



(51) International Patent Classification:

D21H 19/20 (2006.01) **B32B 27/10** (2006.01)
D21H 21/14 (2006.01) **B32B 29/08** (2006.01)
D21H 23/56 (2006.01) **B65H 75/02** (2006.01)
D21H 23/62 (2006.01) **B65H 75/50** (2006.01)
B31C 3/00 (2006.01) **B65H 75/10** (2006.01)
B31C 1/00 (2006.01) **F16L 9/16** (2006.01)
B31C 7/00 (2006.01)

(21) International Application Number:

PCT/US2010/048038

(22) International Filing Date:

8 September 2010 (08.09.2010)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/555,984 9 September 2009 (09.09.2009) US

(71) Applicant (for all designated States except US): **SONOCO DEVELOPMENT, INC.** [US/US]; 1 North Second Street, Hartsville, SC 29550 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HERNANDEZ, Ismael, A.** [US/US]; 2525 West Keswick Road, Florence, SC 29501 (US). **LOUNSBURY, Charles** [US/US]; 2500 West New Castle Road, Florence, SC 29501 (US).

(74) Agents: **ORDERS, Christopher, H.** et al.; Alston & Bird LLP, Bank of America Plaza, 101 South Tryon Street, Suite 4000, Charlotte, NC 28280-4000 (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, TH, 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, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, 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))

Published:

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

— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(54) Title: COATED PAPERBOARD CORE FOR ELASTOMERIC FIBER PRODUCTION

(57) Abstract: A paperboard core suitable for use in winding yarns may include strips of paperboard wrapped about an axis and secured together to form an elongate structure defining a winding surface. A coating of a polymer such as polyvinylidene chloride covers the winding surface. The coating may be applied to the strips of paperboard prior to winding and/or applied to the winding surface after winding. The coating may comprise multiple layers of the polymer, which may be cured individually. The coating may also be applied so as to create a substantially uninterrupted coating along the winding surface. One method of applying the coating is by roll-coating.

