

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
23 April 2009 (23.04.2009)

PCT

(10) International Publication Number
WO 2009/050287 A1

(51) International Patent Classification:

C10L 1/224 (2006.01) *C10M 133/54* (2006.01)
C10M 133/16 (2006.01) *C10M 133/56* (2006.01)
C10L 10/08 (2006.01) *C10M 161/00* (2006.01)
C10L 1/22 (2006.01) *C10N 30/06* (2006.01)
C10M 133/00 (2006.01)

(21) International Application Number:

PCT/EP2008/064071

(22) International Filing Date: 17 October 2008 (17.10.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

07118869.2 19 October 2007 (19.10.2007) EP

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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, 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, 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, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

— with international search report
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(54) Title: FUNCTIONAL FLUIDS FOR INTERNAL COMBUSTION ENGINES



(57) Abstract: The present invention provides a functional fluid suitable for use in an internal combustion engine, comprising: (a) a major amount of a base fluid; (b) a minor amount of a polysubstituted alkanol amine derivative reaction product obtainable by reacting: (i) a carboxylate compound of formula (I) R^1COOR^2 in which: R^1 is an aliphatic C_{1-30} -hydrocarbon radical; and R^2 is hydrogen or alkyl, mono- or polyhydroxyalkyl, or ammonium; with (ii) an alkanol amine of the formula (II) NHR^3R^4 , wherein R^3 and R^4 are independently selected from hydrogen atoms and linear or branched-chain hydrocarbon groups, the carbon chain of which is optionally interrupted by one or more -NH- groups and which optionally has at least one hydroxyl group attached to a carbon atom of the hydrocarbon group, with the proviso that R^3 and R^4 are not both

hydrogen atoms and that at least one of said residues R^3 and R^4 carries at least one hydroxyl group; in a molar ratio of the -COO- groups of the carboxylate compound of formula (I) to the molar sum of OH and NH groups of the alkanol amine of formula (II) in a range and under reaction conditions supporting the formation of a reaction product comprising polysubstituted alkanol amine derivatives; and (c) a minor amount of a detergent additive.

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