

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
03 December 2020 (03.12.2020)



(10) International Publication Number
WO 2020/243213 A1

(51) International Patent Classification:

C08G 18/24 (2006.01) C08G 18/75 (2006.01)
C08G 18/32 (2006.01) C08G 18/79 (2006.01)
C08G 18/60 (2006.01) C08G 18/80 (2006.01)
C08G 18/65 (2006.01) C09D 175/04 (2006.01)

EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV,
MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:

PCT/US2020/034772

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

(22) International Filing Date:

28 May 2020 (28.05.2020)

Published:

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

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/854,726 30 May 2019 (30.05.2019) US

(71) Applicant: **LUBRIZOL ADVANCED MATERIALS, INC.** [US/US]; 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (US).

(72) Inventors: **ERDODI, Gabor**; 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (US). **POURAHMADY, Naser**; 5243 Setting Sun Way, San Diego, California 92121 (US). **SKOFF, Israel J.**; 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (US). **DECHANT, Amanda**; 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (US). **SWECH, Christopher**; 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (US).

(74) Agent: **CORTESE, Vincent A.** et al.; c/o The Lubrizol Corporation, 29400 Lakeland Blvd., Legal Dept. - MD022B, Wickliffe, Ohio 44092-2298 (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, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

(54) Title: SOLVENT BORNE THERMOSET POLYAMIDE URETHANE AND/OR UREA BASED COATINGS

(57) Abstract: The present invention relates to thermoset polymer solution, such as a polyurethanes and/or polyureas that include sufficient polyamide to give polyamide strength, adhesion, and durability, wherein the polymer solutions can be prepared as a one-component or two component solvent-borne coating composition. The polyamides give a harder, more chemical resistant, and often tougher thermoset, than similar water-borne polyurethanes rich in polyamide. The compositions of this disclosure differ from other polyamides as they have been formulated to be appropriate viscosity to use as coatings and then have crosslinking technology to form hard thermoset films.



WO 2020/243213 A1