

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
5 July 2007 (05.07.2007)

PCT

(10) International Publication Number
WO 2007/075769 A1

(51) International Patent Classification:

C08G 59/40 (2006.01) **C08L 63/00** (2006.01)
C08G 59/42 (2006.01) **H05K 1/00** (2006.01)
C08J 5/24 (2006.01)

(21) International Application Number:

PCT/US2006/048578

(22) International Filing Date:

20 December 2006 (20.12.2006)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/753,028 22 December 2005 (22.12.2005) US

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(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).

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

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: A CURABLE EPOXY RESIN COMPOSITION AND LAMINATES MADE THEREFROM

(57) Abstract: A curable halogen-containing epoxy resin composition comprising: (a) at least one epoxy resin; (b) at least one hardener; wherein the hardener is a compound containing a phenolic hydroxyl functionality or a compound capable of generating a phenolic hydroxyl functionality upon heating; (c) a catalytic amount of a nitrogen-containing catalyst; (d) a non-nitrogen containing catalyst adjuvant compound capable of reducing the concentration of the nitrogen-containing catalyst; wherein at least one of the above components (a)-(d) is halogenated or wherein the resin composition includes (e) a halogenated flame retardant compound. The stroke cure gel time of the resin composition is maintained from 90 seconds to 600 seconds when measured at 1700C; and the resultant cured product formed by curing the curable epoxy resin composition contains well-balanced properties. The composition may be used to obtain a prepreg or a metal-coated foil, or a laminate by laminating the above prepreg and/or the above metal-coated foil. The laminate shows a combination of superior glass transition temperature, decomposition temperature, time to delamination at 288°C, adhesion to copper foil, and excellent flame retardancy.



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