

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
31 October 2019 (31.10.2019)



(10) International Publication Number
WO 2019/207161 A1

(51) International Patent Classification:

<i>E21B 19/06</i> (2006.01)	<i>F16L 1/20</i> (2006.01)
<i>B25J 5/02</i> (2006.01)	<i>G21B 1/00</i> (2006.01)
<i>B25J 21/00</i> (2006.01)	<i>G21C 1/00</i> (2018.01)
<i>E21B 19/087</i> (2006.01)	<i>G21D 1/00</i> (2006.01)
<i>E21B 19/14</i> (2006.01)	<i>G21F 1/00</i> (2006.01)
<i>E21B 19/15</i> (2006.01)	<i>G21F 7/00</i> (2006.01)
<i>E21B 19/20</i> (2006.01)	<i>G21H 1/00</i> (2006.01)
<i>F16L 1/00</i> (2006.01)	<i>G21J 1/00</i> (2006.01)

(71) Applicant: **NABORS LUX 2 SARL** [LU/LU]; 8-10 Avenue de la Gare, 1610 LUXEMBOURG (LU).

(72) Inventors: **MIKALSEN, Kenneth**; Alexander Kielands-gate 16A, 4319 SANDENS (NO). **NAESGAARD, Kjetil**; Helleamen 7, 4052 ROEYNEBEG (NO).

(74) Agent: **FIORAVANTI, Corrado** et al.; c/o JACOBACCI & PARTNERS S.p.A., Corso Emilia 8, 10152 TORINO (IT).

(21) International Application Number:

PCT/EP2019/060958

(22) International Filing Date:

29 April 2019 (29.04.2019)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/663,960 27 April 2018 (27.04.2018) 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, 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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(54) Title: SYSTEM AND METHOD FOR CONDUCTING SUBTERRANEAN OPERATIONS

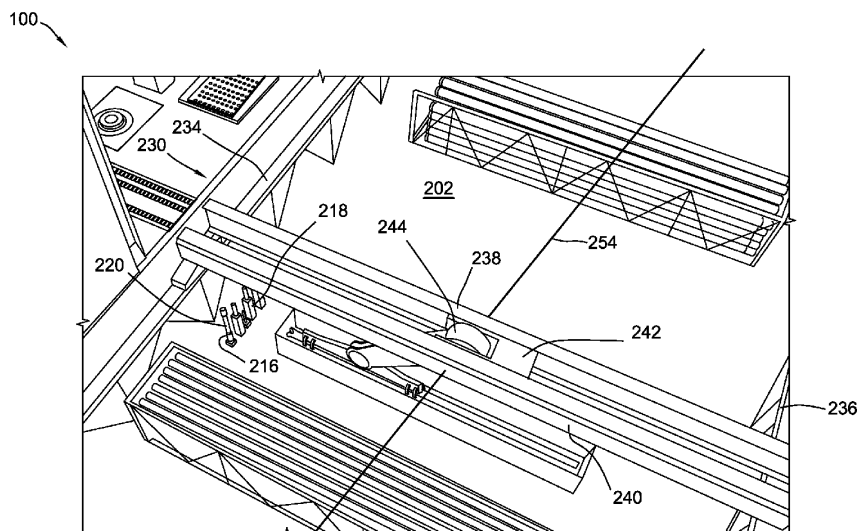


FIG. 11

(57) Abstract: A tubular handling system for conducting subterranean operations is disclosed and can include a bridge (232) disposed within a tubular storage area (200) and coupled to a guide rail (234). The bridge (232) is configured to translate from a first bridge position to a second bridge position along the guide rail (234) and over the tubular storage area (200). The tubular handling system can further include an arm (244) coupled to the bridge (232) and a gripper (280) coupled to the arm (244). The gripper (280) can be adapted to engage a first tubular.

[Continued on next page]

WO 2019/207161 A1

(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).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *of inventorship (Rule 4.17(iv))*

Published:

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