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AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, 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, 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 LAYOUT FOR AN AUTOMATED SYSTEM FOR SAMPLE PREPARATION AND ANALYSIS

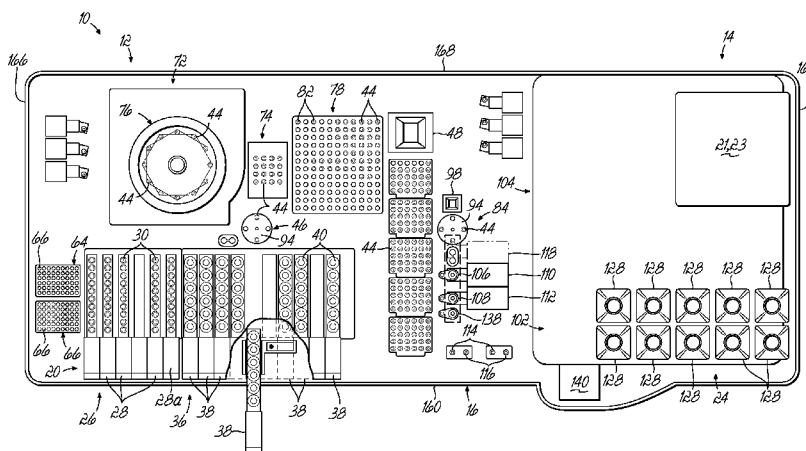


FIG. 2A

(57) Abstract: A sample preparation and analysis system (10). The system (10) includes a housing (16) with a sample preparation station (12) and a sample analysis station (14) positioned within the housing (16). The sample analysis station (14) is spaced away from the sample preparation station (12). A transport assembly (50) is configured to move at least one sample within the housing (16) and between the sample preparation station (12) and the sample analysis station (14).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. G01N35/02 G01N35/08 G01N30/72 H01J49/00 G01N30/06 G01N30/86 ADD. 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 H01J 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 2006/226358 A1 (ISHIKAWA MASAKI [JP] ET AL) 12 October 2006 (2006-10-12)	1-5,11,16
Y	paragraph [0054] - paragraph [0057]; figures 1-4	12
X	----- US 5 313 061 A (DREW RUSSELL C [US] ET AL) 17 May 1994 (1994-05-17)	1-5
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	paragraphs [0028], [0046], [0059]; figures 1,4 ----- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent but published on or after the international filing date "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) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "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 "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 "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 "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
6 July 2012		13/07/2012
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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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/137194 A1 (AMMANN KELLY G [US] ET AL) 26 September 2002 (2002-09-26) paragraphs [0094], [0136], [0144] - [0154], [0220], [0367], [0368], [0380], [0396]; figures 1,2,40-44,58 -----	1
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X	US 7 178 414 B1 (KOKOSA JOHN M [US]) 20 February 2007 (2007-02-20) column 3, line 43 - column 4, line 60; figures 1-3 -----	2
X	US 6 730 517 B1 (KOESTER HUBERT [US] ET AL) 4 May 2004 (2004-05-04) column 14, line 49 - column 19, line 20; figure 1 -----	2
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INTERNATIONAL SEARCH REPORT

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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.:

12
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: 1-5, 11, 16

sample preparation and analysis system

1.1. claim: 1

automatic transport assembly between sample preparation station and sample analysis station

1.2. claim: 2

automated biological specimen preparation and mass spectrometry analysis system

1.3. claim: 3

automated biological specimen preparation and mass spectrometry analysis system comprising mass spectrometer spaced away from the sample preparation station

1.4. claim: 4

automated biological specimen preparation and mass spectrometry analysis system comprising sample preparation station positioned within upper quadrant of a first end of a housing

1.5. claim: 5

automated biological specimen preparation and mass spectrometry analysis system comprising mass spectrometer positioned within lower quadrant of a second end of a housing

1.6. claim: 11

automated biological specimen preparation and mass spectrometry analysis system comprising a roughing pump

1.7. claim: 16

automated biological specimen preparation and analysis system

2. claim: 6

automated biological specimen preparation and mass spectrometry analysis system comprising a mass spectrometer being positioned on a support that is movable horizontally with respect to a housing

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

3. claims: 7, 8

automated biological specimen preparation and mass spectrometry analysis system comprising liquid chromatography pumps positioned at a height that is lower than a height of the sample preparation module

4. claims: 9, 10

automated biological specimen preparation and mass spectrometry analysis system comprising an ionization source being positioned towards a front face of the housing

5. claim: 12

automated biological specimen preparation and mass spectrometry analysis system comprising one or more liquid chromatography pumps and at least one liquid chromatography mobile phase container

6. claims: 13-15

automated biological specimen preparation and analysis system comprising serviceable components

7. claim: 17

automated biological specimen preparation and analysis system comprising an adjustable user interface

8. claims: 18-21

sample preparation and analysis system comprising a database containing a plurality of unique assays

INTERNATIONAL SEARCH REPORT

International application No

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