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<i>B01D 21/26</i> (2006.01)	<i>G01B 11/10</i> (2006.01)
<i>B01L 3/00</i> (2006.01)	<i>G01N 21/27</i> (2006.01)
<i>B04B 7/08</i> (2006.01)	<i>G01N 35/10</i> (2006.01)
<i>B04B 15/00</i> (2006.01)	<i>B04B 9/14</i> (2006.01)
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English

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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[Continued on next page]

(54) Title: SYSTEM AND METHOD FOR PROCESSING SAMPLES

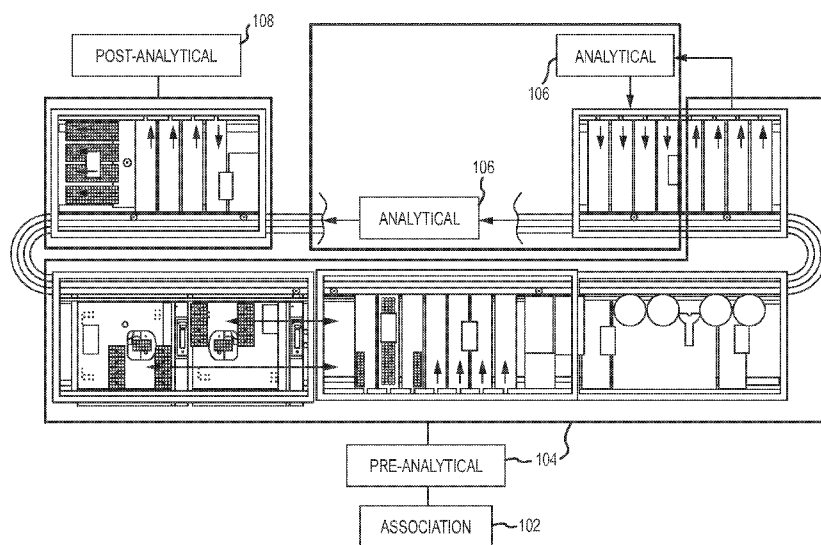


FIG. 1

(57) Abstract: An analytical laboratory system and method for processing samples is disclosed. The system includes a manager unit, as well as an aliquotter unit and a centrifuge unit.





— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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21 November 2013

INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER				
INV. G01N35/04	G01N35/00	B04B9/14	B04B7/02	B01D21/26
B01L3/00	B04B7/08	B04B15/00	G01M1/14	G01B11/02
B25J11/00	G01B11/08	G01B11/10	G01N21/27	G01N35/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2009/117620 A1 (FRITCHIE PATRICK P [US] ET AL) 7 May 2009 (2009-05-07)	1-6,8
Y	paragraphs [0058], [0071], [0074], [0078], [0081], [0090], [0091], [0156]; figures 1, 2, 3A,3B,9A-F	7,9-20, 24,29-50
X	US 6 444 171 B1 (SAKAZUME TAKU [JP] ET AL) 3 September 2002 (2002-09-03)	1-6,8, 21-23
Y	column 3, line 7 - column 4, line 56;	24-28
A	figure 1	7,11,12,
	column 6, line 19 - line 29	14,15,
	column 11, line 12 - line 27	17-20
Y	US 2010/291619 A1 (ROBINSON RONNIE J [US] ET AL) 18 November 2010 (2010-11-18)	7,14
	paragraphs [0022], [0160], [0204], [0205], [0208], [0217], [0412], [0506]; figures 1, 16, 20	
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Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 25 September 2013	Date of mailing of the international search report 04/10/2013
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Eidmann, Gunnar
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2012/063931

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2011/013701 A1 (HITACHI HIGH TECH CORP [JP]; FUKUGAKI TATSUYA [JP]; OGA HIROSHI [JP];) 3 February 2011 (2011-02-03) the whole document & US 2012/129673 A1 (FUKUGAKI TATSUYA [JP] ET AL) 24 May 2012 (2012-05-24) paragraph [0022] - paragraph [0024]; figures 1, 2 -----	11,12, 14,15, 17-20
Y	US 5 814 276 A (RIGGS ROBERT C [US]) 29 September 1998 (1998-09-29) column 2, line 11 - line 25 column 4, line 18 - column 5, line 67; figures 1,2 -----	9,10,13, 16,29-50
A	US 2008/069730 A1 (ITOH TERUAKI [JP]) 20 March 2008 (2008-03-20) paragraph [0029]; figures 1,2 -----	10,30
A	US 2011/065193 A1 (KITAGAWA NOBUHIRO [JP] ET AL) 17 March 2011 (2011-03-17) paragraph [0143]; figure 1 -----	10
A	US 2009/042281 A1 (CHANG JIM YUCHEN [US] ET AL) 12 February 2009 (2009-02-12) paragraph [0025] -----	38-50
A	US 2010/261595 A1 (SCHAEFER ANDREAS [DE] ET AL) 14 October 2010 (2010-10-14) paragraph [0385] -----	41,49
A	US 3 158 765 A (RICHARD POLGREEN GEOFFREY) 24 November 1964 (1964-11-24) column 2, line 71 - column 8, line 48; figures 1-6 -----	44
Y	JP 2008 032652 A (OLYMPUS CORP) 14 February 2008 (2008-02-14) paragraphs [0021], [0030], [0059], [0071]; figure 4 -----	25-28
A	US 2002/025064 A1 (ITOH TERUAKI [JP]) 28 February 2002 (2002-02-28) paragraph [0033] -----	26
A	US 2004/213651 A1 (MALIN COSMAS G [LI]) 28 October 2004 (2004-10-28) paragraph [0065] -----	26
A	US 2003/213313 A1 (KATAGI HITOMI [JP]) 20 November 2003 (2003-11-20) paragraph [0043]; figure 1 -----	26,27

