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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
26 June 2008 (26.06.2008)

PCT

(10) International Publication Number
WO 2008/076570 A3

(51) International Patent Classification:
G05B 19/418 (2006.01) *C10L 1/00* (2006.01)
C10G 75/04 (2006.01) *F28F 27/00* (2006.01)

(21) International Application Number:
PCT/US2007/084913

(22) International Filing Date:
16 November 2007 (16.11.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/610,587 14 December 2006 (14.12.2006) US

(71) Applicant *(for all designated States except US)*: **GENERAL ELECTRIC COMPANY** [US/US]; 1 River Road, Schenectady, NY 12345 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **PRASAD, Vijaysai** [IN/IN]; #201, Adhvika Fantasia, Kagadasapura, C.v. Raman Nagar, Karnataka, Bangalore 560093 (IN). **TAYALIA, Yatin** [IN/IN]; #207, Phase I, Prestige Langleigh, Ecc Road, Whitefield, Bangalore 560066 (IN). **SHAH, Sunil, Shirish** [IN/IN]; 6a32, Cedar, Sherwood, Basvanagar, Bangalore, Karnataka 560037 (IN). **CROSS, Colin, W.** [US/US]; 14927 Oak Bluff Court, Houston, TX 77070 (US).

(74) Agents: **TOOP, Barbara A.** et al.; General Electric Company, Global Patent Operation, 187 Danbury Road, Suite 204, Wilton, CT 06897 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, 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, 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, MT, 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).

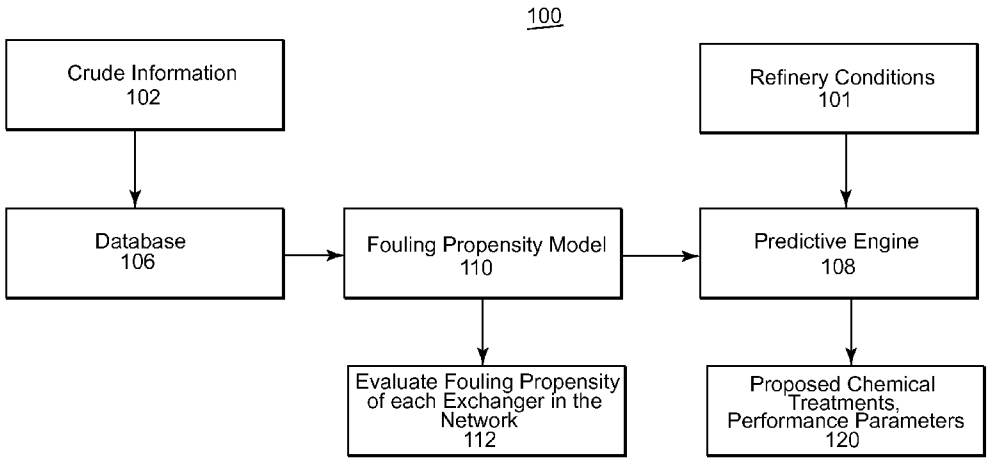
Declarations under Rule 4.17:

— *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))*

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR ASSESSING THE PERFORMANCE OF CRUDE OILS



(57) Abstract: A methodology and system is disclosed which addresses outstanding needs of refiners to process cheaper crudes or blends of crudes. This method and system comprises a number of steps, including characterizing the impact of various constituents in the crude which result in fouling of heat exchangers; estimating model parameters; monitoring and predicting qualitative and quantitative performance; and determining optimal dosage of chemical treatments.

WO 2008/076570 A3

Published:

— *with international search report*

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

(88) Date of publication of the international search report:
2 October 2008