



(43) International Publication Date
10 April 2014 (10.04.2014)

(10) International Publication Number
WO 2014/055213 A3

(51) International Patent Classification:
C04B 28/02 (2006.01)

(21) International Application Number:
PCT/US2013/059350

(22) International Filing Date:
12 September 2013 (12.09.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/708,268 1 October 2012 (01.10.2012) US
61/816,253 26 April 2013 (26.04.2013) US

(71) Applicant: HUNTSMAN PETROCHEMICAL LLC
[US/US]; 10003 Woodloch Forest Drive, The Woodlands,
TX 77380 (US).

(72) Inventors: SALAZAR, Luis, C.; 55 Quiet Oak Circle,
Spring, TX 77381 (US). LEWIS, David, C.; 2443 West-
hoff Court, Conroe, TX 77384 (US). BIESMANS, Guy;
Everslaan 45, B-3078 Everberg (BE). GODAVARTHY,
Srinivasa, S.; 12000 Sawmill Road, #1904, The Wood-
lands, TX 77380 (US). MILLER, Farron, W.; 8914 Al-
cina Dr., Tomball, TX 77375 (US).

(74) Agent: KOROMPAI, Edward, D.; Huntsman Internation-
al LLC, Legal Department, 10003 Woodloch Forest Drive,
The Woodlands, TX 77380 (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, 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, 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, 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, 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).

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))

(88) Date of publication of the international search report:
19 June 2014

(54) Title: SURFACTANT FORMULATION FOR RELEASE OF UNDERGROUND FOSSIL FLUIDS

(57) Abstract: The present disclosure provides a surfactant formulation for use in treating and recovering fossil fluid from a subter-
ranean formation. The surfactant formulation includes a primary surfactant, a formulation stability agent and injection water. The
surfactant formulation may be injected into one or more injection wells located within the subterranean formation and fossil fluids
can then be subsequently recovered from one or more producing wells.



WO 2014/055213 A3