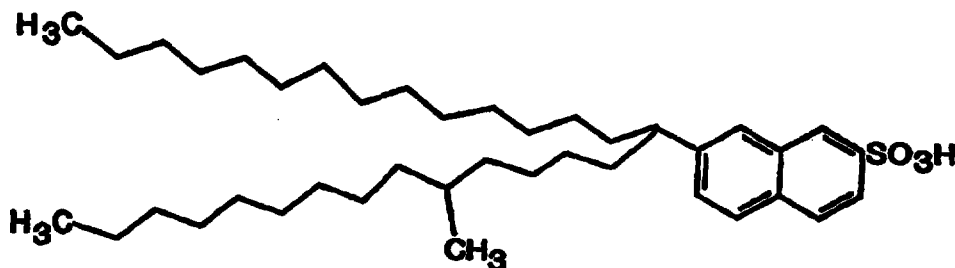




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C07C 7/20, 303/02	A1	(11) International Publication Number: WO 00/32546 (43) International Publication Date: 8 June 2000 (08.06.00)
(21) International Application Number: PCT/US99/27772 (22) International Filing Date: 23 November 1999 (23.11.99) (30) Priority Data: 09/203,141 1 December 1998 (01.12.98) US (71) Applicant: EXXON RESEARCH AND ENGINEERING COMPANY [US/US]; P.O. Box 390, 180 Park Avenue, Florham Park, NJ 07932-0390 (US). (72) Inventors: WIEHE, Irwin, Andrew; 3 Louise Lane, Gladstone, NJ 07934 (US). VARADARAJ, Ramesh; 18 Aberdeen Circle, Flemington, NJ 08822 (US). JERMANSEN, Torris, G.; 25 Pheasant Hill Drive, Far Hills, NJ 07931 (US). KENNEDY, Raymond, John; 46 Van Syckel Road, Hampton, NJ 08827 (US). BRONS, Cornelius, Hendrick; 28 Fairview Street, Washington, NJ 07882 (US). (74) Agents: HANTMAN, Ronald, D. et al.; Exxon Research and Engineering Company, P.O. Box 390, Florham Park, NJ 07932-0390 (US).		(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, ZA, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: **BRANCHED ALKYL-AROMATIC SULFONIC ACID DISPERSANTS FOR SOLUBILIZING ASPHALTENES IN PETROLEUM OILS**



STRUCTURE OF Iso-C₁₅-C₁₅ NAPHTHALENE SULFONIC ACID

(57) Abstract

The present invention is an asphaltene dispersant containing an aromatic, a sulfonic acid head, and an alkyl tail containing 16 carbons or more and at least one branch of a methyl or longer alkyl. Preferably, the aromatic is a fused two ring aromatic and the tail is a two, branched alkyl tail of 30 carbons or longer.