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

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
12 October 2017 (12.10.2017)

WIPO | PCT

(10) International Publication Number
WO 2017/176826 A8

(51) International Patent Classification:
C09D 11/02 (2014.01) *C09D 11/30* (2014.01)
C09D 11/03 (2014.01) *C09D 11/54* (2014.01)
C09D 11/10 (2014.01) *C09D 175/04* (2006.01)
C09D 11/12 (2006.01) *C09D 175/12* (2006.01)
C09D 11/14 (2006.01) *C09D 175/16* (2006.01)

(21) International Application Number:
PCT/US2017/026051

(22) International Filing Date:
05 April 2017 (05.04.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/318,833 06 April 2016 (06.04.2016) US

(71) Applicant: **SUN CHEMICAL CORPORATION** [US/US]; 35 Waterview Boulevard, Parsippany, NJ 07054 (US).

(72) Inventors: **RIMMER, David, Jason**; 4 Heys Hunt Avenue, Leyland PR25 3UL (GB). **CRANDON, Nicholas, Matthew**; 24 Earlesfield Close, Sale M33 4UR (GB).

(74) Agent: **ACHKAR, Charles, C.** et al.; Ostrolenk Faber LLP, 1180 Avenue of the Americas, New York, NY 10036 (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, 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, 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, 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: MULTIPURPOSE SHRINK SLEEVE PRINTING INK

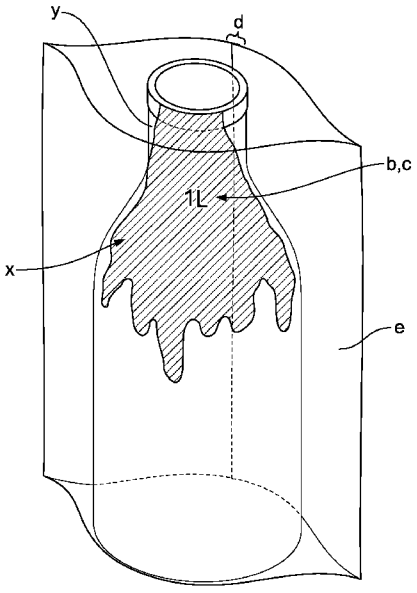

FIG. 2

(57) Abstract: Described herein is a printing ink or coating composition that includes: (a) one or more elastomeric polyurethane resins with amine functionality having a glass transition temperature of about -45°C to about -70°C; (b) one or more acrylic resins based on a methacrylate/styrene copolymer with a glass transition temperature of about 45°C to about 110°C; (c) one or more nitrocellulose binders; (d) one or more solvents; and (e) optionally, one or more waxes and/or one or more colorants. The inks and coating compositions are well suited for printing onto shrink sleeve label substrates, such as by flexographic and gravure printing. The inks and coatings provide exceptional printability and resistance to chemicals, to softening, to re-wetting, and to set-off.

WO 2017/176826 A8

[Continued on next page]

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).

Published:

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

(48) Date of publication of this corrected version:
07 December 2017 (07.12.2017)

(15) Information about Correction:
see Notice of 07 December 2017 (07.12.2017)