

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

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
03 May 2018 (03.05.2018)

(10) International Publication Number
WO 2018/081764 A1

(51) International Patent Classification:

D21H 19/00 (2006.01) *D21H 19/78* (2006.01)
D21H 19/18 (2006.01) *D21H 27/10* (2006.01)

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(21) International Application Number:

PCT/US2017/059164

Published:

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

(22) International Filing Date:

31 October 2017 (31.10.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/414,838 31 October 2016 (31.10.2016) US

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

(72) Inventors: **ZHA, Yongping**; 75 Tudor Lane, Berkely
Heights, NJ 07922 (US). **GORDON, Vanessa**; 87A Up-
per Saddle River Road, Montvale, NJ 07645 (US). **LUC-
CI, Saverio**; 888 Broad Street, Clifton, NJ 07013 (US).
SCHOTTLAND, Philippe; 68 Westgate Drive, Sparta, NJ
078701 (US).

(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, 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, 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,
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,

(54) Title: GREASE, OIL, AND WATER RESISTANT COATING COMPOSITIONS

(57) Abstract: Described herein are coatings which impart oil, grease, and water resistance to various materials, such as paper, paper-board and polymeric materials. Such coatings may be applied as barrier coatings to the substrate materials in order to inhibit and prevent the transmission of oil, grease and water; that is, to prevent oil, water grease from passing into and/or through the substrate material. The coatings include an acrylic-based polymer latex, a styrene-butadiene rubber latex, a styrene-acrylic resin solution, a large particle size wax, and optionally, a small particle size wax. Also disclosed herein is a process of preparing the coatings. Also disclosed are products to which the coatings have been applied in order to impart oil, grease and/or water resistance, and processes for preparing such products.



WO 2018/081764 A1