

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 July 2007 (12.07.2007)

PCT

(10) International Publication Number
WO 2007/079365 A3

(51) International Patent Classification:

C08G 18/32 (2006.01) *C08G 18/66* (2006.01)
C08G 18/50 (2006.01) *C07C 211/43* (2006.01)

(21) International Application Number:

PCT/US2006/062493

(22) International Filing Date:

21 December 2006 (21.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/755,550 30 December 2005 (30.12.2005) US

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

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LEE, John, Y.** [US/US]; 1524 Stoneliagh Avenue, Baton Rouge, LA 70808 (US). **OWENS, David, W.** [US/US]; 610 Woodruff Drive, Baton Rouge, LA 70808 (US). **WIGGINS, Paul, L.** [US/US]; 10819 Danbury Drive, Baton Rouge, LA 70809 (US). **GLASS, Richard, D.** [US/US]; 12658 Milburn Drive, Baton Rouge, LA 70815 (US). **WILHELM, Michael, J.** [US/US]; 2530 Gates Circle #31, Baton Rouge, LA 70809 (US). **SLICKER, Robert, Phillip** [US/US]; 356 Shady Lake Parkway, Baton Rouge, LA 70808 (US).

(74) Agents: **SPIELMAN, Edgar, E.** 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, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, 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, LV, LY, MA, MD, 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, HU, IE, IS, IT, LT, LU, LV, MC, 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).

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

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

30 August 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BLENDS OF DIAMINES HAVING REDUCED COLOR

(57) Abstract: This invention provides a blend which comprises (i) at least one aromatic primary diamine, with which has been blended a color-minimizing amount of at least one N,N-dimethylhydroxylamine, wherein the aromatic primary diamine is in the form of one benzene ring having two primary amino groups on the ring, which amino groups are meta or para relative to each other, and in which each position ortho to a primary amino group bears an alkyl group, and (ii) at least one aromatic secondary diamine having a Gardner color number no more than about 7, wherein said aromatic secondary diamine either is in the form of one benzene ring having two secondary amino groups on the ring, or is in the form of two benzene rings connected by an alkylene bridge and having one secondary amino group on each ring. Optionally, at least one N,N-dihydrocarbylhydroxylamine has been blended with the aromatic secondary diamine.

WO 2007/079365 A3