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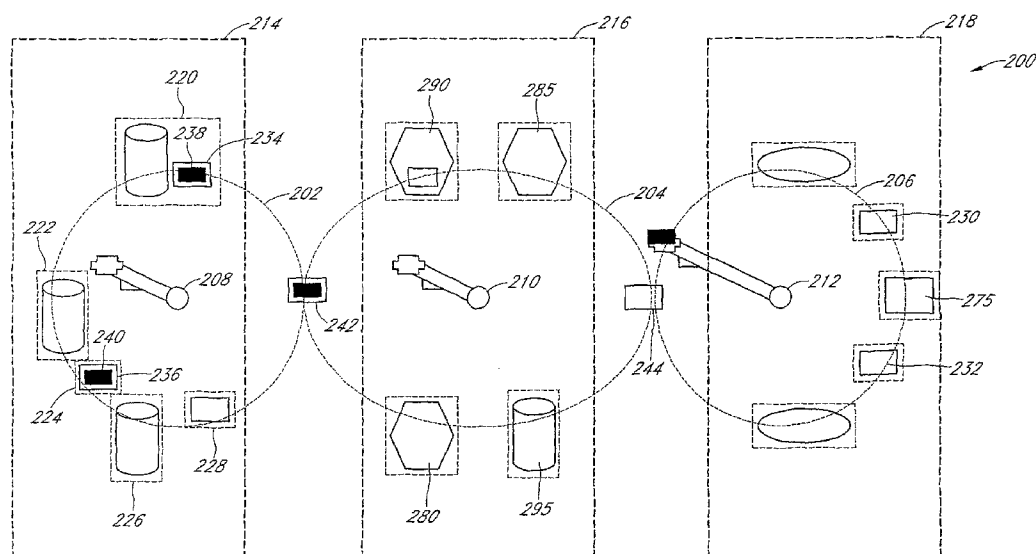
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[Continued on next page]

(54) Title: COMPOUND PROFILING DEVICES, SYSTEMS, AND RELATED METHODS



(57) Abstract: High throughput compound profiling systems, and related devices and sub- systems that can be used to perform various compound profiling processes are provided. These systems typically include work perimeters (202, 204, 206) that are organized for optimum efficiency and processing accuracy. Further, these systems are readily adaptable for performing a wide array of assays, as many different system components are easily incorporated or interchangeable in a particular system. System components that are provided by the invention include cell culture dissociators, which can be used, e.g., to effect cell wetting, dissociation, and/or agitation applications. In some embodiments, these cell culture dissociators are included as components of automated cell culture passaging stations. Dispensing devices that permit on- the- fly fluid temperature regulation are also provided. In addition, various compound profiling methods, cell dissociation methods, uniform cell concentration dispensing methods, among other processes, are also provided.

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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2006/010416

A. CLASSIFICATION OF SUBJECT MATTER
 INV. G01N35/00 C12M3/00

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 C12M B01J

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)

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 2003/040104 A1 (BARBERA-GUILLEM EMILIO) 27 February 2003 (2003-02-27) paragraph [0037] - paragraph [0063]; figures 1-8	1-20, 31-36, 48-105
X	US 2002/090320 A1 (BUROW KRISTINA MARIE ET AL) 11 July 2002 (2002-07-11) cited in the application paragraph [0040] - paragraph [0161]; figures 1-3	1-20, 31-36, 48-105
P,X	EP 1 598 415 A (THE AUTOMATION PARTNERSHIP LIMITED) 23 November 2005 (2005-11-23) paragraph [0061] - paragraph [0214]; figures 13,14	1-20, 31-36, 48-105

☐ 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
 "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)
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 "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

4 August 2006

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2006/010416

Box 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 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 fee, this Authority did not invite payment of any additional fee.
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.:
1-20, 31-36, 48-105

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ 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: 1-20,31-36,48-105

Automated cell culture and passaging system and method of passaging a cell culture and performing an assay, comprising an incubation device, an assaying device and a centrifugal cell dissociator and wherein the cells are delivered to the assaying device without the need for human intervention.

2. claims: 21-30

Automated cell culture and passaging system comprising an incubation device, an assaying device and a decontamination device, wherein the decontamination device is provided with first and second chambers and a decontamination component communicating at least with the second chamber.

3. claims: 37-47

Automated cell culture and passaging system comprising an incubation device, an assaying device and a fluid dispensing device, wherein the fluid dispensing device is provided with a thermal regulation component.

INTERNATIONAL SEARCH REPORT
information on patent family members

International application No

PCT/US2006/010416

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2003040104 A1	27-02-2003	NONE	
US 2002090320 A1	11-07-2002	NONE	
EP 1598415 A	23-11-2005	US 2005260743 A1	24-11-2005