

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
2 October 2008 (02.10.2008)

PCT

(10) International Publication Number
WO 2008/118256 A3

(51) International Patent Classification:
B01D 39/16 (2006.01)

(74) Agent: **BRICKEY, Cheryl J.**; 920 Milliken Road, M-495,
Spartanburg, South Carolina 29303 (US).

(21) International Application Number:

PCT/US2008/001234

(22) International Filing Date: 30 January 2008 (30.01.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

11/726,579 22 March 2007 (22.03.2007) US

(71) Applicant (for all designated States except US): **MTT-
LIKEN & COMPANY** [US/US]; 920 Milliken Road,
M-495, Spartanburg, South Carolina 29303 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **WENSTRUP,
David E.** [US/US]; 636 Driftwood Drive, Greer, SC 29651
(US). **STANSELL, Steven A.** [US/US]; 619 Pleasant
Pointe, Spartanburg, SC 29301 (US). **DEANGELIS,
Alfred R.** [US/US]; 248 Creek Ridge Drive, Spartanburg,
SC 29301 (US).

(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, 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, **HR**, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,

[Continued on next page]

(54) Title: TWO SIDED CONDUCTIVE FILTRATION MEDIA

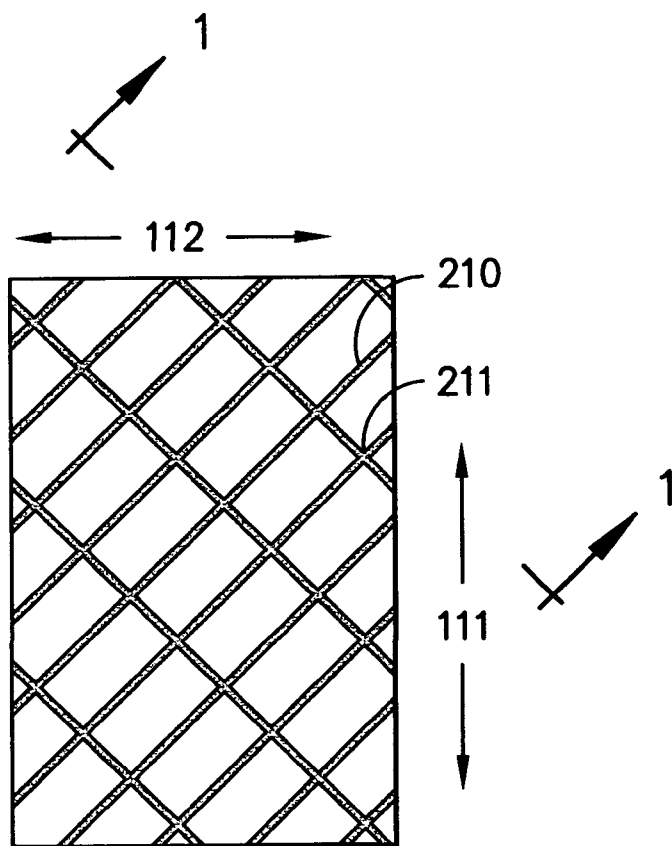


FIG. 2

(57) Abstract: A conductive filtration media having a textile substrate (with a defined first side and a second side and a machine and cross-machine direction), where the conductive pattern on the first side is in registration with the conductive pattern on the second side of the textile substrate. The conductive pattern has a plurality of continuous conductive pathways across the textile substrate, the resistivity of the conductive pattern is less than 100 mega ohms when measured on a 2" by 12" sample taken in the machine and cross-machine direction of the textile substrate in accordance with test DIN 54 345, and the air permeability of the conductive filtration media is between 1 and 100 cc/cm²/sec as measured by ASTM D737. A conductive air filter made from the conductive filtration media and the method of making the conductive filtration media is also disclosed.

WO 2008/118256 A3



NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments*

Published:

— *with international search report*

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

27 November 2008

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2008/001234

A. CLASSIFICATION OF SUBJECT MATTER
INV. B01D39/16

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)
BOID

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.
A	US 5 330 559 A (CHENEY WILLIAM A [US] ET AL) 19 July 1994 (1994-07-19) column 8, line 31 - column 10, line 23; claims 1,8; figure 1 -----	1-15
A	US 6 464 870 B1 (CASTELLANOS EDWIN A [US] ET AL) 15 October 2002 (2002-10-15) paragraphs [0024], [0025]; claims 1,6; figure 1 -----	1-15
A	CN 1 170 370 A (GORE & ASS [US]) 14 January 1998 (1998-01-14) abstract -----	1
A	US 3 933 643 A (COLVIN FLOYD E ET AL) 20 January 1976 (1976-01-20) column 3 - column 5; claim 1; figures 1-3 -----	1-15



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents :

- ¹A¹ 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

25 September 2008

Date of mailing of the international search report

07/10/2008

Name and mailing address of the ISA/
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Tiercet, Marc

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/001234

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5330559	A	19-07-1994	US 5474599 A	12-12-1995
US 6464870	B1	15-10-2002	DE 10138073 A1	28-03-2002
			FR " 2812822 A1	15-02-2002
			GB 2367507 A	10-04-2002
CN 1170370	A	14-01-1998	NONE	
US 3933643	A	20-01-1976	CA 1010380 A1	17-05-1977
			DE 2244414 A1	15-03-1973
			GB 1401816 A	30-07-1975
			JP 48036768 A	30-05-1973