

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 December 2005 (01.12.2005)

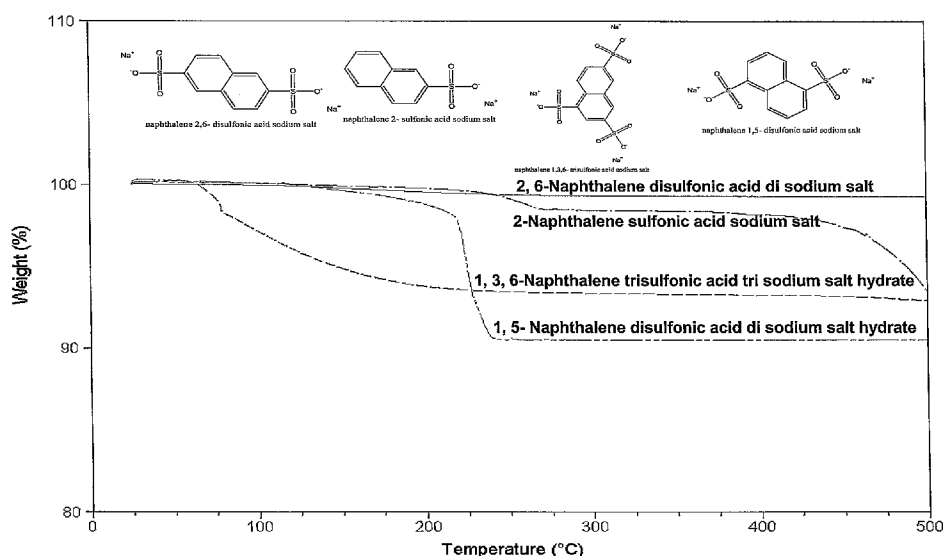
PCT

(10) International Publication Number
WO 2005/113726 A1

- (51) International Patent Classification⁷: **C10G 9/00**, 47/22, 11/00, 45/00, 47/00, 49/00
- (21) International Application Number: PCT/US2005/016710
- (22) International Filing Date: 12 May 2005 (12.05.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/571,308 14 May 2004 (14.05.2004) US
- (71) Applicant (for all designated States except US): **EXXON-MOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **VARADARAJ, Ramesh** [US/US]; 18 Aberdeen Circle, Flemington, NJ 08822 (US). **SISKIN, Michael** [US/US]; 56 Shongum Road, Randolph, NJ 07869 (US). **BROWN, Leo, D.** [US/US]; 5931 Wildflower Road, Baton Rouge, LA 70817 (US). **MAA, Peter, S.** [US/US]; 1521 Woodchase Boulevard, Baton Rouge, LA 70808 (US).
- (74) Agents: **HUGHES, Gerard, J.** et al.; ExxonMobil Research and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:
— with international search report

[Continued on next page]

(54) Title: FOULING INHIBITION OF THERMAL TREATMENT OF HEAVY OILS



(57) Abstract: The use of water-soluble aromatic polysulfonic acid salts for inhibiting fouling in process equipment used in the thermal treatment of heavy oils.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.