

(51) International Patent Classification:
C10G 33/06 (2006.01)(21) International Application Number:
PCT/US2012/053638(22) International Filing Date:
4 September 2012 (04.09.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/248,899 29 September 2011 (29.09.2011) US(71) Applicant (for all designated States except US): CAMERON INTERNATIONAL CORPORATION [US/US];
1333 West Loop South, Houston, TX 74027 (US).

(72) Inventor; and

(71) Applicant : SPRENKEL, Marcus D. [GB/US]; 11535
Overbrook Lane, Houston, TX 77077 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HYPES, Ronald D. [US/US]; 11507 Orchard Mountain Drive, Houston, TX 77059 (US). CASTRO, Jamie J. [VE/US]; 17215 Water Oak Bend Court, Cypress, TX 77433 (US). VERA, Francisco E. [VE/US]; 14303 Darmera Court, Cypress, TX 77429 (US). KHAN, Rafiqul [CA/US]; 27106 Bretown Bridge Court, Cypress, TX 77433 (US).

(74) Agent: ROSSLER, Paul E.; Gable Gotwals, 100 West 5th Street, 10th Floor, Tulsa, OK 74103-4217 (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, 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:

— without international search report and to be republished upon receipt of that report (Rule 48.2(g))

(54) Title: INTERFACE AND MUD CONTROL SYSTEM AND METHOD FOR REFINERY DESALTERS

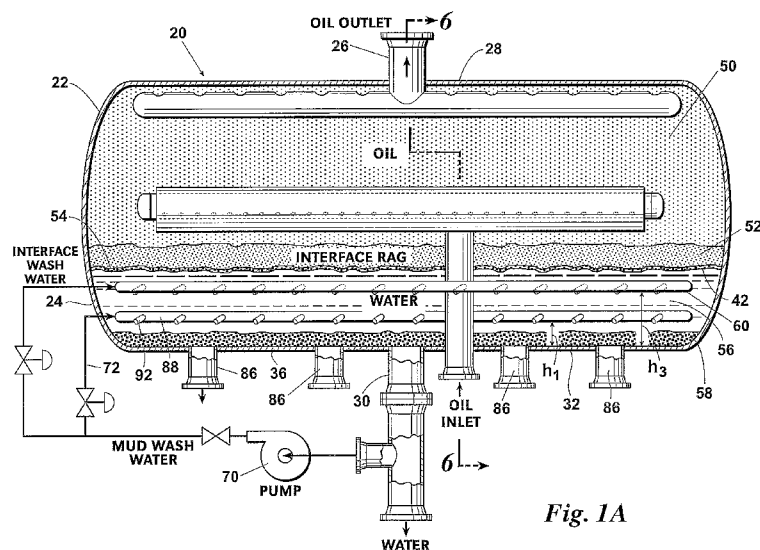


Fig. 1A

(57) Abstract: A method and system for controlling an interface emulsion layer and mud layer within a desalter vessel includes injecting a water flow through a plurality of nozzles arranged about a piping circuit located in the brine water layer. Each nozzle is oriented toward an interior space of the desalter vessel and is arranged oblique to the piping circuit. The water flow through the plurality of nozzles causes a horizontal and vertical rotation of a volume of water that is effective for suspending solids in the water and promoting a collapse of the interface emulsion layer. The water flow through each nozzle, which may be a recycled water flow, is preferably in a range of 1 to 3 fpm and each nozzle is preferably oriented at an angle of about 15° and 60° in a horizontal plane and a downward angle of about 15° and 60° in a vertical plane.