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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
16 December 2010 (16.12.2010)

PCT

(10) International Publication Number
WO 2010/144593 A3

(51) International Patent Classification:
E21B 34/10 (2006.01) *F16K 31/122* (2006.01)
E21B 21/10 (2006.01)

(21) International Application Number:
PCT/US2010/037996

(22) International Filing Date:
9 June 2010 (09.06.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/481,740 10 June 2009 (10.06.2009) US

(71) Applicant *(for all designated States except US)*: **BAKER HUGHES INCORPORATED** [US/US]; P.o. Box 4740, Houston, TX 77210-4740 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **PLUNKETT, Kevin, R.** [US/US]; 3000 N. Hemlock Cr., Broker Arrow, OK 74012 (US). **LINDEMANN, John, D.** [US/US]; 2419 S. Narcissus Pl., Broker Arrow, OK 74012 (US).

(74) Agent: **DUPHORNE, Darin, H.**; Baker Hughes Incorporated, P.o. Box 4740, Houston, TX 77210-4740 (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,

[Continued on next page]

(54) Title: DUAL ACTING ROD PISTON CONTROL SYSTEM

(57) Abstract: A downhole tool is hydraulically actuated through a control system that features rod piston(s) that are double acting. The piston bore is in a single housing component with an annular cavity that provides access to all piston bores to move the pistons in a first direction. The housing component that has the piston bore also includes an internal sleeve in a passage in the housing. A second control system connection communicates with a sealed annular space defined between the sleeve and the passage wall that holds the sleeve. A series of radial ports communicate from the annular space into each piston bore on the opposite side of each piston from the annular cavity so that each piston is double acting with a bore in a single housing component.

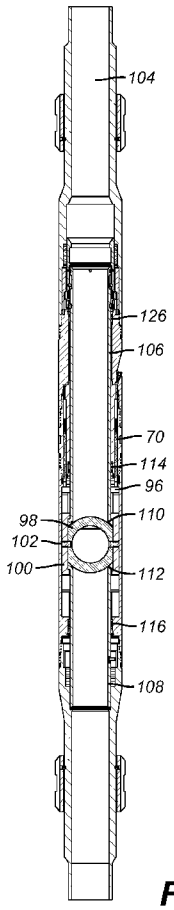


FIG. 6

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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, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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:
31 March 2011