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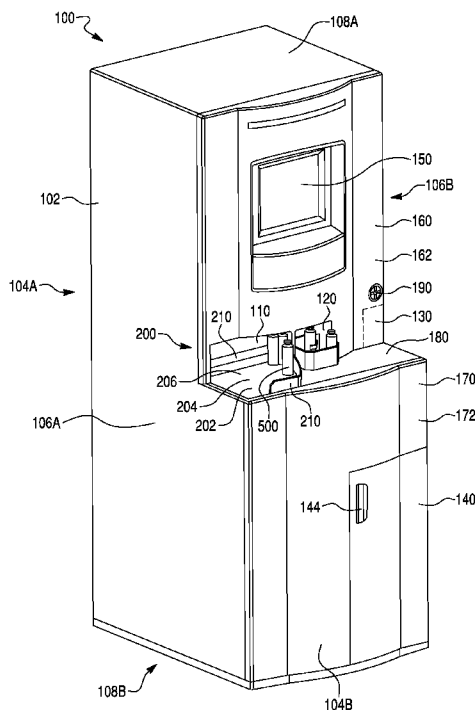
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[Continued on next page]

(54) Title: AUTOMATED MICROBIAL DETECTION APPARATUS

Fig. 1



(57) Abstract: A method and automated apparatus for rapid non-invasive detection of a microbial agent in a test sample is described herein. The apparatus may include one or more means for automated loading, automated transfer and/or automated unloading of a specimen container. The apparatus also includes a detection system for receiving a detection container, e.g., container or vial, containing a biological sample and culture media. The detection system may also include one or more heated sources, holding structures or racks, and/or a detection unit for monitoring and/or interrogating the specimen container to detect whether the container is positive for the presence of a microbial agent therein. In other embodiment, the automated instrument may include one or more, bar code readers, scanners, cameras, and/or weighing stations to aid in scanning, reading, imaging and weighing of specimen containers within the system.

WO 2010/132741 A3



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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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 practical, search terms used)
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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 2007/006903 A2 (HORIBA ABX SAS ET AL.) 18 January 2007 (2007-01-18) page 1, line 4 - page 10 page 10, line 15 - line 28 page 11, line 15 - line 28 page 12, line 20 - line 25 page 13, line 13 - line 21 page 14, line 28 - page 15, line 15 page 18, line 6 - page 19, line 8 page 20, line 11 - page 21, line 17 claim 11; figures 1-4	1-26, 37-44
Y	US 5 498 543 A (BERNDT) 12 March 1996 (1996-03-12) cited in the application column 1, line 8 - line 14 page 4, line 19 - line 41 figures 1-3	1-26, 37-44
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Further documents are listed in the continuation of Box C.

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 document but published on or after the international filing date
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- "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

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Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No
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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.
Y	US 2007/189926 A1 (LE COMTE) 16 August 2007 (2007-08-16) figures 1-5B paragraphs [0002], [0029] - [0042] -----	1-26, 37-44
Y	US 2006/216199 A1 (KOIKE) 28 September 2006 (2006-09-28) figures 1,2,4,48 the whole document -----	1-26, 37-44
Y	US 2008/318306 A1 (LE COMTE ET AL.) 25 December 2008 (2008-12-25) the whole document -----	1-26, 37-44
Y	EP 0 834 553 A2 (BECTON, DICKINSON AND COMPANY) 8 April 1998 (1998-04-08) the whole document -----	1-26, 37-44

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2010/034857

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2010/034857

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.:
1-26, 37-44

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: 1-26, 37-44

Automated detection apparatus for rapid non-invasive detection of microorganism growth in a test sample comprising a sealable specimen container, housing, holding structure, container locator device, automated loading mechanism, automatic transfer mechanism and detection unit and method by using the automatic detection apparatus.

2. claims: 27-30

Retention feature for retaining a container in a holding structure

3. claims: 31-36, 45-50

A storage testing apparatus for storage and/or testing a specimen sample and method for automated container management of one or more containers

4. claims: 51-53

A transfer mechanism for transferring a container from a first instrument to a second instrument comprising a conveyor belt
