



(51) International Patent Classification:

C10G 7/10 (2006.01) C10L 1/26 (2006.01)
C10G 9/16 (2006.01) C10G 75/02 (2006.01)
C10L 1/14 (2006.01) C10L 10/04 (2006.01)

(21) International Application Number:

PCT/IB2009/053726

(22) International Filing Date:

25 August 2009 (25.08.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

1790/MUM/2008 26 August 2008 (26.08.2008) IN

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(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).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report:

19 August 2010

(54) Title: A NEW ADDITIVE FOR INHIBITING ACID CORROSION AND METHOD OF USING THE NEW ADDITIVE

(57) Abstract: The present invention relates to the field of corrosion inhibition in hydrocarbon fluid processing units. The present invention comprises a new additive for inhibiting acid corrosion comprising polymeric thiophosphate ester, which is obtained by reaction of a polymer compound having mono, di or poly hydroxyl group, preferably polymer compound which is hydroxyl - termination, more preferably said polymer compound comprising hydroxyl - terminated polyisobutylene or polybutene and phosphorous pentasulphide. Said polymeric thiophosphate ester is further reacted with any oxide selected from group consisting of ethylene oxide, butylenes oxide or propylene oxide or such other oxide, preferably ethylene oxide, capably forming ethylene oxide derivative of thiophosphate ester. The invention is useful effecting acid corrosion inhibition on the metal surfaces of a distillation unit, distillation column, trays, packing and pump around piping.

