



(43) International Publication Date
13 December 2012 (13.12.2012)

(10) International Publication Number
WO 2012/170153 A3

(51) International Patent Classification:

C10G 69/00 (2006.01) *C07C 49/88* (2006.01)
C10L 1/08 (2006.01) *C07C 45/87* (2006.01)
C10G 3/00 (2006.01)

(21) International Application Number:

PCT/US2012/037767

(22) International Filing Date:

14 May 2012 (14.05.2012)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

13/157,921 10 June 2011 (10.06.2011) US

(71) Applicant (for all designated States except US): **CHEVRON U.S.A. INC.** [US/US]; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZHAN, Bi-Zeng** [CA/US]; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US). **HOMMELTOFT, Sven Ivar** [DK/US]; 6001 Bollinger Canyon Road, San Ramon, California 94583 (US).

(74) Agents: **MCQUISTON, Jeffrey M.** et al.; Chevron Corporation, Law Department, P.O. Box 6006, San Ramon, California 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, 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:

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

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

13 June 2013

(54) Title: CONVERSION OF FATTY ACIDS TO BASE OILS AND TRANSPORTATION FUELS

(57) Abstract: The present invention is directed to methods for processing fatty acids to provide for base oil and transportation fuels, wherein decarboxylation-coupling dimerization of fatty acids provides dimer ketones from which the base oils and transportation fuels may be produced.



WO 2012/170153 A3