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(81) Designated States (unless otherwise indicated, for every kind of national protection available):

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

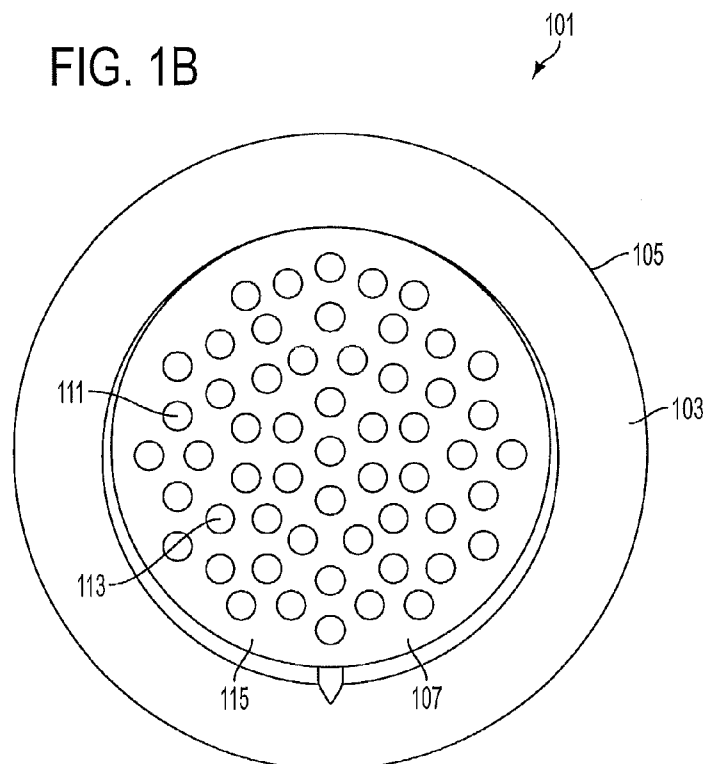
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ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: FLUID PURIFICATION MEDIA AND CARTRIDGE

FIG. 1B



(57) Abstract: A fluid purification system, comprising: • a first fluid purification media comprising a first rigid porous purification block, comprising: • a longitudinal first surface (105); • a longitudinal second surface (107) disposed inside the longitudinal first surface (105); and • a porous high density polymer disposed between the longitudinal first surface (105) and the longitudinal second surface (107); • a second fluid purification media, comprising a fluid purification material comprising a particulate oxidizing material disposed adjacent to the first surface (105) of the first fluid purification media, the second surface (107) of the first purification media, or both.





Published:

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

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Previous Correction:
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INTERNATIONAL SEARCH REPORT

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PCT/US2012/063660

A. CLASSIFICATION OF SUBJECT MATTER
 INV. B01D39/20 C02F1/00
 ADD. C02F101/12 C02F1/28 C02F1/72 C02F5/00 B01D29/58

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)
 C02F B01D 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 practicable, 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 2011/062066 A1 (MCCAGUE MICHAEL [US]) 17 March 2011 (2011-03-17)	1-6, 8-23,25, 26, 28-46, 48-52
Y	paragraphs [0029] - [0031], [0035], [0038]; figures 1,2,3	7,24,27, 47
X	US 6 165 362 A (NOHREN JR JOHN E [US] ET AL) 26 December 2000 (2000-12-26)	1-6, 8-23,25, 26, 28-46, 48-51
Y	column 2, line 21 - line 36 column 4, line 6 - line 19 column 5, line 16 - line 20; figure 5 ----- -/--	7,24,27, 47,52

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 application or patent 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

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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 4 August 2014	Date of mailing of the international search report 14/08/2014
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Beckmann, Oliver
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INTERNATIONAL SEARCH REPORT

International application No

PCT/US2012/063660

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2006/207925 A1 (LEVY EHUD [US]) 21 September 2006 (2006-09-21)	1-6, 8-23,25, 26, 28-46, 48-51
Y	paragraphs [0036], [0041], [0043], [0054]; figures 1C,1B	7,24,27, 47,52
Y	----- US 2004/195180 A1 (CUMBERLAND SCOTT L [US] ET AL) 7 October 2004 (2004-10-07) paragraphs [0020], [0023], [0024], [0042], [0052], [0060], [0063]; claims 1,8,15; table 2	7,24,27, 47
Y	----- US 2004/206682 A1 (HAMLIN THOMAS [US] ET AL) 21 October 2004 (2004-10-21) cited in the application paragraph [0045]; figure 4	52
Y	----- US 4 753 728 A (VANDERBILT HERBERT J [US] ET AL) 28 June 1988 (1988-06-28) column 2, line 23 - column 4, line 28; figure 1	52

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/063660

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.:

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: 1-51

fluid purification comprising a first purification medium, including a first rigid porous purification block which comprises a porous high density polymer disposed between a first longitudinal surface and a second longitudinal surface inside the first surface, and a second purification medium comprising a particulate oxidizing material disposed adjacent to one or both longitudinal surfaces of the first purification medium.

2. claim: 52

fluid purification comprising a first purification medium, including a first rigid purification block which comprises a material disposed between a first longitudinal surface and a second longitudinal surface inside the first surface, each surface having openings, and a second purification medium comprising a particulate oxidizing material disposed inside one or both longitudinal surfaces of the first purification medium, and a third purification medium located outside or inside the first purification medium.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2012/063660

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2011062066	A1	17-03-2011	NONE
US 6165362	A	26-12-2000	US 5609759 A 11-03-1997 US 6165362 A 26-12-2000
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