

CLAIMS:

1. Disconnectable turret mooring system for a vessel, comprising a turret positioned in a moonpool of the vessel and having an upper part (5) cooperating with a first upper bearing assembly (3) positioned between the turret and the vessel, and a lower disconnectable buoy part (6) cooperating with a second lower bearing assembly (4) positioned between the turret and the vessel, characterized in that the lower bearing assembly comprises a number of discrete circumferentially spaced bearing members (11) which are attached to and extend radially inwards from the vessel for engaging the lower disconnectable buoy part of the turret (6), and which bearing members are displaceable radially between an inner operative position for engaging the lower disconnectable buoy part and an outer inoperative position for disengaging the lower disconnectable buoy part wherein the lower disconnectable buoy part is provided with an outer bearing ring for cooperation with the bearing members, the bearing ring has an upper inwardly sloping part, the moonpool has a lower end in which fender members are provided for cooperation with the turret, and the fender members comprise a number of circumferentially spaced fender strips for preventing any damage of the bearing surface of the bearing ring.

~~2. Disconnectable turret mooring system according to claim 1, wherein the lower disconnectable buoy part is provided with an outer bearing ring for cooperation with the bearing members.~~

~~3. Disconnectable turret mooring system according to claim 2, wherein the bearing ring has an upper inwardly sloping part.~~

~~4.2. Disconnectable turret mooring system according to any of the previous claims 1, comprising eighteen bearing members which are regularly spaced at 20° intervals.~~

~~5.3. Disconnectable turret mooring system according to any of the previous claims 1 or claim 2, wherein each bearing member comprises a longitudinal member having an inner end defining a bearing surface for cooperation with the lower disconnectable buoy part and a shaft part extending outwardly from said inner end and cooperating with a stationary guide connected to the vessel, and further comprises driving means for displacing the shaft part relative to the stationary guide between the inner operative position and the outer inoperative position.~~

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~~6.4.~~ Disconnectable turret mooring system according to claim ~~53~~, wherein the driving means comprise remotely operated automated driving means, such as for example electrically, hydraulically or pneumatically operated driving means.

5 | ~~7.~~ Disconnectable turret mooring system according to any of the previous claims, wherein the moonpool has a lower end in which fender members are provided for cooperation with the turret.

10 | ~~8.~~ Disconnectable turret mooring system according to claim ~~7~~, wherein the fender members comprise a number of circumferentially spaced fender strips.

~~9.5.~~ Disconnectable turret mooring system according to any of the previous claims, wherein the moonpool has a lower end at the keel of the vessel and wherein the second lower bearing assembly is positioned at a distance above said lower end of the moonpool.