

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number
WO 2005/060624 A3

- (51) International Patent Classification⁷: **H01B 1/12**, H05B 33/12
- (21) International Application Number:
PCT/US2004/041386
- (22) International Filing Date:
10 December 2004 (10.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/528,325 10 December 2003 (10.12.2003) US
- (71) Applicant (for all designated States except US): **NORTH-WESTERN UNIVERSITY** [US/US]; 633 Clark Street, Evanston, IL 60208 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **MARKS, Tobin, J.** [US/US]; 2300 Central Park Avenue, Evanston, IL 60201 (US). **YAN, He** [CN/US]; 8847 La Crosse Avenue #1, Skokie, IL 60077 (US). **HUANG, Qinglan** [CN/US]; 4800 Grove Street, Apt 2E, Skokie, IL 60077 (US).
- (74) Agents: **DEKRUIF, Rodney, D.** et al.; Reinhart Boerner Van Deuren s.c., Attn. Linda Gabriel-Kasulke, 1000 North Water Street, Suite 2100, Milwaukee, WI 53202 (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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, 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).
- 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 March 2006
- 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: HOLE TRANSPORT LAYER COMPOSITIONS AND RELATED DIODE DEVICES

(57) Abstract: Hole transport layer compositions comprising a silylated aryl amine and a polymeric component, to enhance performance of an associated electroluminescent device.



WO 2005/060624 A3