

(51) International Patent Classification:
C08L 27/18 (2006.01) *C09D 127/18* (2006.01)(21) International Application Number:
PCT/US2009/058407(22) International Filing Date:
25 September 2009 (25.09.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/100,311 26 September 2008 (26.09.2008) US
61/109,950 31 October 2008 (31.10.2008) US
61/145,433 16 January 2009 (16.01.2009) US
61/145,875 20 January 2009 (20.01.2009) US(71) Applicant (for all designated States except US): **WHIT-FORD CORPORATION** [US/US]; 47 Park Avenue, Elverson, PA 19520 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HARVEY, Leonard, W.** [US/US]; 18 Spring Meadow Drive, Downingtown, PA 19335 (US). **LEECH, Lawrence, D.** [US/US]; 1218 Brinton Circle, West Chester, PA 19380 (US).(74) Agent: **ADAM F. COX, REG. NO. 46 644**; BAKER & DANIELS LLP, 111 EAST WAYNE STREET, SUITE 800, FORT WAYNE INDIANA 46802 (US).

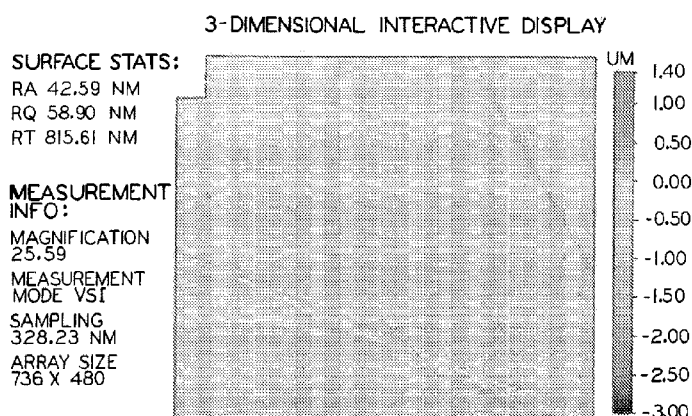
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, 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, PE, 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, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: BLENDED FLUOROPOLYMER COATINGS FOR RIGID SUBSTRATES



(57) Abstract: A fluoropolymer coating composition that may be applied over a primer and/or at least one midcoat in a non-stick coating system. The coating composition may be prepared and applied in the form of a liquid dispersion, and includes at least one fluoropolymer base component, such as polytetrafluoroethylene (PTFE) and, in particular, at least one high molecular weight PTFE (HPTFE). The coating composition additionally includes a blended fluoropolymer composition. The blended fluoropolymer composition is a blend of at least one low molecular weight PTFE (LPTFE) and at least one melt-processible fluoropolymer. After application directly to a substrate or over an underlying coating, the coating demonstrates improved abrasion and scratch resistance, as well as improved release characteristics, as compared to known coatings that include only HPTFE or HPTFE with a small amount of melt processible fluoropolymer.

Fig. 2