

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2018/045282 A8

(43) International Publication Date
08 March 2018 (08.03.2018)

(51) International Patent Classification:

C09K 8/04 (2006.01) *C09K 8/36* (2006.01)
C09K 8/12 (2006.01) *C09K 8/68* (2006.01)
C09K 8/26 (2006.01) *C09K 8/88* (2006.01)
C09K 8/28 (2006.01)

Published:

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

(48) Date of publication of this corrected version:

17 May 2018 (17.05.2018)

(21) International Application Number:

PCT/US2017/049845

(15) Information about Correction:

see Notice of 17 May 2018 (17.05.2018)

(22) International Filing Date:

01 September 2017 (01.09.2017)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/382,347 01 September 2016 (01.09.2016) US

(71) Applicant: **KEMIRA OYJ** [FI/FI]; Porkkalankatu 3,
FI-00180 Helsinki (FI).

(72) Inventor: **TELLAKULA, Roopa**; 887 Village Manor
Place, Suwanee, GA 30024 (US).

(74) Agent: **SMYTHE, Nicole**; King & Spalding, 1180
Peachtree Street, Atlanta, GA 30309 (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,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

(54) Title: EMULSIONS, TREATMENT FLUIDS AND METHODS FOR TREATING SUBTERRANEAN FORMATIONS

(57) Abstract: Emulsions, treatment fluids and methods for treating subterranean formations are provided, wherein the emulsions comprise water, a water-immiscible liquid, one or more polymers, and an inverting surfactant composition comprising one or more surfactants selected from the group consisting of ethoxylated amine compounds, ethoxylated fatty acid compounds, and alkyl poly-ethyleneglycol ether carboxylic acid compounds, alkyl polyglycol ether carboxylic acid compounds, and salts or esters thereof. The emulsions are particularly suitable for use in brine.



WO 2018/045282 A8