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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
19 April 2012 (19.04.2012)

PCT

(10) International Publication Number
WO 2012/049459 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/GB2011/001476

(22) International Filing Date:
13 October 2011 (13.10.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/903,648 13 October 2010 (13.10.2010) US

(71) Applicant *(for all designated States except US)*: **HALLIBURTON ENERGY SERVICES, INC.** [US/US]; P.O. Box 819052, Dallas, TX 75381-9052 (US).

(71) Applicant *(for MW only)*: **BENNETT, Adrian Robert James** [GB/GB]; A A Thornton & Co, 235 High Holborn, London WC1V 7LE (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **RIGGENBERG, Paul D.** [US/US]; 2601 Beltine Road, Carrollton, TX 75006 (US). **MARTIN, Adam H.** [US/US]; 2601 Beltine Road, Carrollton, TX 75006 (US). **DONLAD, Perkins** [US/US]; 2601 Beltine Road, Carrollton, TX 75006 (US).

(74) Agent: **BENNETT, Adrian Robert James**; A A Thornton & Co, 235 High Holborn, London WC1V 7LE (GB).

(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, 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.

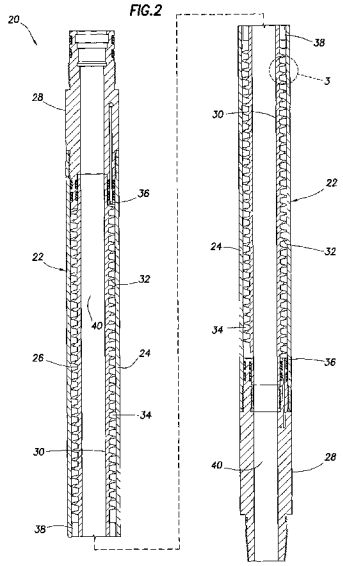
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, 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))*

(54) **Title**: PRESSURE BEARING WALL AND SUPPORT STRUCTURE THEREFOR

FIG.2



(57) **Abstract**: A method of supporting a pressure bearing wall (24) against a pressure differential applied across the wall can include positioning a support structure (26) proximate the pressure bearing wall, the support structure having a support surface formed thereon, and the support surface contacting the pressure bearing wall and supporting the wall against the pressure differential. A pressure bearing housing assembly (22) can include a pressure bearing wall and a support structure which supports the pressure bearing wall against a pressure differential applied across the wall. A well system can comprise a well tool including a pressure bearing housing assembly exposed to pressure in a wellbore, whereby a pressure differential is applied across a pressure bearing wall of the housing assembly, the pressure bearing wall being supported against the pressure differential by a support structure.

WO 2012/049459 A2