,
WO0177648 A1, WO0169211 A1, WO0169211 A1, WO0156369, WO0135079 A1, WO0135079,
WO0113096 A1, WO0103507 A1, WO0058715 A2, WO0058715 A2, WO0031518 A1, WO0031518 A1,
WO0025113 A1, WO0013017 A2, WO0004366 A1, WO0004366 A1, US9911088, US981440, US9285318
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US6133986 A, US6132578 A, US6121603 A, US6110683 A, US6098272 A, US6096272 A, US6084667 A,
US6066459 A, US6066245 A, US6057114 A, US6040940 A, US6040586 A, US6040586 A, US6026323 A,
US6017434 A, US60092785, US6005663 A, US5990479 A, US5990479 A, US5958349 A, US5943129 A,
US5928907 A, US5926271 A, US5891656 A, US5872623 A, US5863502 A, US5863502 A, US5858653 A,
US5854854 A, US5854684 A, US5848842 A, US5846842 A, US5844208 A, US5837196 A, US5834206 A,
US5834203 A, US5833827 A, US5833826 A, US5822060 A, US5792610 A, US5790727 A, US5788889 A,
US5784157 A, US5784152 A, US5784152 A, US5779978 A, US5779972 A, US5766889 A, US5766889 A,
US5759781 A, US5757014 A, US5754291 A, US5750781 A, US5741412 A, US5741411 A, US5736333 A,
US5735333 A, US5730850 A, US5717602 A, US5710628 A, US5710602 A, US5707797 A, US5707797 A,
US5695626 A, US5695626 A, US5679457 A, US5679457 A, US5675155 A, US5672881 A, US5672881 A,
US5672880 A, US5667656 A, US5656493 A, US5656493 A, US5636017 A, US5635402 A, US5633752 A,
US5627643 A, US5626936 A, US5626936 A, US5595708 A, US5593788 A, US5593788 A, US5585242 A,
US5582705 A, US5567947 A, US5567847 A, US5557398 A, US5554450 A, US5554450 A, US5547849 A,
US5529679 A, US5527684 A, US5515682 A, US5515169 A, US5512758 A, US5496517 A, US5491343 A,
US5477853 A, US5475610 A, US5475610 A, US5470710 A, US5459325 A, US5439578 A, US5424841 A,
US5397709 A, US5389544 A, US5388544 A, US5383023 A, US5383020 A, US5377004 A, US5371624 A,
US5371016 A, US5366608 A, US5355215 A, US5340453 A, US5340453 A, US5337740 A, US5315375 A,
US5314602 A, US5304810 A, US5290904 A, US5290904 A, US5277780 A, US5275951 A, US5268080 A,
US5259381 A, US5256880 A, US5256860 A, US5248540 A, US5243540 A, US5241363 A, US5215883 A,
US5192412 A, US5173748 A, US5169601 A, US5166800 A, US5157262 A, US5141609 A, US5127730 A,
US5091652 A, US5081652 A, US5073029 A, US5030002 A, US5018866 A, US4989977 A, US4972258 A,
US4887721 A, US4852985 A, US4832815 A, US4786165 A, US4762420 A, US4756427 A, US4689202 A,
US4683202 A, US4683202 A, US4673877 A, US4673289 A, US4661913 A, US4660971 A, US4643877 A,
US4626884 A, US4626684 A, US4537861 A, US4537861 A, US4487477 A, US4412543 A, US44092003,
US44092003, US440920 A, US44085203, US440852 A, US44071903, US4356429 A, US4356429 A,
US4284897 A, US4200801 A, US4076420 A, US3973129 A, US3963351 A, US3963351 A, US3811777 A,
US21662002, US2011159549 AA, US2010216143 AA, US2007105212 AA, US2005279949 AA,
US2005057749 AA, US2005009174 AA, US2004253714 AA, US2004207532 AA, US2004207532 AA,
US2004166249 AA, US2004165256 AA, US2004086956 AA, US2004070763 AA, US2004038390 AA,
US2004014202 AA, US2004009586 AA, US2003230728 AA, US2003176776 AA, US2003160957 AA,
US2003160182 AA, US2003116497 AA, US2003030804 AA, US2002185610 AA, US2002160535 AA,
US2002146688 AA, US2002109100 AA, US2002060791 AA, US2002056804 AA, US2002055178 AA,
US2002024026 AA, US2001033374 AA, US10440852, JPS63287177, JPS6216911 U, JPS60108457,
JPS57186169, JPPE0065409, JP9503308 T2, JP9304276 A2, JP9292572 A2, JP9281078 A2, JP9281078,
JP9230246 A2, JP9230246, JP9229862 A2, JP9229862, JP9166752 A2, JP9072843 A2, JP8271521 A2,
JP8094940 A2, JP8066199 A2, JP7174701 A2, JP7163397 A2, JP7163397, JP7120393 A2, JP7120392 A2,
JP63287177 A2, JP62249778, JP62169911 A2, JP6216911 A2, JP62016911 U1, JP62016911 U,
JP62016911 U, JP62016911 A2, JP6201468 A2, JP6108457 A2, JP6045654 B2, JP6045654 B2, JP6045654
A2, JP60108457 A2, JP57186169 A2, JP3504046 T2, JP3504046, JP3504046, JP2009503308,
JP2009304276, JP2009230246 A2, JP2009072843 A2, JP2007163397 A2, JP2006201468, JP2004264312
A2, JP2004247312 A2, JP2004246047 A2, JP2004219322 A2, JP2003521696 T2, JP2003521696,
JP2002116508 A2, JP2002116508, JP2002116141 A2, JP2001500986 T2, JP2001500628 T2,
JP2001346002 A2, JP2001346002, JP2001108684 A2, JP2001083090 A2, JP2000503857 T2,
JP2000180922 A2, JP2000121559 A2, JP11271227, JP1096862, JP10115783 A2, JP10115781,
JP10096862, JP10096862, GB2313512 A1, GB2313512 A1, GB2039031 A1, GB2039031 A1, EP1447710
A1, EP1447710, EP1124128 A2, EP1124128 A2, EP0987539 A1, EP0854362 A2, EP0802413 A2,
EP0802413 A2, EP0686699 A2, EP0668498 A2, EP0640828 B1, EP0640828 A1, EP0622455 A1,
EP0616211 A1, EP0545284 A1, EP0065409 A2, DE3717274 A1, DE3441179 A1, DE19925161 A1,
DE19748211 A1, DE19651667 A1, DE19649605 A1, DE19624421 A1, CA2410688 AA, CA2410688 AA,

