

Title (en)

A single point mooring tower structure with rigid arm.

Title (de)

Einpunktverankerungseinrichtung mit starrem Arm.

Title (fr)

Structure d'amarrage à un seul point comprenant un bras rigide.

Publication

EP 0105976 A1 19840425 (EN)

Application

EP 82201300 A 19821015

Priority

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Abstract (en)

The invention provides a permanent single point mooring structure in which the vessel (1) is moored to a single point mooring tower structure (4) via a rigid arm assembly (11, 12). The vessel (1) and rigid arm assembly (11, 12) are free to rotate about the vertical axis (9) of the tower structure (4). The rigid arm assembly (11, 12) is connected to the vessel by a hinge arrangement (13, 14, 15, 16) and to the turntable (8) of the tower structure by two tension members (23, 24). The rigid arm assembly (23, 24) is ballasted at the towerend (19, 20). These ballast weights (21, 22) provide a stable pendulum in combination with the tension members (23, 24). The weight of the rigid arm (11, 12) and its ballast (21, 22), and the loading on the tension members (23, 24) combine to produce a restoring force and moment which prevent the vessel (1) from moving away or from riding up to the tower structure (4), or jack-knifing of the assembly when the vessel (1) is affected by any combination of wind, waves and current.

IPC 1-7

B63B 21/00; **B63B 27/34**

IPC 8 full level

B63B 22/02 (2006.01)

CPC (source: EP)

B63B 22/025 (2013.01)

Citation (search report)

- [X] FR 2420475 A1 19791019 - EMH [FR]
- [A] NL 8202335 A 19820802 - SINGLE BUOY MOORINGS
- [A] NL 8202334 A 19820802 - SINGLE BUOY MOORINGS

Cited by

AU585760B2; US4665856A; US4802432A; AU574289B2; EP1826116A1; GB2424404A; GB2424404B; EP1283159A1; US5333340A; GB2399329A; GB2399329B; EP0188840A1; US4694771A; US6915753B1; WO03016128A1; WO2007096019A1; US7322308B2; US6923225B2; US7066219B2

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