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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 February 2013 (28.02.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/028409 A2

(51) International Patent Classification:
E21B 17/01 (2006.01) *E21B 15/02* (2006.01)
E21B 17/02 (2006.01)

(21) International Application Number:
PCT/US2012/050771

(22) International Filing Date:
14 August 2012 (14.08.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
13/213,184 19 August 2011 (19.08.2011) US

(71) Applicant *(for all designated States except US)*: **CAMERON INTERNATIONAL CORPORATION** [US/US]; 1333 West Loop South, Suite 1700, Houston, Texas 77027 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **KOTRLA, Johnnie E.** [US/US]; 1143 Flagmore Drive, Katy, Texas 77450 (US). **WALKER, Stephen J.** [US/US]; 9319 Slate Stone Court, Houston, Texas 77064 (US). **PUCCIO, William F.** [US/US]; 24106 Sunset Sky, Katy, Texas 77494 (US).

(74) Agent: **ROSE, Collin A.**; Chamberlain Hrdlicka, 1200 Smith Street, 14th Floor, Houston, TX 77002 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM,

[Continued on next page]

(54) Title: RISER SYSTEM

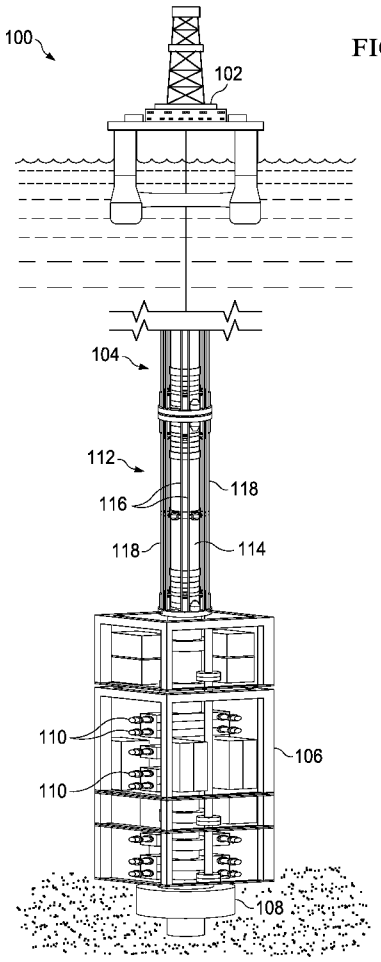

FIG. 1

(57) Abstract: A riser system for coupling a surface platform to a wellhead. The riser system includes a main tube, flanges and one or more tie rods. The main tube forms an annulus for fluid flow between the wellhead and the platform. A flange extends radially from each end of the main tube. The tie rods are coupled to and extend between the flanges.

WO 2013/028409 A2

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))*