

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
29 May 2008 (29.05.2008)

PCT

(10) International Publication Number
WO 2008/063399 A3(51) International Patent Classification:
HOLM 8/10 (2006.01)(74) Agents: **BOLAND, Kevin, J.** et al; W. L. Gore & Associates, Inc., 551 Paper Mill Road, P.O. Box 9206, Newark, DE 19714-9206 (US).(21) International Application Number:
PCT/US2007/023326

(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, 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

(22) International Filing Date:
5 November 2007 (05.11.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/560,591 16 November 2006 (16.11.2006) US

(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).

(71) Applicants (for all designated States except US): **GORE ENTERPRISE HOLDINGS, INC.** [US/US]; 551 Paper Mill Road, P.O. Box 9206, Newark, DE 19714-9206 (US).**W.L. GORE & ASSOCIATES GMBH** [DE/DE]; Postfach 1154, 85636 Putzbrunn (DE).

(72) Inventors; and

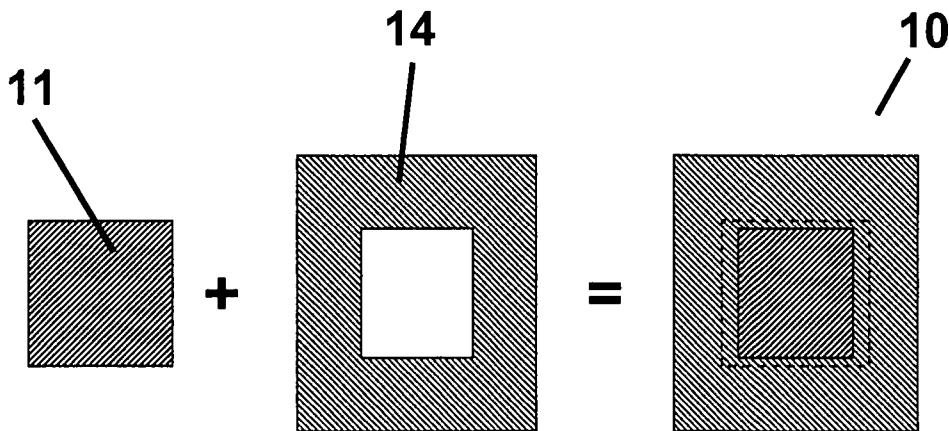
(75) Inventors/Applicants (for US only): **SZRAMA, Peter** [US/US]; 459 Preakness Run, Newark, DE 19702 (US). **TELLER, Oliver** [DE/DE]; Karneidplatz 9, 81547 Muenchen (DE). **KILLER, Anton** [DE/DE]; Steinsberger Weg 1, 83623 Dietramszell (DE).

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

[Continued on next page]

(54) Title: FULLY CATALYZED MEMBRANE ASSEMBLY WITH ATTACHED BORDER



WO 2008/063399 A3

(57) Abstract: A catalyst coated membrane assembly comprising a solid polymer electrolyte membrane, an electrode that covers substantially one entire face of said solid polymer electrolyte membrane, and a structural film layer attached to at least two opposing outer regions of said electrode such that it partially overlaps the open face of said electrode. The use of structural film layer allows for high volume, high yield manufacturing of assemblies, leading to reduced assembly cost.



(88) Date of publication of the international search report:
17 July 2008

INTERNATIONAL SEARCH REPORT

International application No

PCT/US2007/023326

A CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - H01M 8/10 (2008 04)
 USPC - 439/30

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(8) - H01M 8/10 (2008 04)
 USPC - 439/30

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)
 PatBas θ, Google Patents

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 2006/0029850 A 1 (SZRAMA βt al) 09 February 2006 (09 02 2006) entire document	1-6,1 1-21 ,26-36
---		---
Y	US 5,523,177 A (KOSEK et al) 04 June 1996 (04 06 1996) entire document	7-10,22-25

I Further documents are listed in the continuation of Box C

- * 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
- '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

07 April 2008

Date of mailing of the international search report

09 MAY 2008

Name and mailing address of the ISA/US
 Mail Stop PCT, Attn ISA/US, Commissioner for Patents
 P O Box 1450, Alexandria, Virginia 22313-1450
 Facsimile No 571-273-3201

Authorized officer
 Blame R Copenheaver

PCT HBlpdesk 571-272-4300
 PCT OSP 571-272 7774