

Title (en)

Mooring system for a floating structure

Title (de)

Verankerungssystem für eine schwimmende Struktur

Title (fr)

Système d'amarrage pour une structure flottante

Publication

**EP 1826116 A1 20070829 (EN)**

Application

**EP 06122163 A 20061012**

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- EP 06122163 A 20061012

Abstract (en)

A mooring system for a floating structure, such as vessel, is described, comprising a mooring structure, such as a buoy, a further floating structure or a fixed tower. The mooring structure has a turntable rotatable around a vertical axis, and a connection structure adapted to provide a connection between the floating structure and the mooring structure. The connection structure comprises a rigid arm assembly and pendulum members, wherein the rigid arm assembly and pendulum members at one end are hingedly interconnected and at their other ends are adapted to be connected to the floating structure and the mooring structure respectively. Ballast weights are provided at the interconnected ends. A damping system for damping the swinging motion of the pendulum members is provided. The damping system comprises at least one liquid tank containing a liquid and being located in the mooring system at a distance from the vertical axis. The liquid tank has such dimensions that at a swinging motion of the pendulum members the liquid is adapted to move in the liquid tank to provide damping forces counteracting the swinging motion of the pendulum members.

IPC 8 full level

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Citation (search report)

- [A] US 2004025772 A1 20040212 - BOATMAN L TERRY [US]
- [DA] EP 0105976 A1 19840425 - BLUEWATER TERMINAL SYSTEMS NV [NL]
- [A] US 4625673 A 19861202 - FALLER FRANK R [CA], et al
- [A] EP 1308384 A2 20030507 - SINGLE BUOY MOORINGS [CH]
- [A] US 4669412 A 19870602 - POLLACK JACK [US]
- [A] FR 2579558 A1 19861003 - SERVICES EQUIPEMENTS [FR]

Cited by

EP2331393A4; CN107576479A; EP2070812A1; WO2011059918A1; US11679844B2; US8561563B2; US11560203B2; WO2021034828A1; US11267532B2; US11279446B2; US11319036B2

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