

Title (en)

BED-TO-SURFACE CONNECTOR INSTALLATION OF A RIGIDE TUBE WITH A FLEXIBLE DUCT HAVING POSITIVE FLOTATION

Title (de)

BODEN-OBERFLÄCHE-VERBINDUNG AUS EINEM STARREN STEIGROHR MIT FLEXIBLEM KANAL MIT POSITIVER FLOTATION

Title (fr)

INSTALLATION DE LIAISON FOND-SURFACE D'UNE CONDUITE RIGIDE AVEC UNE CONDUITE FLEXIBLE A FLOTTABILITE POSITIVE

Publication

EP 2286056 B1 20120725 (FR)

Application

EP 09745928 A 20090414

Priority

- FR 2009050684 W 20090414
- FR 0852771 A 20080424

Abstract (en)

[origin: WO2009138609A2] The invention relates to a bed-to-surface connector installation with at least two submarine pipes (10a, 10b) lying on the bed of the sea, comprising : 1) a first hybrid tower with: a) a vertical riser (1a) anchored (3a) to a first base and connected to one of the submarine pipes (10a) lying on the sea bed the upper end of which is connected to a first float (2a) at the sub-surface and b) a first connector pipe (4a), preferably a flexible pipe, providing the connection between a floating support (11) and the upper end of said riser and 2) at least one second rigid pipe (1b) rising from the seabed where said pipe rests (10b) or from a second submarine pipe resting on the seabed to which the lower end which isn't anchored at the depth of the first base is connected, extending to the sub-surface where the upper end thereof is connected to a second float (2b) arranged essentially at the same depth as said first float (2a) and fixed to said first float by a second flexible connector pipe (2b), providing connection to said support float (11).

IPC 8 full level

E21B 17/01 (2006.01)

CPC (source: BR EP US)

E21B 17/01 (2013.01 - BR EP US); **E21B 17/015** (2013.01 - BR EP US); **E21B 17/017** (2013.01 - BR EP US)

Cited by

US8905143B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2930587 A1 20091030; BR PI0911162 A2 20151006; BR PI0911162 B1 20190827; EP 2286056 A2 20110223; EP 2286056 B1 20120725; US 2011042094 A1 20110224; US 8430170 B2 20130430; WO 2009138609 A2 20091119; WO 2009138609 A3 20100520

DOCDB simple family (application)

FR 0852771 A 20080424; BR PI0911162 A 20090414; EP 09745928 A 20090414; FR 2009050684 W 20090414; US 98877509 A 20090414