

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
06 July 2023 (06.07.2023)



(10) International Publication Number
WO 2023/129187 A1

(51) International Patent Classification:

E21B 34/10 (2006.01) *E21B 47/06* (2006.01)
E21B 34/08 (2006.01)

(21) International Application Number:

PCT/US2022/011490

(22) International Filing Date:

06 January 2022 (06.01.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/566,580 30 December 2021 (30.12.2021) US

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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, 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.

(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))

(54) Title: PRESSURE-ACTIVATED VALVE ASSEMBLIES AND METHODS TO REMOTELY ACTIVATE A VALVE

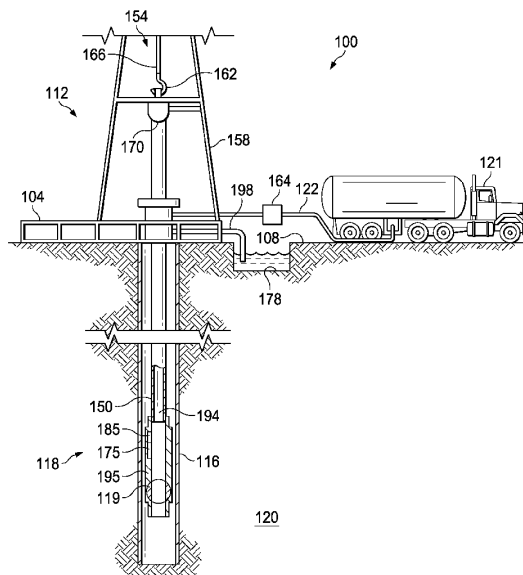


FIG. 1

(57) Abstract: Pressure-activated valve assemblies and methods to remotely activate a valve are disclosed. A pressure-activated valve assembly includes a valve, a latch mechanism configured to shift the valve to an open position, and a pressure-activated indexing mechanism that is initially engaged to the latch mechanism. The pressure-activated indexing mechanism is initially in an unarmed mode. After the pressure-activated indexing mechanism is in an armed mode, applying at least one cycle of threshold pressure to the pressure-activated indexing mechanism disengages the latch mechanism to shift the valve to the open position. The pressure-activated valve assembly also includes a remote-activated downhole system configured to receive an activation pressure signal having a signature profile, and in response to receiving the activation pressure signal, arm the pressure-activated indexing mechanism.