



(51) International Patent Classification:
B32B 27/40 (2006.01) **D06N 3/14** (2006.01)
B32B 27/04 (2006.01)

(21) International Application Number:
PCT/US2009/052178

(22) International Filing Date:
30 July 2009 (30.07.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/086,571 6 August 2008 (06.08.2008) US

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

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MELTZER, Donald A.** [US/US]; 560 Lake of the Woods Blvd., Akron, Ohio 44333 (US). **WIESSNER, Robert J.** [NL/NL]; P.G. Ballingslaan 37, NL-5531XG Bladel (NL). **FARKAS, Julius** [US/US]; 36200 Behm Drive, North Ridgeville, Ohio 44039 (US).

(74) Agents: **POWELL, Joe A.** et al.; Lubrizol Advanced Materials, Inc., Legal Department, 9911 Brecksville Road, Cleveland, Ohio 44141-3247 (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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

[Continued on next page]

(54) Title: FILMS AND ARTICLES MADE WITH THERMOPLASTIC BLOCK COPOLYMERS

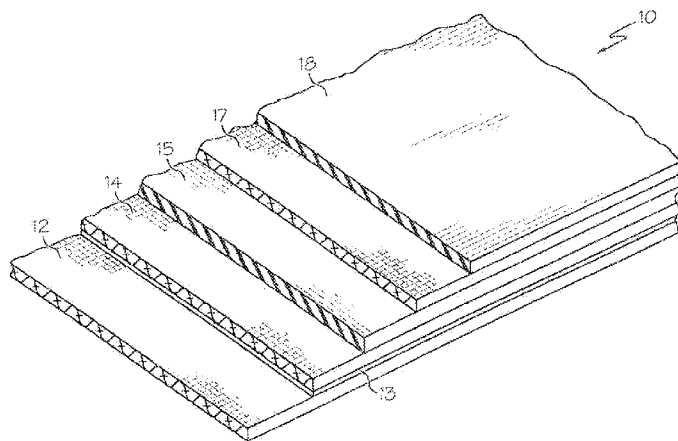


FIG. 1

(57) Abstract: The present invention relates to printing blankets, pipe liners, conveyor belts, inflatable articles, collapsible containers, protective clothing, and other types of coated fabrics that are manufactured with a thermoplastic block copolymer (TBC). This TBC can be a thermoplastic polyurethane (TPU), a copolyester (COPE), a copolyamide (COPA) or a polyurethaneurea (TPUU). The subject invention more specifically discloses a printing blanket or printing sleeve and a cured in place liner for a passageway or pipe. The TBC is (I) the reaction product of (1) a hydrophobic polyol or polyamine, (2) a polyisocyanate or an aromatic dicarboxylic acid, and (3) a linear chain extender containing 2 to 20 carbon atoms, or (II) the reaction product of (1) a hydrophobic polyol or polyamine, and (2) a carboxylic terminated telechelic polyamide sequence.



Published:

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