

Title (en)
BUOYANCY METHOD AND DEVICE FOR STABILIZING AND CONTROLLING LOWERING OR RAISING OF A STRUCTURE BETWEEN THE SURFACE AND THE SEA FLOOR

Title (de)
AUFTRIEBSVORRICHTUNG UND VERFAHREN FÜR DIE STABILISIERUNG UND KONTROLLE DER NIEDERGANG UND DES AUFSTIEGS EINER STRUKTUR ZWISCHEN MEERESOBERFLÄCHE UND MEERESBODEN

Title (fr)
DISPOSITIF DE FLOTTABILITE ET PROCEDE DE STABILISATION ET DE CONTROLE DE LA DESCENTE OU REMONTEE D'UNE STRUCTURE ENTRE LA SURFACE ET LE FOND DE LA MER

Publication
EP 1606159 B1 20080312 (FR)

Application
EP 04742349 A 20040325

Priority
• FR 2004000741 W 20040325
• FR 0303969 A 20030326

Abstract (en)
[origin: US8776706B2] A method of using a buoyancy fluid presenting density that is less than that of sea water, and that is confined in a rigid or flexible leaktight casing, so as to constitute an immersed buoyancy element, wherein the buoyancy fluid is a compound that is naturally in a gaseous state at ambient atmospheric temperature and pressure, and in a liquid state at the underwater depth to which the buoyancy element is immersed. A method is also disclosed for placing a buoyancy element in place between the surface and the bed of the sea, wherein fluid is stored in a tank on a surface ship as a liquid in the cooled or compressed liquid state, and is injected in the liquid state into a pipe from the surface where it is stored to an immersed casing at an underwater depth at which the underwater pressure is not greater than the vapor pressure of the gas corresponding to the compound at the temperature at the depth.

IPC 8 full level
B63C 7/16 (2006.01); **B63B 27/08** (2006.01); **E02B 15/04** (2006.01); **E21B 43/01** (2006.01)

CPC (source: EP US)
B63B 27/08 (2013.01 - EP US); **B63C 7/006** (2013.01 - EP US); **E02B 15/08** (2013.01 - EP US); **E21B 43/0122** (2013.01 - EP US); **E02B 2015/005** (2013.01 - EP US)

Cited by
CN109018260A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
FR 2852917 A1 20041001; **FR 2852917 B1 20050624**; AT E388889 T1 20080315; DE 602004012398 D1 20080424; EP 1606159 A2 20051221; EP 1606159 B1 20080312; EP 1606159 B8 20080716; US 2006225810 A1 20061012; US 2011005452 A1 20110113; US 7882794 B2 20110208; US 8776706 B2 20140715; WO 2004087496 A2 20041014; WO 2004087496 A3 20050106; WO 2004087496 A8 20080424

DOCDB simple family (application)
FR 0303969 A 20030326; AT 04742349 T 20040325; DE 602004012398 T 20040325; EP 04742349 A 20040325; FR 2004000741 W 20040325; US 55081805 A 20050923; US 85933810 A 20100819