Forward Citations:

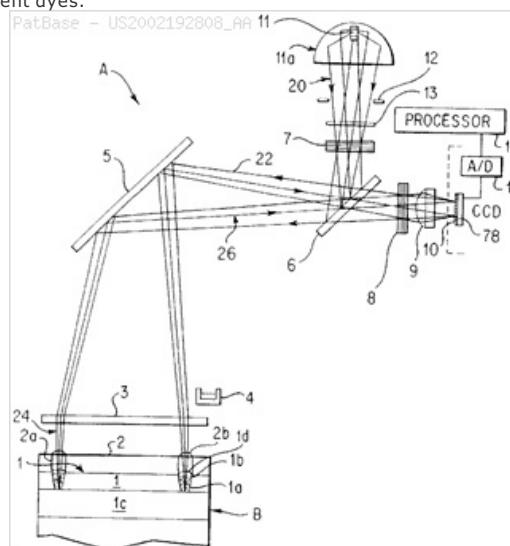
WO18117351, WO18094169, WO18073326, WO17194628, WO17161046, WO17119884, WO17075519,
WO16187535, WO16066156, WO15189298, WO15106024, WO15056501, WO14194028, WO14130970,
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WO12151358, WO12151358, WO12063097, WO11106522, WO11031377, WO10121643, WO10110096,

