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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
19 December 2013 (19.12.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/187877 A1

(51) International Patent Classification:
E21B 33/124 (2006.01) *E21B 33/12* (2006.01)

(21) International Application Number:
PCT/US2012/041968

(22) International Filing Date:
11 June 2012 (11.06.2012)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant *(for all designated States except US)*: **HALLIBURTON ENERGY SERVICES, INC.** [US/US]; 10200 Bellaire Boulevard, Houston, Texas 77072 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CUNNINGHAM, Gregory Scott** [US/US]; 532 Chasewood Drive, Grapevine, Texas 76051 (US). **LEAST, Brandon Thomas** [US/US]; 3218 Jubilee Trail, Dallas, Texas 75229 (US). **GRECI, Stephen Michael** [US/US]; 4416 San Mateo Lane, McKinney, Texas 75070 (US). **LOPEZ, Jean Marc** [FR/US]; 7308 Stoddard Lane, Plano, Texas 75025 (US). **VEIT, Jan** [CZ/US]; 3201 Dover Drive, Plano, Texas 75075 (US).

(74) Agents: **CONLEY ROSE, P.C.** et al.; 5601 Granite Parkway, Suite 750, Plano, TX 75024 (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, 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).

[Continued on next page]

(54) Title: SHUNT TUBE CONNECTION AND DISTRIBUTION ASSEMBLY AND METHOD

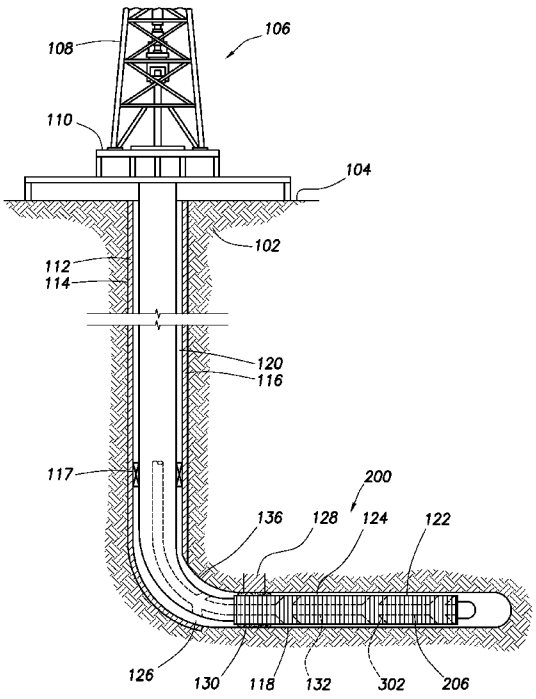


FIG. 1

(57) Abstract: A shunt tube assembly comprises a plurality of shunt tubes, a jumper tube, and a coupling member configured to provide fluid communication between the jumper tube and the plurality of shunt tubes. The coupling member can comprise a first end and a second end. The coupling member may be configured to provide a sealing engagement between the coupling member and the jumper tube at the first end, and the coupling member may be configured to provide a sealing engagement between the coupling member and the plurality of jumper tubes at the second end.

WO 2013/187877 A1

Declarations under Rule 4.17:

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

Published:

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