

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
20 December 2001 (20.12.2001)

PCT

(10) International Publication Number
WO 01/96026 A2(51) International Patent Classification⁷: **B03D 1/16**,
B03B 13/00, C02F 1/24, B01D 17/02(74) Agents: **RIDDLE, J., Albert et al** Baker Hughes Incorporated, Suite 1200, 3900 Essex Lane, Houston, TX 77027 (US)

(21) International Application Number: PCT/US01/18336

(22) International Filing Date: 7 June 2001 (07.06.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/210,692 9 June 2000 (09.06.2000) US(71) Applicant (for all designated States except US): **BAKER HUGHES INCORPORATED** [US/US], 3900 Essex Lane, Suite 1200, Houston, TX 77027 (US)

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(81) Designated States (national): AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW

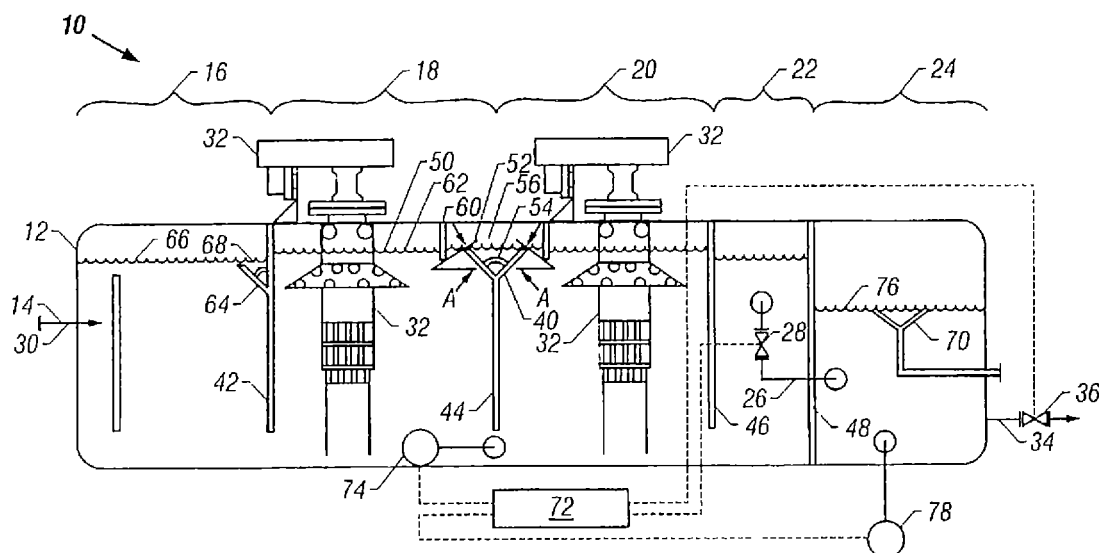
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG)

Published:

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

[Continued on next page]

(54) Title: DUAL-CELL MECHANICAL FLOTATION SYSTEM



(57) Abstract: It has been discovered that a mechanical flotation system having only two cells can be nearly as efficient as one having more cells, yet provide an apparatus with a considerably smaller footprint, significantly reduced capital and operating costs, as well as be resistant to floating oil recovery platform wave effects. The dual-cell mechanical flotation system has, in sequential order, an inlet chamber and two gasification chambers or cells, each with at least one gas ingestion and mixing mechanism, and a discharge chamber. A common primary skim collection channel atop the partition dividing the gasification chambers efficiently channels away the bulk of the floating collected matter. At least one baffle depending from the top of the vessel near the primary skim collection channel helps dampen the action of the fluid containing the suspended matter when the vessel is affected by wave motion against the floating oil production platform.

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