

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 June 2010 (10.06.2010)

PCT

(10) International Publication Number
WO 2010/065468 A1

(51) International Patent Classification:

C08F 12/08 (2006.01) **C08K 5/00** (2006.01)
C08F 112/08 (2006.01) **C08F 8/20** (2006.01)

(21) International Application Number:

PCT/US2009/066134

(22) International Filing Date:

30 November 2009 (30.11.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/119,289 2 December 2008 (02.12.2008) US

(71) Applicant (for all designated States except US): **ALBERMARLE CORPORATION** [US/US]; 451 Florida Street, Baton Rouge, LA 70801-1765 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LAYMAN, William, J.** [US/US]; 3265 White Shadow Drive, Baton Rouge, LA 70816 (US). **KOLICH, Charles, H.** [US/US]; 963 Fulwar Skipwith Road, Baton Rouge, LA 70810 (US). **MACK, Arthur, G.** [US/US]; 37234 Lakeshore Avenue, Prairieville, LA 70769 (US). **MC-CARNEY, Jonathan, P.** [US/US]; 12329 Warwick Avenue, Baton Rouge, LA 70815 (US). **KUMAR, Govindarajulu** [US/US]; 18763 Santa Maria Parkway, Baton Rouge, LA 70809 (US). **WANG, Junzuo** [CN/US]; 10735 Pinebrook Avenue, Baton Rouge, LA 70809 (US). **MORICE, Jorge** [US/US]; 6445 Feather Nest Lane, Baton Rouge, LA 70817 (US). **GE, Zhongxin** [CN/US]; 11110 Boardwalk Drive, Unit 44, Baton Rouge, LA 70816 (US). **LIU, Bo** [US/US]; 20144 Eastwood Drive, Zachary, LA 70791 (US). **LUTHER, Douglas, W.** [US/US]; 11121 West Anne Drive, Walker, LA 70785 (US). **WHITE, Kimberly, M.** [US/US]; 9360 West Van Place, Baton Rouge, LA 70815 (US). **BERRIS, Bruce, C.** [US/US]; 824 North 8th Street, Apt. B., Baton Rouge, LA 70802 (US).

(74) Agents: **KLIEBERT, Jeremy, J.** et al.; Albemarle Corporation, Law Department, 451 Florida Street, Baton Rouge, LA 70801-1765 (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, 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, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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))

(54) Title: BROMINATED FLAME RETARDANTS AND PRECURSORS THEREFOR

(57) Abstract: Described are a particular group of novel aromatic hydrocarbon telomers that, on bromination, result in the formation of novel flame retardants having a uniquely beneficial combination of properties. The resultant flame retardants and uses thereof are also described. The disclosure includes descriptions of methods for preparing both the aromatic hydrocarbon telomers and the brominated flame retardant polymers.



WO 2010/065468 A1