

(19) World Intellectual Property Organization
International Bureau



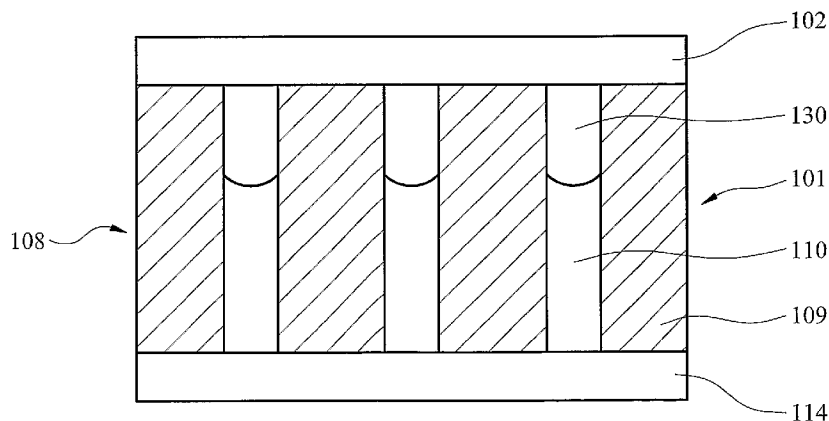
(43) International Publication Date
20 March 2008 (20.03.2008)

PCT

(10) International Publication Number
WO 2008/032076 A3

- (51) **International Patent Classification:**
G01N 27/40 (2006.01) *G01N 33/49* (2006.01)
G01N 33/487 (2006.01) *G01N 33/493* (2006.01)
- (21) **International Application Number:**
 PCT/GB2007/003477
- (22) **International Filing Date:**
 12 September 2007 (12.09.2007)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
 0617983.2 13 September 2006 (13.09.2006) GB
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- (81) **Designated States (unless otherwise indicated, for every kind of national protection available):** AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.
- (84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
 — with international search report
 — before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) **Date of publication of the international search report:**
 3 July 2008

(54) **Title:** BIOLOGICAL FLUID ANALYSIS SYSTEM



(57) **Abstract:** A system apparatus (101) includes an integrated sensing and separation component (108) for the monitoring and analysis of clinical species present in biological fluids. In the preferred embodiment this is by use of a polyHIPE membrane (109) with a chemically active sol-gel (110), and a plurality of micro- electrode arrays adapted for selectively adjusting sensitivity.

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INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2007/003477

A. CLASSIFICATION OF SUBJECT MATTER INV. G01N27/40 G01N33/487 G01N33/49 G01N33/493		
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 practical, search terms used) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CAMERON N R: "High internal phase emulsion templating as a route to well-defined porous polymers" POLYMER, ELSEVIER SCIENCE PUBLISHERS B.V., GB, vol. 46, no. 5, 14 February 2005 (2005-02-14), pages 1439-1449, XP004727558 ISSN: 0032-3861 page 1447, left-hand column, paragraph 3 - page 1448, right-hand column, paragraph 1 figure 9 ----- -/--	1-29
<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 :		
<p>*A* document defining the general state of the art which is not considered to be of particular relevance</p> <p>*E* earlier document 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>		
Date of the actual completion of the international search 20 February 2008		Date of mailing of the international search report 14/05/2008
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2260 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Baranski, Jörg

INTERNATIONAL SEARCH REPORT

International application No
PCT/GB2007/003477

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2006/023037 A (DOW CORNING [US]; GARDNER GEOFFREY BRUCE [US]; MAGHSOODI SINA [US]; HA) 2 March 2006 (2006-03-02) paragraph [0003] paragraph [0095] paragraph [0001]	1-29
X	WO 94/02842 A (UNIV MANCHESTER [GB]; VADGAMA PANKAJ MADGANLAL [GB]; CHRISTIE IAN MCIN) 3 February 1994 (1994-02-03) abstract	1-29
X	WO 01/06245 A (UNIV MANCHESTER [GB]; VADGAMA PANKAJ MADGANLAL [GB]; WARRINER KEITH ST) 25 January 2001 (2001-01-25) abstract	1-29
A	"PolyHIPE Materials for Advancing the Capabilities of Electrochemical Sensors: A Feasibility Study" INTERNET CITATION, [Online] 1 December 2003 (2003-12-01), XP007904100 Retrieved from the Internet: URL: http://www.dur.ac.uk/ritu.kataky/sensors%20report%20011203.pdf [retrieved on 2008-02-19] the whole document	1-29
A	GRANCHAROV GEORGY ET AL: "Individually addressable recessed gold microelectrode arrays with monolayers of thio-cyclodextrin nanocavities." THE ANALYST OCT 2005, vol. 130, no. 10, October 2005 (2005-10), pages 1351-1357, XP002469852 ISSN: 0003-2654 the whole document	1-29
A	GB 2 116 850 A (WESCOR INC) 5 October 1983 (1983-10-05) figure 9	1-29

INTERNATIONAL SEARCH REPORT

International application No.
PCT/GB2007/003477

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.: 32, 33
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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 allsearchable 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 reportcovers 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.:
1-29

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

Continuation of Box II.2

Claims Nos.: 32,33

The claims rely only on references to the description or drawings. They do not contain any additional meaningful content and should be removed.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guideline C-VI, 8.5), should the problems which led to the Article 17(2) declaration be overcome.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-29

sensor with semipermeable membrane on electrode

2. claims: 30-31

sensor with a multiplicity of microelectrode arrays

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/GB2007/003477

Patent document cited in search report	A	Publication date	Patent family member(s)	Publication date
WO 2006023037	A	02-03-2006	CA 2575238 A1 EP 1820065 A2 KR 20070041569 A	02-03-2006 22-08-2007 18-04-2007
WO 9402842	A	03-02-1994	AU 4716093 A	14-02-1994
WO 0106245	A	25-01-2001	AU 5997600 A CA 2379582 A1 EP 1196767 A1 JP 2003504639 T	05-02-2001 25-01-2001 17-04-2002 04-02-2003
GB 2116850	A	05-10-1983	DE 3309273 A1	24-11-1983