

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 October 2020 (08.10.2020)



(10) International Publication Number
WO 2020/206249 A1

(51) International Patent Classification:

B63B 21/50 (2006.01) *B63B 21/00* (2006.01)
B63B 21/16 (2006.01) *B63B 35/44* (2006.01)

(21) International Application Number:

PCT/US2020/026572

(22) International Filing Date:

03 April 2020 (03.04.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/830,082 05 April 2019 (05.04.2019) 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, 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,

(54) Title: DISCONNECTABLE TOWER YOKE MOORING SYSTEM AND METHODS FOR USING SAME

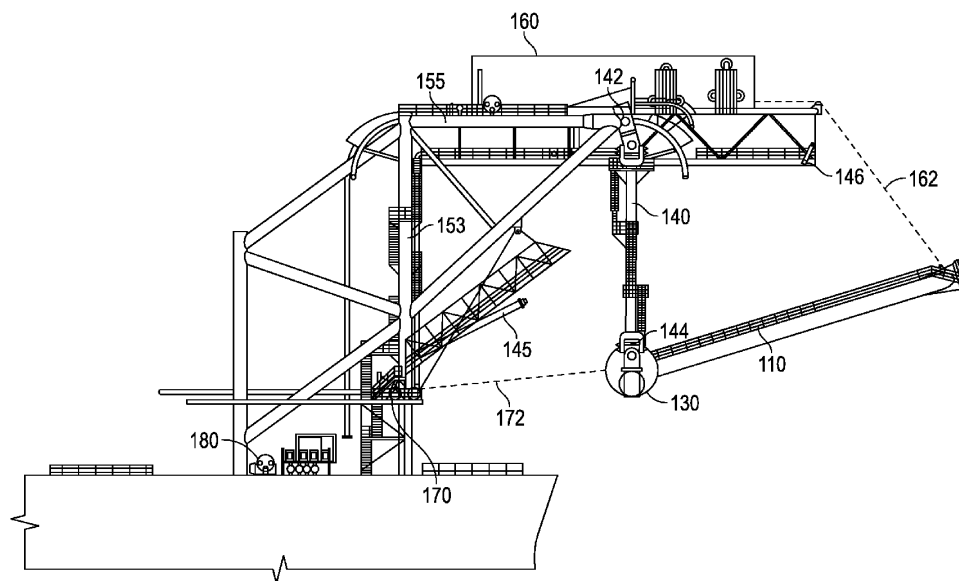


FIG. 3

(57) Abstract: A yoke mooring system for connecting a floating vessel to a tower structure at sea. The system can include a support structure with one or more extension arms suspended from the support structure. A ballast tank can be connected to the one or more extension arms, and a yoke can extend from and connect to the ballast tank. The yoke can include a tower connector disposed on a second end thereof for connecting to the tower structure. A first winch system can be located on the support structure and connect to the yoke proximate a second end of the yoke via a first line or cable. A second winch system can be connected to the ballast tank via a second line or cable.

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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))*

Published:

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