(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
31 May 2007 (31.05.2007)

PCT

(10) International Publication Number
WO 2007/061935 A2

(51) International Patent Classification:
B01D 59/44 (2006.01)

(21) International Application Number:
PCT/US2006/044843

(22) International Filing Date:
17 November 2006 (17.11.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/738,749 22 November 2005 (22.11.2005) US
11/598,873 14 November 2006 (14.11.2006) US

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

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **QIAN, Kuangnan** [US/US]; 45 Hendrickson Drive, Belle Mead, NJ 08502 (US). **OLMSTEAD, William, N.** [US/US]; 126 Lee's Hill Road, Basking Ridge, NJ 07924 (US). **ENGLISH, Jason, B.** [US/US]; 11999 Longridge Avenue #214, Baton Rouge, LA 70816 (US). **GREEN, Larry, A.** [US/US]; 708 Union Road, Mickleton, NJ 08056 (US). **SAEGER, Roland, B.** [US/US]; 207 West Evesham Road, Runnemede, NJ 08078-1932 (US). **JAFFE, Stephen, B.** [US/US]; 548 Bartram Road, Moorestown, NJ 08057 (US).

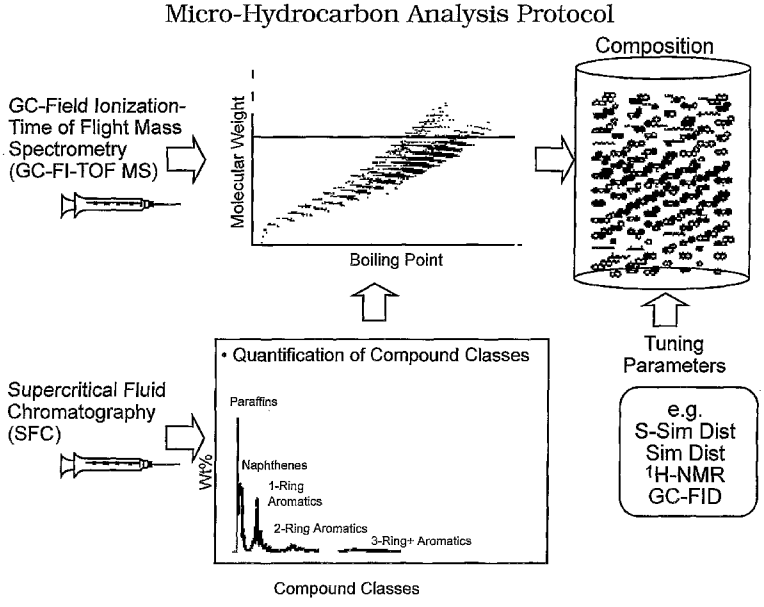
(74) Agents: **PURWIN, Paul, E.**_ et al.; Exxonmobil Research And Engineering Company, 1545 Route 22 East, P.O. Box 900, Annandale, NJ 08801-0900 (US).

(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.

(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).

[Continued on next page]

(54) Title: MICRO-HYDROCARBON ANALYSIS



(57) Abstract: The present invention is a method to determine the composition of a hydrocarbon feedstream from a small sample of hydrocarbons including the steps analyzing the sample with a combination of chromatograph and mass spectrometer, and reconciling output from step a) with other analytical measurements to determine to determine the composition of the hydrocarbon feedstream.

WO 2007/061935 A2

Published:

— *without international search report and to be republished upon receipt of that report*

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.