

Title (en)

A RIGID ARM SINGLE POINT MOORING SYSTEM FOR VESSELS

Publication

**EP 0096119 B1 19870422 (EN)**

Application

**EP 82200724 A 19820611**

Priority

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Abstract (en)

[origin: EP0096119A1] A mooring device is disclosed, consisting of a single point mooring (SPM) - buoy or tower - and a rigid arm (15). The stationary part (4) of the SPM is anchored to the sea bottom. The rotatory part (8) of the SPM and the rigid arm (15) are free to rotate about the vertical axis (A-A) of the SPM. The rigid arm (15) is connected to the single point mooring by a hinge arrangement (9) pivotable about a horizontal axis (B-B). A further hinge may be provided in the rigid arm (15) dividing the rigid arm into two independently movable frames to allow for independent pitch and roll motions of the buoy and vessel in relation to the rigid arm. The vessel is connected to the rigid arm (15) by two tension members (6, 7) which could be chains, cables or bars. The rigid arm (15) is ballasted at the vessel end. The weight of the rigid arm (15) and its ballast (13, 14) and the loading on the tension members, combine to produce a restoring force and moment which prevent the vessel (1) from riding up to the SPM or jack-knifing of the assembly when the rigid arm (15) moves out of line with the centre line of the vessel (1).

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IPC 8 full level

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Cited by

EP0152975A1; FR2579558A1; EP1705111A1; EP0135445A1; FR2575129A1; US4665856A; FR2542690A1; US7007623B2; WO0021825A1; WO2004043765A1

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