



(51) International Patent Classification:

C08J 5/16 (2006.01) C08K 5/06 (2006.01)

A61L 27/14 (2006.01) C08K 5/05 (2006.01)

A61L 27/34 (2006.01) C08K 5/21 (2006.01)

(21) International Application Number:

PCT/CA2021/051331

(22) International Filing Date:

24 September 2021 (24.09.2021)

(25) Filing Language:

English

(26) Publication Language:

English

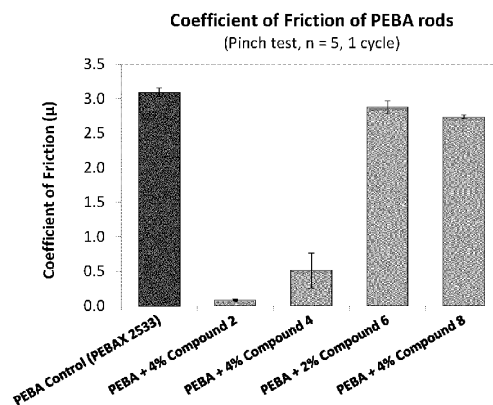
(30) Priority Data:

63/083,305 25 September 2020 (25.09.2020) US

(71) Applicant: **EVONIK CANADA INC.** [CA/CA]; 3380
South Service Road, Burlington, Ontario L7N 3J5 (CA).(72) Inventors: **PIOTROWICZ, Alexandra**; 2454 Genevieve
Drive, Mississauga, Ontario L5A 2M3 (CA). **CILLERO
RODRIGO, Antonio**; 281 Mutual Street, Unit 802, Toron-
to, Ontario M4Y 3C4 (CA). **ZUO, Jiaqing**; 1601 Cuth-
bert Ave., Mississauga, Ontario L5M 3R3 (CA). **HO, Jean-
nette**; 39 Nealon Avenue, Toronto, Ontario M4K 1Z1 (CA).(74) Agent: **ROBIC**; 630 Boul Rene-Levesque W., 20th Floor,
Montreal, Québec H3B 1S6 (CA).(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, IT, 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,
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).

(54) Title: SURFACES HAVING LUBRICIOUS OR LOW FRICTION PROPERTIES

Figure 1



(57) **Abstract:** An article, comprising: a low friction surface comprising an oligofluorinated additive admixed with a base polymer; wherein a coefficient of friction of said low friction surface is reduced by at least 30% compared to a surface of the base polymer without said oligofluorinated additive. Said oligofluorinated additive may be according to Formula (I), Formula (II), Formula (III), or Formula (IV). A low friction surface can be created by applying said mixture of oligofluorinated additive and a base polymer to a surface, and a medical device having reduced coefficient of friction can be created by extruding, molding or coating a composition comprising an oligofluorinated additive and a base polymer.

[Continued on next page]



Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

— *with international search report (Art. 21(3))*
— *in black and white; the international application as filed
contained color or greyscale and is available for download
from PATENTSCOPE*