

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 May 2003 (01.05.2003)

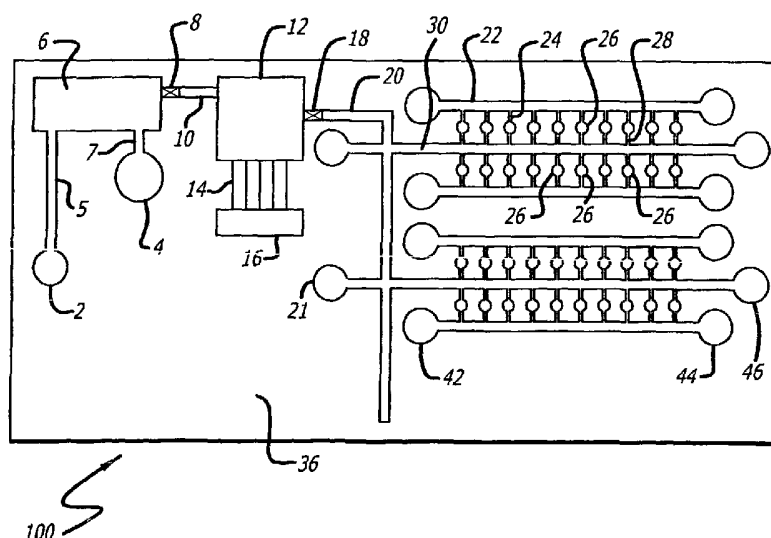
PCT

(10) International Publication Number
WO 2003/035909 A3

- (51) International Patent Classification⁷: C12Q 1/68, B01L 3/00
- (21) International Application Number: PCT/SG2002/000252
- (22) International Filing Date: 25 October 2002 (25.10.2002)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/335,875 26 October 2001 (26.10.2001) US
10/279,628 24 October 2002 (24.10.2002) US
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- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: A METHOD FOR DETECTING DISEASE USING A FLUIDIC DEVICE



(57) Abstract: The present invention relates to diagnostic methods utilizing an apparatus comprising a substrate having at least one assay station. The at least one assay station has at least a first assay station channel and at least a second assay station channel and the first and second assay station channels each separately being in communication with the at least one assay station. The apparatus has an arrangement of at least first and second multi-purpose channels in communication with the first and second assay station channels, respectively. The first multi-purpose channel and first assay station channel have internal surface characteristics conducive to conduction of a sample solution therethrough. There is at least one sample fluid inlet in communication with the at least first multi-purpose channel, and at least one isolation-medium inlet in communication with the at least first and second multi-purpose channels. The at least one second multi-purpose channel has an internal surface portion non-conductive to conduction of said sample solution.



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Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK,
TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

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.

Published:

— *with international search report*

(88) Date of publication of the international search report:

22 January 2004

INTERNATIONAL SEARCH REPORT

International Application No

PCT/SG 02/00252

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12Q1/68 B01L3/00

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)
IPC 7 C12Q B01L

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, BIOSIS, PAJ, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01 41931 A (BRISCOE CYNTHIA G ;CHAN TONY (US); FOLEY BARBARA (US); TUGGLE TODD) 14 June 2001 (2001-06-14) page 29, paragraph 5 -page 35, paragraph 3 page 60, paragraph 6 -page 61, paragraph 1 page 66, paragraph 5 -page 77, paragraph 2	1-52
Y	WO 93 22053 A (UNIV PENNSYLVANIA) 11 November 1993 (1993-11-11) page 16, paragraph 1 -page 17, paragraph 2 page 25, paragraph 2; figures 8-18	1-52
Y	US 6 235 471 B1 (KNAPP MICHAEL ET AL) 22 May 2001 (2001-05-22) column 4, line 54 -column 6, line 8 column 30, line 54 -column 32, line 16 column 43, line 21 -column 53, line 65; figure 11	1-52

Further documents are listed in the continuation of box C.

Patent family members are listed in 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)
- *O* document referring to an oral disclosure, use, exhibition or other means
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- *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

21 July 2003

Date of mailing of the international search report

29/07/2003

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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	WO 00 46595 A (ACLARA BIOSCIENCES INC) 10 August 2000 (2000-08-10) page 1, line 31 -page 2, line 11 page 4, line 11 -page 8, line 9 ---	1-52
Y	WO 00 22436 A (MYRIAD GENETICS INC ;BIOMICRO SYSTEMS INC (US)) 20 April 2000 (2000-04-20) page 6, line 24 -page 8, line 21 example 2 ---	1-52
Y	WO 96 15450 A (SARNOFF DAVID RES CENTER) 23 May 1996 (1996-05-23) abstract; figures 7B,7C; example 2 ---	1-52
Y	WO 00 67907 A (ACLARA BIOSCIENCES INC) 16 November 2000 (2000-11-16) page 31, line 25 -page 36, line 23 page 18, line 14-17; figure 3 ---	1-52
Y	WATERS L C ET AL: "MULTIPLE SAMPLE PCR AMPLIFICATION AND ELECTROPHORETIC ANALYSIS ON A MICROCHIP" ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY. COLUMBUS, US, vol. 70, no. 24, 15 December 1998 (1998-12-15), pages 5172-5176, XP000799221 ISSN: 0003-2700 page 5172, column 2, paragraph 2 -page 5173, column 2, paragraph 3 ---	1-52
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A	WO 99 64840 A (SUNDBERG STEVEN A ;LEE ERNEST C W (US); PARCE J WALLACE (US); CALI) 16 December 1999 (1999-12-16) abstract -----	41

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG 02/00252

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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.: 1-20, 22-52(in part)
because they relate to subject matter not required to be searched by this Authority, namely:
see FURTHER INFORMATION sheet PCT/ISA/210

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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

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.:

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

Continuation of Box I.1

Although claims 1-20 and 22-52 encompass a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the method.

Continuation of Box I.1

Claims Nos.: 1-20,22-52(in part)

Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/SG 02/00252

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