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/063931

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-8, 11, 12, 14, 15, 17-24

A system capable of preparing a sample for laboratory analysis comprising a camera coupled to a gripper unit

2. claims: 9, 10, 13, 16, 29-50

A manager unit, input and output drawers

3. claims: 25-28

STAT samples

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/063931

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2009117620	A1	07-05-2009	CA 2704682 A1 14-05-2009
			EP 2227331 A2 15-09-2010
			EP 2305384 A1 06-04-2011
			JP 2011503544 A 27-01-2011
			US 2009117620 A1 07-05-2009
			US 2012282684 A1 08-11-2012
			WO 2009061641 A2 14-05-2009
US 6444171	B1	03-09-2002	JP 3930977 B2 13-06-2007
			JP 2000046842 A 18-02-2000
			US 6444171 B1 03-09-2002
US 2010291619	A1	18-11-2010	AU 2010248902 A1 24-11-2011
			AU 2010248907 A1 24-11-2011
			CA 2760975 A1 18-11-2010
			CA 2760978 A1 18-11-2010
			CN 102460180 A 16-05-2012
			CN 102460181 A 16-05-2012
			CN 102460182 A 16-05-2012
			CN 102460183 A 16-05-2012
			EP 2430457 A2 21-03-2012
			EP 2430459 A2 21-03-2012
			EP 2430460 A2 21-03-2012
			EP 2430461 A2 21-03-2012
			JP 2012526559 A 01-11-2012
			KR 20120027359 A 21-03-2012
			RU 2011145539 A 20-06-2013
			US 2010291619 A1 18-11-2010
			US 2010311108 A1 09-12-2010
			US 2011124028 A1 26-05-2011
			US 2011124029 A1 26-05-2011
			US 2011124030 A1 26-05-2011
			US 2011124038 A1 26-05-2011
			US 2011124096 A1 26-05-2011
			US 2011125314 A1 26-05-2011
			WO 2010132741 A2 18-11-2010
			WO 2010132746 A2 18-11-2010
			WO 2010132749 A2 18-11-2010
			WO 2010132780 A2 18-11-2010
			WO 2010132829 A2 18-11-2010
WO 2011013701	A1	03-02-2011	CN 102470380 A 23-05-2012
			EP 2460590 A1 06-06-2012
			JP 2011025181 A 10-02-2011
			US 2012129673 A1 24-05-2012
			WO 2011013701 A1 03-02-2011
US 5814276	A	29-09-1998	NONE
US 2008069730	A1	20-03-2008	CN 101149386 A 26-03-2008
			JP 4336360 B2 30-09-2009
			JP 2008076185 A 03-04-2008
			KR 20080026514 A 25-03-2008
			US 2008069730 A1 20-03-2008
US 2011065193	A1	17-03-2011	CN 102023227 A 20-04-2011
			EP 2299276 A2 23-03-2011
			JP 2011064537 A 31-03-2011

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2012/063931

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
		US 2011065193 A1	17-03-2011

US 2009042281	A1 12-02-2009	AU 2006226992 A1	28-09-2006
		CA 2601704 A1	28-09-2006
		EP 1869476 A2	26-12-2007
		JP 2008533989 A	28-08-2008
		US 2006257999 A1	16-11-2006
		US 2009042281 A1	12-02-2009
		WO 2006102416 A2	28-09-2006

US 2010261595	A1 14-10-2010	AU 2006298739 A1	12-04-2007
		CA 2623511 A1	12-04-2007
		DE 202006020707 U1	27-08-2009
		EP 1941284 A2	09-07-2008
		EP 2295981 A1	16-03-2011
		EP 2295982 A1	16-03-2011
		EP 2295983 A1	16-03-2011
		EP 2295984 A1	16-03-2011
		JP 5119377 B2	16-01-2013
		JP 2009510399 A	12-03-2009
		KR 20080066711 A	16-07-2008
		US 2010261595 A1	14-10-2010
		WO 2007039524 A2	12-04-2007

US 3158765	A 24-11-1964	GB 867045 A	03-05-1961
		US 3158765 A	24-11-1964

JP 2008032652	A 14-02-2008	NONE	

US 2002025064	A1 28-02-2002	JP 2002005942 A	09-01-2002
		US 2002025064 A1	28-02-2002

US 2004213651	A1 28-10-2004	EP 1441026 A1	28-07-2004
		US 2004213651 A1	28-10-2004

US 2003213313	A1 20-11-2003	DE 60300734 D1	07-07-2005
		DE 60300734 T2	04-05-2006
		EP 1348965 A2	01-10-2003
		JP 3740428 B2	01-02-2006
		JP 2003294769 A	15-10-2003
		US 2003213313 A1	20-11-2003
