

Title (en)

OFFSHORE ROCK-DRILLING REDRIVING-TYPE LARGE-DIAMETER PILE STRUCTURE AND CONSTRUCTION METHOD

Title (de)

OFFSHORE-GESTEINSBOHRENDE GROSSDIMENSIONIERTE NACHRAMMPFAHLSTRUKTUR UND BAUVERFAHREN

Title (fr)

STRUCTURE DE PIEU DE GRAND DIAMÈTRE DE TYPE À BATTRE EN FORANT EN MER ET PROCÉDÉ DE CONSTRUCTION

Publication

EP 3406802 A1 20181128 (EN)

Application

EP 18168006 A 20180418

Priority

CN 201710379587 A 20170525

Abstract (en)

An offshore rock-drilling redriving-type large-diameter pile structure is provided, which is suitable for a foundation including a loose cover soil layer, a compact soil layer and a rock layer from top to bottom, wherein a pile hole (3) is drilled into the rock layer, and a steel pipe pile (1) is driven into the pile hole (3); the pile hole (3) being sequentially divided into a loose soil layer section corresponding to the loose cover soil layer, a compact soil layer section corresponding to the compact soil layer and a rock layer section corresponding to the rock layer from top to bottom, wherein the loose soil layer section is formed after the steel pipe pile is subjected to pile driving, and the compact soil layer section and the rock layer section are formed after the steel pipe pile driven in the loose cover soil layer and drilling is performed on the compact soil layer and the rock layer for a construction channel.

IPC 8 full level

E02D 27/52 (2006.01); **E02D 7/02** (2006.01); **E02D 7/28** (2006.01)

CPC (source: CN EP)

E02D 5/50 (2013.01 - CN); **E02D 7/02** (2013.01 - CN); **E02D 27/425** (2013.01 - CN); **E02D 27/44** (2013.01 - CN); **E02D 27/525** (2013.01 - CN EP);
E02D 7/02 (2013.01 - EP); **E02D 7/28** (2013.01 - EP); **E02D 2250/0023** (2013.01 - CN)

Citation (search report)

- [XAI] EP 3034702 A1 20160622 - BAUER SPEZIALTIEFBAU [DE]
- [A] EP 2930275 A1 20151014 - HERRENKNECHT AG [DE]

Citation (third parties)

Third party : Anonymous

- FR 2418301 A1 19790921 - CE GEO CIE ETU GEOTECHNIQUES [FR]
- DE 102009023466 A1 20110105 - HERRENKNECHT AG [DE]
- KR 20160017644 A 20160216 - SAMILENC [KR]

Cited by

CN110258613A; CN113174992A; CN113174990A; CN114438998A; CN114673144A; CN113981961A; CN115012405A; CN109811786A;
CN109469080A; CN114960623A

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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