



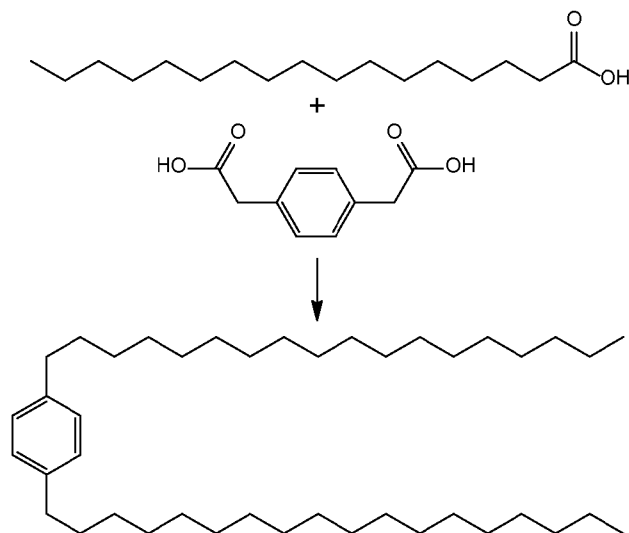
- (51) International Patent Classification:
C10G 3/00 (2006.01) *C25B 3/10* (2006.01)
- (21) International Application Number:
PCT/US2014/015199
- (22) International Filing Date:
7 February 2014 (07.02.2014)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
13/788,604 7 March 2013 (07.03.2013) US
- (71) Applicant: **EXXONMOBIL RESEARCH AND ENGINEERING COMPANY** [US/US]; 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).
- (72) Inventors: **WANG, Kun**; 5 Burr Street, Bridgewater, NJ 08807 (US). **TAN, Liena**; 5335 Broad Drive, Unit 102, Madison, WI 53705 (US).
- (74) Agents: **MIGLIORINI, Robert, A.** et al.; Exxonmobil Research and Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (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, BN, 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, IR, IS, JP, KE, KG, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, KM, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: ELECTROCHEMICAL SYNTHESIS TO PRODUCE LUBE STOCK FROM RENEWABLE FEEDS

**FIG. 2**

(57) Abstract: Provided are processes for producing a lube basestock or wax from a feedstock of biological origin, the method including: providing a fatty acid originated from the feedstock of biological origin and an aromatic acid in a solvent comprising a base; and electrically coupling the fatty acid and the aromatic acid to produce a hydrocarbon, wherein the molar concentration of the fatty acid is greater than the molar concentration of the aromatic acid.

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

7 May 2015

- *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))*