

Title (en)

Swivelling module for use when producing an underwater foundation of a structure

Title (de)

Schwenkmodul zum Einsatz beim Erstellen eines Unterwasserfundaments eines Bauwerks

Title (fr)

Module pivotant pour utilisation lors de l'établissement d'une fondation sous-marine d'une construction

Publication

EP 2423390 B1 20151014 (DE)

Application

EP 11008987 A 20100407

Priority

- EP 10713137 A 20100407
- DE 102009023466 A 20090602

Abstract (en)

[origin: WO2010139380A1] The invention relates to a method and a device for creating an underwater foundation of a building, wherein a base element is provided as a module carrier (11) at the erection site and a pile (6) forms the foundation to be created or is a component of the foundation, wherein the pile (6) is implemented as a hollow body. The aim of the invention is to allow the creation of a foundation in geologically difficult conditions, while simultaneously reducing noise emissions in sensitive areas. The aim is achieved by clamping the pile (6) in a pivot module (13), by erecting the pile (6) by way of pivoting the pivot module (13), until the desired driving direction into the ground (9) relative to the horizontal is achieved, by locking the pivot module after erecting the desired slope, by sinking the pile (6) to the floor (8) of the water system (7) and pressing it into the floor (8) until a limit value of a driving force is reached, by installing a sinking device (24) in the pile (6) and sinking it to the floor (8), by loosening the rock (9) below the pile (6) and sinking the pile (6) until the final depth is reached.

IPC 8 full level

E02D 7/16 (2006.01); **E02D 7/20** (2006.01); **E02D 7/26** (2006.01); **E02D 7/28** (2006.01); **E02D 13/04** (2006.01); **E02D 27/52** (2006.01)

CPC (source: EP US)

E02D 7/16 (2013.01 - EP US); **E02D 7/20** (2013.01 - EP US); **E02D 7/26** (2013.01 - EP US); **E02D 7/28** (2013.01 - EP US); **E02D 13/04** (2013.01 - EP US); **E02D 27/52** (2013.01 - EP US)

Cited by

CN105064434A; CN112368447A

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 SM TR

DOCDB simple family (publication)

WO 2010139380 A1 20101209; CN 102803616 A 20121128; CN 102803616 B 20160601; DE 102009023466 A1 20110105; DE 102009023466 B4 20120913; DK 2417303 T3 20130304; DK 2423390 T3 20160125; EP 2417303 A1 20120215; EP 2417303 B1 20121114; EP 2423390 A1 20120229; EP 2423390 B1 20151014; ES 2399603 T3 20130402; ES 2559204 T3 20160211; PT 2417303 E 20130221; US 2012076591 A1 20120329; US 9222233 B2 20151229

DOCDB simple family (application)

EP 2010002181 W 20100407; CN 201080030937 A 20100407; DE 102009023466 A 20090602; DK 10713137 T 20100407; DK 11008987 T 20100407; EP 10713137 A 20100407; EP 11008987 A 20100407; ES 10713137 T 20100407; ES 11008987 T 20100407; PT 10713137 T 20100407; US 201013322848 A 20100407