

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
4 May 2006 (04.05.2006)

PCT

(10) International Publication Number
WO 2006/047666 A2

(51) International Patent Classification:

C09D 7/12 (2006.01) C08K 3/36 (2006.01)
C09D 167/04 (2006.01) C08K 5/3492 (2006.01)

(21) International Application Number:

PCT/US2005/038721

(22) International Filing Date: 26 October 2005 (26.10.2005)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/974,235 27 October 2004 (27.10.2004) US

(71) Applicant (for all designated States except US): **PPG INDUSTRIES OHIO, INC.** [US/US]; 3800 West 143rd Street, Cleveland, OH 44111 (US).

(72) Inventors: **SCHNEIDER, John R.**; 306 Laurelwood Drive, Glenshaw, PA 15116 (US). **RETSCH, William, H., Jr.**; 3810 Lyndell Street, Castle Shannon, PA 15234-1908 (US). **AMBROSE, Ronald, R.**; 6307 Hampton Street, Pittsburgh, PA 15206 (US).

(74) Agents: **MILLER, Michael A.** et al.; PPG Industries, Inc., One PPG Place, Pittsburgh, PA 15272 (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, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, 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, 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:

— without international search report and to be republished upon receipt of that 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: LIQUID COATING COMPOSITIONS THAT INCLUDE A COMPOUND FORMED FROM AT LEAST ONE POLYFUNCTIONAL ISOCYANURATE, RELATED MULTI-LAYER COMPOSITE COATINGS, METHODS AND COATED SUBSTRATES

(57) Abstract: Liquid coating compositions are disclosed that include (a) at least one film forming resin, (b) at least one flattening agent, and (c) at least one compound formed from a polyfunctional isocyanurate. Also disclosed are methods for coating a substrate with such compositions, multi-layer composite coatings wherein at least one layer is deposited from such compositions, and substrates at least partially coated with such compositions. Methods for enhancing the flattening capabilities of at least one flattening agent in a liquid coating composition are also disclosed.



WO 2006/047666 A2