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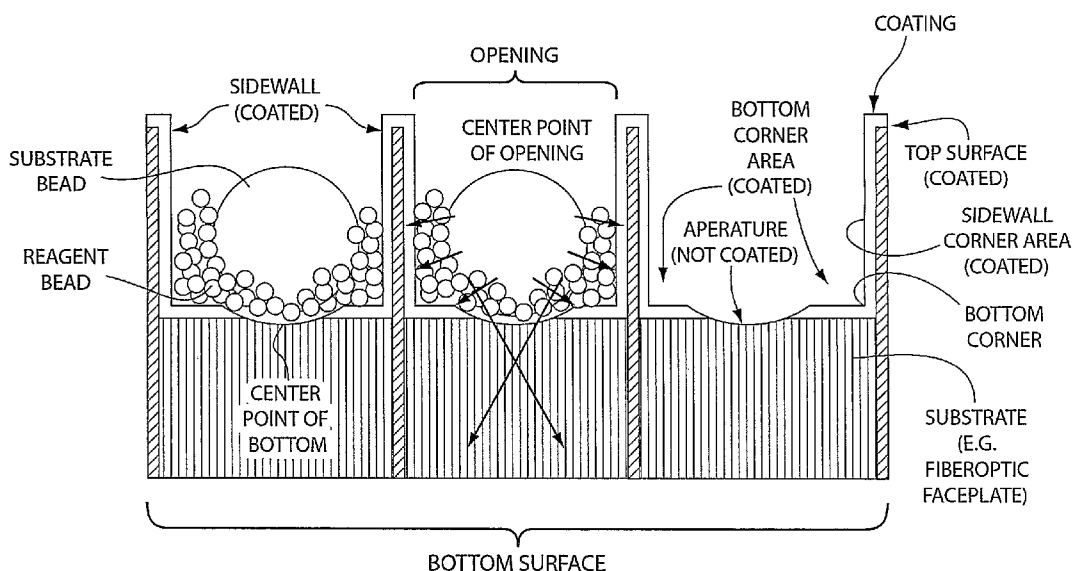
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[Continued on next page]

(54) Title: THIN FILM COATED MICROWELL ARRAYS AND METHODS OF MAKING SAME



(57) Abstract: This invention relates to microwell array compositions which are coated with one or more thin film coatings. The invention includes the process of fabricating and using thin film coated microwell arrays including methods of etching, depositing one or more thin film coatings, preparing and using the array.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER INV. G01N21/77 B01L3/00 G01N33/543 ADD. G02B6/08		
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) G02B G01N 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		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/077287 A (CURAGEN CORPORATION; ROTHBERG, JONATHAN, M; BADER, JOEL, S; DEWELL, SC) 3 October 2002 (2002-10-03) page 4, line 2 - line 28 page 14, line 27 - page 15, line 32 page 18, line 30 - page 19, line 4 page 27, line 1 - line 13 page 29, line 20 - line 33 figures 2,3,6,11	1-16, 82-88, 93,94 29-61
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Y	-----	
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<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 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 "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
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Name and mailing address of the ISA/ European Patent Office, P.B. 5618 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer D'Alessandro, Davide

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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.
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A	WO 02/078834 A (GENOSPECTRA, INC; XIAO, JIANMING; CHEN, SHIPING; LUO, YULING; BUTLER,) 10 October 2002 (2002-10-10) paragraph [0124] figure 20 -----	29-81
A	US 2004/191924 A1 (HUNTER IAN ET AL) 30 September 2004 (2004-09-30) paragraph [0079] -----	3,16,30, 87
A	WO 2004/011912 A (NIPPON SHEET GLASS CO., LTD; FUJITA, KOJI) 5 February 2004 (2004-02-05) abstract -----	3,16,30, 87

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2006/013494

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.:

1-88,93,94

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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

1. claims: 1-88,93,94

an array of reaction chambers comprising a fiber optic faceplate coated with thin films; method of production and method of use;

2. claims: 89-92

a process for depositing a non-transparent coating on the substrate of an array of reaction chambers;

3. claims: 95-102

apparatus and method for etching fiber optic faceplates in order to create arrays of reaction chambers;

4. claims: 103-105

method for cleaning a fiber optic faceplate comprising reaction chambers.
