

(10) International Publication Number
WO 2013/162736 A1(43) International Publication Date
31 October 2013 (31.10.2013)(51) International Patent Classification:
C11D 1/28 (2006.01)(21) International Application Number:
PCT/US2013/031049(22) International Filing Date:
13 March 2013 (13.03.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/637,607 24 April 2012 (24.04.2012) US(71) Applicant: STEPAN COMPANY [US/US]; 22 W. Front-
age Road, Northfield, IL 60093 (US).

(72) Inventors: ALLEN, David, R.; 849 N. Franklin #1212, Chicago, IL 60610 (US). ALONSO, Marcos; 6826 N. Ridge Blvd. #206, Chicago, IL 60645 (US). BEDDAOUI, Mary; 2507 Debra Lane, Glenview, IL 60026 (US). BERNHARDT, Randal, J.; 39771 N. Wittenburg Drive, Antioch, IL 60002 (US). BROWN, Aaron; 2022 W. Estes, Chicago, IL 60645 (US). DILLAVOU, Scott; 7514 Kolmar Ave., Skokie, IL 60076 (US). DONG, Xue, Min; 34 Fox Trail, Lincolnshire, IL 60069 (US). GORMAN, Wilma; 512 S. Home, Park Ridge, IL 60068 (US). HUTCHISON, John, C.; 6525 N. Bosworth Avenue #1, Chicago, IL 60626 (US). LUEBKE, Gary; 5701 N. Sheridan Road, Unit 24 M, Chicago, IL 60660 (US). LUKA, Renee; 1419 W. Touhy Ave, Park Ridge, IL 60068 (US). LUXEM, Franz; 1234 E. Pratt Drive, Palatine, IL 60074 (US). MALEC, Andrew, D.; 532 W. Belmont Ave. #n2, Chicago, IL 60657 (US). MASTERS, Ronald, A.; 2516 Waukegan Road, #348, Glenview, IL 60025 (US). MURPHY, Dennis, S.; 1239 Deer Trail Lane, Libertyville, IL 60048 (US). PENDLETON, Nicholas; 1102 Gables Dr Ne, Atlanta, GA 30319 (US). RYKLIN, Irma; 874 Horatio Blvd., Buffalo Grove, IL 60089 (US).

SKELTON, Patti; 866 Moon Bridge Road, P.O. Box 405, Winder, GA 30680 (US). SOOK, Brian; 3875 Orchard Way, Valdosta, GA 31605 (US). SPAULDING, Chris; 2740 Hampton Pkwy, Unit G2, Evanston, IL 60201 (US). TURPIN, Krista; 3285 Minuit Ct., Loganville, GA 30052 (US). WALLACE, Gregory; 3122 W. Carmen Ave., Chicago, IL 60625 (US). WIESTER, Michael; 2107 W. Berwyn Ave. Apt. 1E, Chicago, IL 60625 (US). WOLFE, Patrick Shane; 145 N. Clark Drive, Palantine, IL 60074 (US).

(74) Agent: DILWORTH IP LLC; 2 Corporate Drive, Suite 206, Trumbull, CT 06611 (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, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, 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, ML, MR, NE, SN, TD, TG).

Published:

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

(54) Title: UNSATURATED FATTY ALCOHOL DERIVATIVES FROM NATURAL OIL METATHESIS

(57) Abstract: Sulfate and sulfonate derivatives of unsaturated fatty alcohols, processes for making them, and methods of using them are disclosed. In one aspect, a monounsaturated fatty alcohol composition is then converted to a sulfate or sulfonate derivative by one or more of alkoxylation, sulfation, sulfonation, and sulfitation. Of particular interest are the sulfate and ether sulfate derivatives.



WO 2013/162736 A1