

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
29 July 2010 (29.07.2010)

PCT

(10) International Publication Number
WO 2010/085279 A1

(51) International Patent Classification:
C11D 1/12 (2006.01) *C11D 3/00* (2006.01)

(21) International Application Number:
PCT/US2009/051319

(22) International Filing Date:
21 July 2009 (21.07.2009)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
PCT/US2009/031608
21 January 2009 (21.01.2009) US

(71) Applicant (for all designated States except US):
STEPAN COMPANY [US/US]; 22 West Frontage
Road, Northfield, IL 60093 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BERNHARDT, Randal, J.** [US/US]; 39771 N Wittenburg Drive, Antioch, IL 60002 (US). **ALONSO, Lourdes, R.** [US/US]; 431 Elm Street, #4C, Deerfield, 60015 (US). **DADO, Gregory, P.** [US/US]; 3520 N Lake Shore Drive, Apt 1M, Chicago, IL 60657 (US).

(74) Agent: **GROETKEN, Troy, A.**; Mcandrews, Held & Malloy LTD, 500 W Madison Street, Suite 3400, Chicago, IL 60661 (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, 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, KM, 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, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: LIGHT DUTY LIQUID DETERGENT COMPOSITIONS OF SULFONATED ESTOLIDES AND OTHER DERIVATIVES OF FATTY ACIDS AND USES THEREOF

(57) Abstract: Light duty liquid detergent formulations that contain sulfo-estolide surfactants, sulfo-estolide derivatives and salts of sulfo-estolides are disclosed. The compositions of the presently described technology are useful for soil removal applications including, but not limited to, washing dishes by hand.



WO 2010/085279 A1