



(51) International Patent Classification:
E21B 33/04 (2006.01)

(21) International Application Number:
PCT/US2015/066995

(22) International Filing Date:
21 December 2015 (21.12.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
14/579,972 22 December 2014 (22.12.2014) US

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

(72) Inventor: THORNBURROW, Edward T.; Cameron Flow Control Technology (UK) Ltd., Queen Street, Stourton, Leeds Yorkshire LS10 1SB (GB).

(74) Agent: EUBANKS IV, L. Lee; Eubanks PLLC, 9720 Cypresswood Dr., Suite 242, Houston, Texas 77070 (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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, ST, 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, KM, ML, MR, NE, SN, TD, TG).

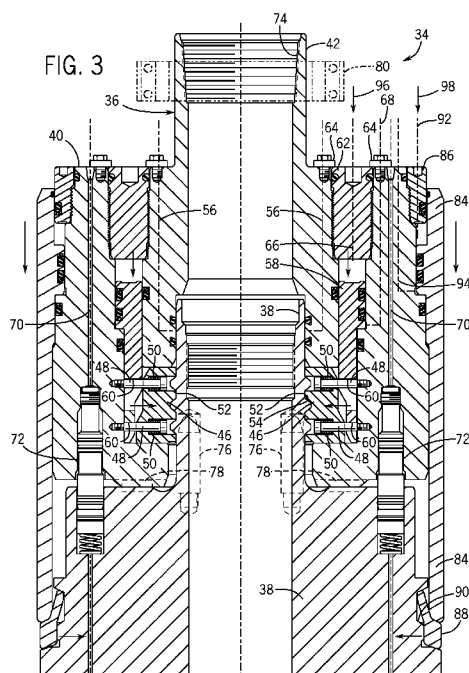
Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))

Published:

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

(54) Title: HYDRAULICALLY ACTUATED WELLHEAD HANGER RUNNING TOOL



(57) Abstract: Various tools for installing components in a wellhead housing are provided. In one embodiment, an apparatus includes a wellhead hanger running tool (36). The running tool includes a piston (58) and a locking segment (46) both disposed in a body of the running tool. The piston and the locking segment are positioned with respect to one another so as to allow the locking segment to be selectively driven by the piston to secure the running tool to a wellhead hanger (22, 38) received by the running tool. Additional systems, devices, and methods are also disclosed.