



(51) International Patent Classification:

C10M 105/10 (2006.01) *C07F 3/04* (2006.01)
C10M 105/58 (2006.01) *C07C 11/02* (2006.01)

(21) International Application Number:

PCT/US2012/071753

(22) International Filing Date:

27 December 2012 (27.12.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/580,562 27 December 2011 (27.12.2011) US

(71) Applicant (for all designated States except US): **CHEVRON ORONITE COMPANY LLC**; 6001 Bollinger Canyon Road, Bldg. T, San Ramon, CA 94583-2324 (US).

(72) Inventors; and

(71) Applicants (for US only): **GIBBS, Andrew, R.** [GB/US]; 203 Coggins Drive, Apt. A212, Pleasant Hill, CA 94523 (US). **CAMPBELL, Curtis** [US/US]; 118 Montego Drive, Hercules, CA 94547 (US).(74) Agents: **CARMEN, Michael, E.** et al.; M. Carmen & Associates, PLLC, 1201 RXR Plaza, Uniondale, NY 11556 (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:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: POST-TREATED SULFURIZED SALT OF AN ALKYL-SUBSTITUTED HYDROXYAROMATIC COMPOSITION

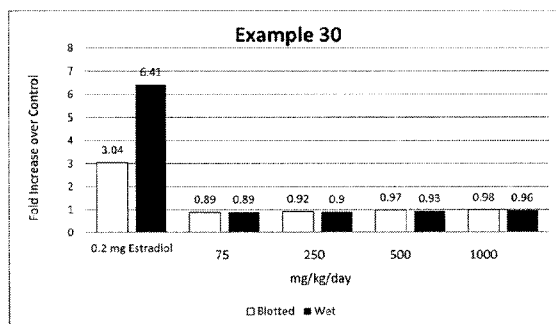


Figure 1

(57) **Abstract:** Disclosed herein is a post-treated salt of a sulfurized alkyl-substituted hydroxyaromatic composition which is a reaction product of (a) a salt of a sulfurized alkyl-substituted hydroxyaromatic composition, wherein the alkyl-substituted hydroxyaromatic compound is derived from alkylation of a hydroxyaromatic compound with one or more olefins comprising C₉ to C₁₈ oligomers of monomers selected from propylene, butylene or mixtures thereof, (b) a source of an aldehyde and (c) a primary and/or secondary monoamine compound having at least one active hydrogen. The post-treated salt of a sulfurized alkylhydroxyaromatic composition disclosed herein has a reduced content of unsulfurized alkyl-substituted hydroxyaromatic compound and its unsulfurized metal salt as compared to the content, by combined mass, of the unsulfurized alkyl-substituted hydroxyaromatic compound and its unsulfurized metal salt present in the non-post-treated salt of a sulfurized alkyl-substituted hydroxyaromatic composition.