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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 April 2007 (26.04.2007)

PCT

(10) International Publication Number
WO 2007/047217 A1

(51) International Patent Classification:
C08L 71/12 (2006.01) *C08L 53/00* (2006.01)
C08L 25/04 (2006.01) *C08K 5/09* (2006.01)

(21) International Application Number:
PCT/US2006/039443

(22) International Filing Date: 10 October 2006 (10.10.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/248,524 12 October 2005 (12.10.2005) US

(71) Applicant *(for all designated States except US)*: **GENERAL ELECTRIC COMPANY** [US/US]; (A New York Corporation), 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **RIDING, Geoffrey, H.** [GB/US]; 21 Bellwood Lane, Castleton, NY 12033 (US). **KUMAGAI, Katsuhisa** [JP/JP]; Yu Point Nakano, 1-10-10 Nakanoki, Funabashi City (JP). **BALFOUR, Kim, G.** [US/US]; 511 Hillman Road, Delanson, NY 12053 (US). **HOSSAN, Robert** [US/US]; 34 Yorkshire Lane, Delmar, NY 12054 (US).

(74) Agents: **WINTER, Catherine, J.** et al.; General Electric Company, Global Patent Operation, 187 Danbury Road, Suite 204, Wilton, CT 06897 (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, 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))*

Published:
— *with international search report*

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:** METHOD OF REDUCING THE STYRENE CONTENT OF A POLY (ARYLENE ETHER) POLYSTYRENE BLEND, AND ARTICLES COMPRISING THE RESULTING THERMOPLASTIC RESIN

(57) **Abstract:** A poly(arylene ether)/polystyrene blend may be prepared by melt kneading a carboxylic acid compound, a poly(arylene ether), and a polystyrene to form an intimate blend, and steam stripping the intimate blend, where melt kneading is conducted with a specific energy consumption of about 0.1 to about 0.3 kilowatt-hour per kilogram of blend. The method allows the formation of an intimate resin blend while minimizing the styrene monomer content of the final blend.

WO 2007/047217 A1