

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 April 2012 (26.04.2012)

PCT

(10) International Publication Number
WO 2012/054111 A1

(51) International Patent Classification:
A24D 3/06 (2006.01)

(21) International Application Number:
PCT/US2011/044142

(22) International Filing Date:
15 July 2011 (15.07.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/390,211 6 October 2010 (06.10.2010) US
61/390,213 6 October 2010 (06.10.2010) US
12/981,909 30 December 2010 (30.12.2010) US
PCT/US11/20013 3 January 2011 (03.01.2011) US
61/504,023 1 July 2011 (01.07.2011) US
PCT/US11/43269 7 July 2011 (07.07.2011) US

(71) Applicant (for all designated States except US):
CELANESE ACETATE LLC [US/US]; 1601 West LBJ
Freeway, Dallas, TX 75234 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BURKE, Peter**
[GB/GB]; 3 Boydell Way, Dodleston Chester CH4 9NR
(GB). **GUSIK, Meinhard** [DE/DE]; Holtstegstrasse 41,
46147 Oberhausen (DE). **HUFEN, Julia** [DE/DE]; Wal-
lacherstrasse 54, 47495 Rheinberg (DE). **JIMENEZ,**
Luis [US/US]; 302 Little Circle, Blacksburg, VA 24060
(US). **ROBERTSON, Raymond** [US/US]; 3210 Gordon
Drive, Blacksburg, VA 24060 (US). **SRINIVASAN,**
Ramesh [US/US]; 6807 Treeridge Drive, Cincinnati, OH
45244 (US).

(74) Agent: **KAISER, Iona, N.**; McDERMOTT WILL &
EMERY LLP, 600 13th Street, NW Washington, DC
20005 (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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG,
ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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).

Published:

- with international search report (Art. 21(3))
- with information concerning one or more priority claims
considered void (Rule 26bis.2(d))

(54) Title: SMOKE FILTERS FOR SMOKING DEVICES WITH POROUS MASSES HAVING A CARBON PARTICLE
LOADING AND AN ENCAPSULATED PRESSURE DROP

(57) Abstract: Disclosed are filters, smoking devices, related articles and apparatus, and related methods. The filters include
porous masses that have an active particle and a binder particle, wherein the active particle comprises carbon and the porous mass
has a carbon loading of at least about 6 mg/mm and an encapsulated pressure drop of about 20 mm of water or less per mm of
porous mass.



WO 2012/054111 A1