

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 August 2009 (06.08.2009)

PCT

(10) International Publication Number
WO 2009/097205 A1

(51) International Patent Classification:

C09D 7/02 (2006.01) C08F 293/00 (2006.01)
C09D 17/00 (2006.01)

Brian E.; 1912 Jane Street #5, Pittsburgh, Pennsylvania
15203 (US).

(21) International Application Number:

PCT/US2009/031527

(74) Agent: **PALLADINO, Donald R.**; PPG Industries, Inc.,
One PPG Place, Pittsburgh, Pennsylvania 15272 (US).

(22) International Filing Date: 21 January 2009 (21.01.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

12/023,423	31 January 2008 (31.01.2008)	US
61/026,267	5 February 2008 (05.02.2008)	US
61/029,641	19 February 2008 (19.02.2008)	US
12/054,821	25 March 2008 (25.03.2008)	US

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, 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, LY, MA, MD, ME, 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, ST, 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, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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

(72) Inventors: **POLK, W. David**; 6337 Stanton Avenue, Pittsburgh, Pennsylvania 15206 (US). **DECKER, Eldon L.**; 459 Partridge Run Road, Gibsonia, Pennsylvania 15044 (US). **VANIER, Noel R.**; 405 Potomac Court, Wexford, Pennsylvania 15090 (US). **WOODWORTH,**

Published:

— with international search report

(54) Title: PIGMENT DISPERSANT

(57) Abstract: A pigment dispersant is disclosed comprising a tri-block copolymer having a first block comprising a glycidyl (meth)acrylate reacted with a naphthoic acid, a second block comprising (meth)acrylic acid alkyl esters, and a third block comprising (meth)acrylic acid alkyl esters, wherein said third block is different from said second block. The dispersant is suited for use in a nanoparticulate dispersion comprising pigment particles having an average primary particle size of less than 100 nm.

WO 2009/097205 A1