

Title (en)

Installation for the exploitation of an offshore oil deposit and method for mounting a riser

Title (de)

Einrichtung zur Ausbeutung einer Erdöllagerstätte in der See und Verfahren zur Aufstellung eines Risers

Title (fr)

Installation d'exploitation d'un gisement en mer et procédé d'implantation d'une colonne montante

Publication

EP 0979923 B1 20050112 (FR)

Application

EP 99402019 A 19990809

Priority

FR 9810301 A 19980811

Abstract (en)

[origin: EP0979923A1] In an installation for extracting oil from seabed deposits, the rising column (24) of a semi-submersible platform (10) is kept under tension by one or more submerged float (28) and a pulling mechanism (30) mounted on the platform. An abutment holds the float against the platform. The float(s) are sized to apply a traction force on the rising column which is greater than that applied by the mechanism, preferably 1-3 times the weight of the column. The platform includes an immersed base (16) and a floating hull (12) connected by legs (14). The float(s) are placed at the depth of the base, which has vertical guides for each float. The base contains a vertical passage (22) for each float, in which the float can move axially. Each float contains a conduit through which the associated rising column extends. A universal joint links the float and the rising column, having a concave annular seat fixed to the float in the axial conduit and a convex collar carried on the column. The collar presses on the seat to apply the traction. The conduit has a diameter greater than three times that of the column. The traction mechanism at the top of the column has at least one hydro-pneumatic jack with a pulley assembly at each end on which at least one sling applies traction to the column. An Independent claim is also included for the installation of a rising column comprising ensuring the abutment holds the float vertically against the platform, submerging the column with its lower end held at a distance from the seabed, ballasting the platform, lowering the column and connecting it to the seabed, disengaging the abutment between the float and the platform, and deballasting the platform.

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