WO10065779, WO10065779, WO10052431, WO10048512, WO10007386, WO10007386, WO09156942, WO09134980, WO09098624, WO09056669, WO09006447, WO08154317, WO08086890, WO08066747, WO08032251, WO08024080, WO08011875, WO07138302, WO07118209, WO07063457, WO07063457, WO07031203, WO07027634, WO06119368, WO06119368, WO06110460, WO06110460, WO06078036, WO06073811, WO06073811, WO05068976, WO05068976, WO05059525, WO04009239, WO03098279, WO03098279, WO03098278, WO03098277, WO03098277, WO0206796, USD831843, USD787087, USD742027, USD692162, USD669191, USD665095, USD641918, USD640189, USD620432, USD615488, USD610986, US9989527, US9974630, US9956559, US9952240, US9951438, US9951381, US9946004, US9932628, US9931636, US9929325, US9925538, US9915613, US9915601, US9909171, US9907494, US9891217, US9885715, US9880153, US9874674, US9863871, US9856535, US9856517, US9828598, US9823195, US9821311, US9816131, US9815057, US9810704, US9810631, US9803169, US9802199, US9802193, US9780518, US9776187, US9772291, US9765389, 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Abstract:

An optical instrument monitors PCR replication of DNA in a reaction apparatus having a temperature cycled block with vials of reaction ingredients including dye that fluoresces in presence of double-stranded DNA. A beam splitter passes an excitation beam to the vials to fluoresce the dye. An emission beam from the dye is passed by the beam splitter to a CCD detector from which a processor computes DNA concentration. A reference strip with a plurality of reference emitters emit reference beams of different intensity, from which the processor selects an optimum emitter for compensating for drift. Exposure time is automatically adjusted for keeping within optimum dynamic ranges of the CCD and processor. A module of the beam splitter and associated optical filters is associated with selected dye, and is replaceable for different dyes.



2) Family number: 61181702 (CO7420255A)

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Title: SISTEMA TELEOPERADO PARA SELECCION DE MASAS PARA UNA MAQUINA QUE OPERA CON MASAS VARIABLES Teleoperated SYSTEM FOR MASS SELECTION FOR A MACHINE THAT OPERATES WITH VARIABLE MASSES (Machine translation)

Priority: CO20150156540 20150708

Family:

Publication number	Publication date	Application number	Application date
CO7420255 A1	20151020	CO20150156540	20150708

Probable Assignee: UNIVERSIDAD DE MEDELLIN

Assignee(s): UNIVERSIDAD DE MEDELLIN

Inventor(s): ANDRES FELIPE CANABAL GARZON ; CARLOS ALBERTO RODRIGUEZ ORTIZ ; JHON JAIR QUIZA

MONTEALEGRE ; OSCAR DANIEL IBARRA TOBAR ; SANTIAGO SALDARRIAGA ESCOBAR

Agent(s): MAURICIO JARAMILLO CAMPUZANO

International class B66F19/00 G06F7/00 (Advanced/Invention)
(IPC 8-9):

[Classification Explorer](#)

Abstract:

Source: CO7420255A [ES] RESUMEN Un sistema teleoperado para seleccion de masas para una maquina que opera con masas variables a fines de verificar las leyes mecanicas del movimiento de los cuerpos, en donde dicho sistema comprende un pasador en el cual se acoplan selectivamente respectivas unidades y que cae libremente simulando una caida libre, siendo que, dicho sistema teleoperado puede ser utilizado para otras operaciones en las que se requiera variar selectivamente masas o cargas.

Machine translation: SUMMARY A teleoperated system for mass selection for a machine that operates with variable mass in order to verify the mechanical laws of motion of bodies, wherein said system comprises a pin in respective units which selectively engage and freely falling simulating a free fall, with which, by the teleoperated system can be used for other operations where required selectively varying masses or charges.