

CORRECTED VERSION

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
7 January 2010 (07.01.2010)

(10) International Publication Number
WO 2010/002863 A8

(51) International Patent Classification:

C10M 125/00 (2006.01) *C10N 30/12* (2006.01)

C10M 133/54 (2006.01) *C10N 40/25* (2006.01)

(21) International Application Number:

PCT/US2009/049212

(22) International Filing Date:

30 June 2009 (30.06.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

12/215,739 30 June 2008 (30.06.2008) US

(71) Applicant (for all designated States except US):
CHEVRON ORONITE COMPANY LLC [US/US];
6001 Bollinger Canyon Road, San Ramon, CA 94583
(US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **NELSON, Kenneth, D.** [US/US]; 3643 Mount Veeder Road, Napa, CA 94558 (US). **CHIVERTON, Edward, A.** [US/GB]; 9 Mansion House, Bryn Y Mor, Tenby, Pembrokeshire SA70HT (GB).

(74) Agents: **CAROLI, Claude, J.** et al.; Chevron Corporation, Law Department, Post Office Box 6006, San Ramon, CA 94583-0806 (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, 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, 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))

Published:

— with international search report (Art. 21(3))

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

8 April 2010

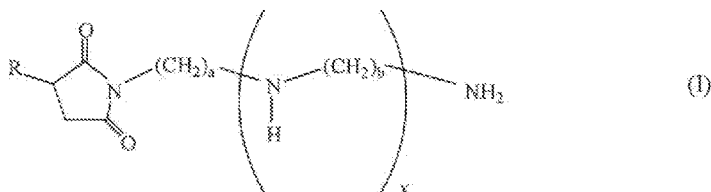
(48) Date of publication of this corrected version:

10 September 2010

(15) Information about Correction:

see Notice of 10 September 2010

(54) Title: LUBRICATING OIL ADDITIVE AND LUBRICATING OIL COMPOSITION CONTAINING SAME



(57) Abstract: A molybdated succinimide complex is disclosed which is prepared by a process comprising (a) reacting a succinimide of a polyamine of formula (I) wherein R is a hydrocarbon radical having a number average molecular weight of about 500 to about 5,000, a and b are independently 2 or 3, and x is 0 to 10, with an ethylenically unsaturated carboxylic acid or anhydride thereof, in a charge mole ratio of the ethylenically unsaturated carboxylic acid or anhydride thereof to the succinimide of formula (I) of about 0.9:1 to about 1.05:1; and (b) reacting the succinimide product of step (a) with an acidic molybdenum compound. Also disclosed is a lubricating oil composition containing at least (a) a major amount of a base oil of lubricating viscosity and (b) a minor amount of the molybdated succinimide complex.