

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
26 July 2007 (26.07.2007)

PCT

(10) International Publication Number
WO 2007/084407 A3

(51) International Patent Classification:
C10G 71/00 (2006.01)

Dumfries, VA 22026 (US). **HORODYSKY, Andrew, G.**
[US/US]; 139 Weston Drive, Cherry Hill, NJ 08003 (US).

(21) International Application Number:
PCT/US2007/000915

(74) Agents: **PURWIN, Paul, E.** et al.; Exxonmobil Research
And Engineering Company, 1545 Route 22 East, P. O. Box
900, Annandale, NJ 08801-0900 (US).

(22) International Filing Date: 12 January 2007 (12.01.2007)

(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, GT, HN, HR, HU, ID, IL, IN, IS,
JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS,
LT, LU, LV, LY, MA, MD, 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, SV, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/758,840 13 January 2006 (13.01.2006) US
11/651,185 9 January 2007 (09.01.2007) US

(71) Applicant (for all designated States except US): **EXXON-
MOBIL RESEARCH AND ENGINEERING COM-
PANY** [US/US]; 1545 Route 22 East, P. O. Box 900,
Annandale, NJ 08801-0900 (US).

(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, LV, 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).

(72) Inventors; and

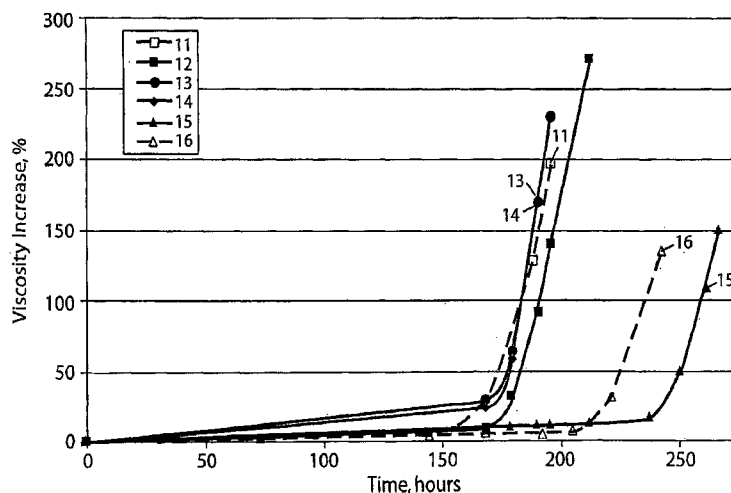
(75) Inventors/Applicants (for US only): **BUCK, William,
H.** [US/US]; 1122 Independence Drive, West Chester, PA
19382 (US). **FARNG, L., Oscar** [US/US]; 22 Evans Lane,
Lawrenceville, NJ 08648 (US). **DECKMAN, Douglas, E.**
[US/US]; 5 Peachtree Lane, Mullica Hill, NJ 08062 (US).
GIVENS, Jr., Willie, A. [US/US]; 17694 Avenel Lane,

Published:
— with international search report

[Continued on next page]

(54) Title: LOW SULFUR, LOW ASH AND LOW PHOSPHOROUS LUBRICANT ADDITIVE AND COMPOSITION

Impact of Group V Basestock on ERCOT Performance



(57) Abstract: A lubricating oil composition is disclosed. This composition, comprises a lubricating oil basestock, an alkylated aromatic additive of at least 0.01 and less than 20 weight percent of the composition, a dispersant-detergent-inhibitor system of less than 15 percent weight percent of the composition, a zinc dithiophosphate additive of at least 0.1 weight percent of the composition and no more than 1.0 weight percent of the composition, the composition having less than 630 PPM phosphorus, less than 710 PPM zinc, less than 5,000 PPM sulfur, less than 8 TBN5 less than 1.0 weight percent ash. In a second embodiment, an additive composition for lubricating oils is disclosed. In a third embodiment, a method of obtain a favorable lubricating properties is disclosed.

WO 2007/084407 A3



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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.

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

6 December 2007