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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
25 April 2013 (25.04.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/056858 A1

(51) **International Patent Classification**:
*E21B 33/035* (2006.01) *E21B 47/06* (2012.01)
*E21B 47/00* (2012.01)

(21) **International Application Number**:
PCT/EP2012/059143

(22) **International Filing Date**:
16 May 2012 (16.05.2012)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
20111436 21 October 2011 (21.10.2011) NO

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(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).

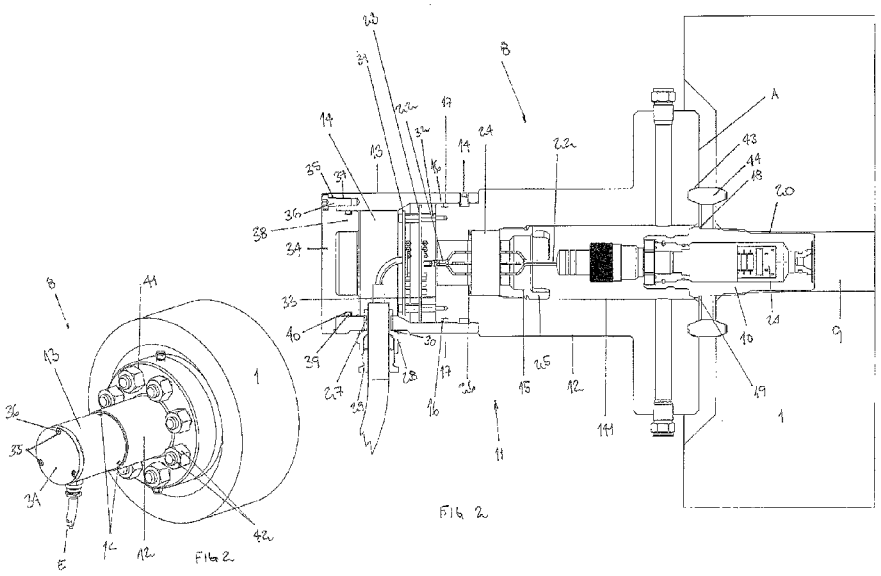
**Published**:

— *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))*

WO 2013/056858 A1

(54) **Title**: PLUG SENSOR



(57) **Abstract**: The present invention relates to an apparatus for monitoring physical parameters in an oil and/or gas well, the apparatus being connectable to a wellhead of the oil and/or gas well. The apparatus comprises a flange assembly configured with a through bore and an end termination, in which through bore a sensor and associated electronics are arranged. The sensor, including a first electronic circuitry, is connected to a second electronic circuitry via transmission devices that are passed through a pressure-tight element arranged in the through bore. The invention also relates to a wellhead for use with an oil and/or gas well with a plurality of casings defining a plurality of annili. The wellhead is configured with a plurality of through-holes, each leading into a respective annulus of the well, and each through-hole is connected to an apparatus as mentioned above.