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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 October 2011 (13.10.2011)

PCT

(10) International Publication Number
WO 2011/126592 A3

(51) **International Patent Classification**:
E21B 33/035 (2006.01) ***E21B 33/043*** (2006.01)
E21B 23/00 (2006.01)

(21) **International Application Number**:
PCT/US2011/022645

(22) **International Filing Date**:
26 January 2011 (26.01.2011)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
12/757,328 9 April 2010 (09.04.2010) US

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

(72) **Inventors; and**

(75) **Inventors/Applicants** *(for US only)*: **JUNE, David** [US/US]; 14622 Carols Way, Houston, Texas 77070 (US). **SANTILLI, Claudio** [BR/US]; 17403 Turquoise Stream Dr., Houston, Texas 77095 (US).

(74) **Agent**: **SWANSON, Tait R.**; Fletcher Yoder PC, P.O. Box 692289, Houston, Texas 77269-2289 (US).

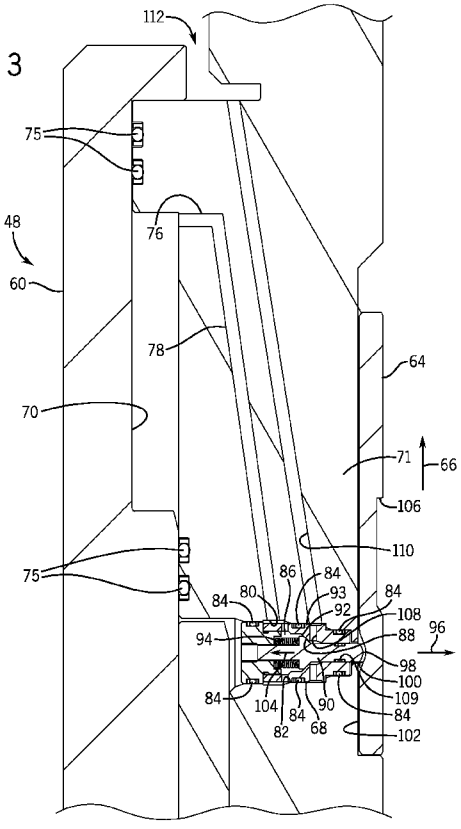
(81) **Designated States** *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, 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, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK,

[Continued on next page]

(54) **Title**: TUBING HANGER RUNNING TOOL WITH INTEGRATED PRESSURE RELEASE VALVE

FIG. 3



(57) **Abstract**: A system, in certain embodiments, includes a subsurface safety valve (SSV) biased toward a closed position, and configured to open by application of hydraulic pressure. The system also includes a tubing hanger running tool (THRT), including a conduit in fluid communication with the SSV, and a pressure release valve fluidly coupled to the conduit. The pressure release valve is configured to maintain sufficient hydraulic pressure within the conduit to hold the SSV in an open position while the pressure release valve is in a closed position.

WO 2011/126592 A3

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).

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))*

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

(88) Date of publication of the international search report:
12 April 2012