ABSTRACT

Disconnectable mooring system and method for disconnecting or reconnecting it

A disconnectable mooring system for a vessel is presented, comprising a moonpool in the vessel, a turret structure mounted for a rotation in said moonpool and a buoy member having a plurality of passages each adapted to receive a riser. The turret structure has a lower end comprising a buoy receptacle for detachably receiving the buoy member, wherein the mooring system further comprises a plurality of mooring lines for transmitting mooring forces and each have a lower end and an upper end connected to the seabed and the buoy member, respectively. The mooring lines each comprise a first section which in a disconnectable manner is connected to the turret structure and a second section connected to the first section at a coupling point and connected to the buoy member. The length of the second section between said coupling point and its connection to the buoy member is chosen such that when the buoy member is received in the buoy receptacle with the first section connected to the turret structure and in a state for transmitting mooring forces, said second section is in a slack state not loaded by said mooring forces. Also methods for disconnecting and reconnecting such a mooring system are presented.

FIG. 1