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 63/139,417 20 January 2021 (20.01.2021) US</p> <p>(71) Applicant (for US only): CAMERON INTERNATIONAL CORPORATION [US/US]; 5599 San Felipe Street, 16th Fl, Houston, Texas (US).</p> <p>(71) Applicant (for CA only): SCHLUMBERGER CANADA LIMITED [CA/CA]; 125 – 9 Avenue SE, Calgary, Alberta T2G 0P6 (CA).</p> <p>(71) Applicant (for all designated States except CA, US): CAMERON TECHNOLOGIES LIMITED [IE/NL]; Parkstraat 83, 2514 JG The Hague (NL).</p> | <p>(702) Inventors: LIM, Haw Keat; No. 2 GUL CIRCLE, 629560 Singapore (SG). LEE, Yong Wee; No. 2 GUL CIRCLE, 629560 Singapore (SG). CHRISTIAN, Albert; Blk 208, Bishan St 23, #03-379, 570208 Singapore (SG). HEE, Boon Hao; No. 2 GUL CIRCLE, 629560 Singapore (SG). LAI, Ping Cheng; No. 2 GUL CIRCLE, 629560 Singapore (SG).</p> <p>(74) Agent: RAYBAUD, Helene et al.; Schlumberger, 10001 Richmond Avenue, Room 4720, Houston, Texas 77042 (US).</p> <p>(81) Designated States (<i>unless otherwise indicated, for every kind of national protection available</i>): 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, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.</p> <p>(84) Designated States (<i>unless otherwise indicated, for every kind of regional protection available</i>): 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,</p> |
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(54) Title: SEAL MONITORING SYSTEM

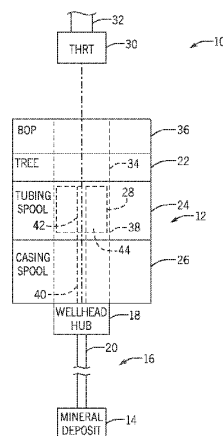


FIG. 1

(57) Abstract: A seal monitoring system includes at least one sensor configured to couple to an outer surface of a housing and to output a sensor signal indicative of deformation of the housing. The housing is configured to receive an insert within an internal cavity of the housing, and an engageable seal is configured to selectively establish a seal between the insert and the housing. The seal monitoring system also includes a controller communicatively coupled to the at least one sensor. The controller includes a memory and a processor, the controller is configured to determine a degree of engagement of the engageable seal based on the deformation of the housing. Additionally or alternatively, the controller is configured to determine a fluid pressure within the housing based on the deformation of the housing.

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