



- (51) **International Patent Classification:**
H01B 17/30 (2006.01) *E21B 33/038* (2006.01)
- (21) **International Application Number:**
PCT/IB2014/002975
- (22) **International Filing Date:**
1 October 2014 (01.10.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/885,089 1 October 2013 (01.10.2013) US
14/504,046 1 October 2014 (01.10.2014) US
- (71) **Applicant:** ONESUBSEA IP UK LIMITED [GB/GB];
100 New Bridge Street, London EC4V 6JA (GB).
- (72) **Inventor:** NOEL, Jean-Francois; Nordeidbrekka 25, N-
5252 Soreidgrend (NO).
- (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).

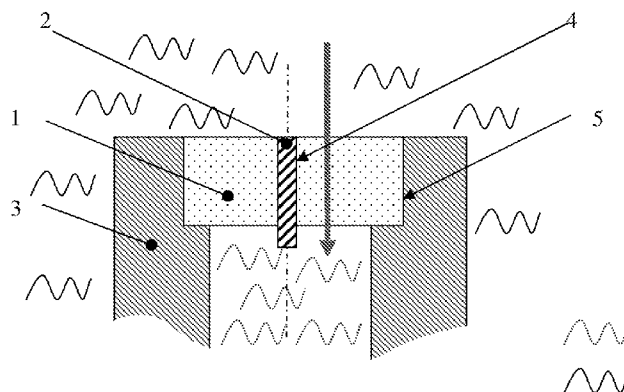
Published:

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

(88) **Date of publication of the international search report:**
20 August 2015

(54) **Title:** ELECTRICAL CONDUCTOR AND METHOD OF FABRICATING THE SAME

FIGURE 1



(57) **Abstract:** An electrical conductor includes an electrically non-conductive plate, an electrically conductive pin extending through the plate, and a frame member fitted around an outer edge of the plate. The frame member is configured to pre-load the plate with a compressive stress. In particular, the frame member may pre-load the plate with the compressive stress that is sufficiently high enough such that a sum of the compressive stress, tensile stress, and shear stress components generated in the plate under high- pressure conditions is compressive overall.