

Title (en)
METHOD FOR ANCHORING AN OBJECT TO THE GROUND

Title (de)
VERFAHREN ZUM HERSTELLEN EINER ANKERUNG IM BODEN

Title (fr)
PROCÉDÉE D'INSTALLATION D'UNE ANCRAGE DANS UN SOL

Publication
EP 3240931 B1 20200219 (EN)

Application
EP 15837147 A 20151229

Priority
• NL 2014075 A 20141230
• NL 2015050915 W 20151229

Abstract (en)
[origin: WO2016108690A1] A method for anchoring/founding an object (15) comprises the steps of positioning a sonic drill apparatus (1), providing an assembly of head and rod sections (6; 20), in which the rod sections are connectable to the head section and to each other while extending in the longitudinal direction for forming a pile, inserting the pile into the ground, and coupling the object to a proximal end of the connected sections of the pile. The head section comprises a drilling portion. The head section is drilled directly into the ground by means of the sonic drill apparatus, and repeatedly gets one of the rod sections connected thereto, after which the connected sections get drilled further into the ground. During at least part of this drilling, a sonic vibration is introduced into the connected sections.

IPC 8 full level
E02D 7/22 (2006.01)

CPC (source: EP)
E02D 5/765 (2013.01); **E02D 7/22** (2013.01); **E02D 11/00** (2013.01)

Citation (examination)
• US 2010101863 A1 20100429 - OOTHOUDT THOMAS J [US]
• EP 1719841 A1 20061108 - MELEGARI CESARE [IT]
• GB 2363133 A 20011212 - CLARK GORDON [GB], et al
• WO 2009103149 A1 20090827 - ROUSSY RAYMOND J [CA]

Citation (opposition)
Opponent : EURODRILL GmbH
• EP 1719841 A1 20061108 - MELEGARI CESARE [IT]
• GB 2363133 A 20011212 - CLARK GORDON [GB], et al
• US 2010101863 A1 20100429 - OOTHOUDT THOMAS J [US]
• WO 2009103149 A1 20090827 - ROUSSY RAYMOND J [CA]
• US 2009101412 A1 20090423 - HARTUNG MARKUS [DE], et al
• WO 2014049278 A1 20140403 - SOLETANCHE FREYSSINET [FR]
• WO 2014049277 A1 20140403 - SOLETANCHE FREYSSINET [FR]
• AT 60816 B 19130825 - KAHLER GEORG [DE], et al
• KR 101420685 B1 20140717 - AMG GROUP ARCHITECTS & ENGINEERS [KR]

Opponent : Eurodrill GmbH
• EP 1719841 A1 20061108 - MELEGARI CESARE [IT]
• GB 2363133 A 20011212 - CLARK GORDON [GB], et al
• US 2010101863 A1 20100429 - OOTHOUDT THOMAS J [US]
• WO 2009103149 A1 20090827 - ROUSSY RAYMOND J [CA]
• US 2009101412 A1 20090423 - HARTUNG MARKUS [DE], et al
• US 3479829 A 19691125 - GOODMAN WILLARD B
• WO 2014049278 A1 20140403 - SOLETANCHE FREYSSINET [FR]
• EP 1795656 A2 20070613 - VAN LEEUWEN HARMELEN BV GEB [NL]
• DE 3400182 A1 19850711 - ISCHEBECK FRIEDRICH GMBH [DE]
• US 4732510 A 19880322 - LOUIS CLAUDE C [FR]
• WO 2009145897 A1 20091203 - LUCON PETER A [US]
• AT 60816 B 19130825 - KAHLER GEORG [DE], et al
Opponent : thyssenkrupp Infrastructure GmbH
• EP 1719841 A1 20061108 - MELEGARI CESARE [IT]
• GB 2363133 A 20011212 - CLARK GORDON [GB], et al
• US 2010101863 A1 20100429 - OOTHOUDT THOMAS J [US]
• WO 2009103149 A1 20090827 - ROUSSY RAYMOND J [CA]
• US 3479829 A 19691125 - GOODMAN WILLARD B
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• DE 3400182 A1 19850711 - ISCHEBECK FRIEDRICH GMBH [DE]
• US 4732510 A 19880322 - LOUIS CLAUDE C [FR]
• WO 2009145897 A1 20091203 - LUCON PETER A [US]
• AT 60816 B 19130825 - KAHLER GEORG [DE], et al
• "7x7 Neue Wage in der Ankertechnik Bohr- und Injektionsanker TITAN", INJEKTIONSANKER ISCHEBECK, 1983, XP055773066

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EP3546654A1

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

DOCDB simple family (publication)

WO 2016108690 A1 20160707; DK 3240931 T3 20200511; EP 3240931 A1 20171108; EP 3240931 B1 20200219; EP 3240931 B8 20200401;
EP 3546654 A1 20191002; NL 2014075 B1 20161012; PT 3240931 T 20200520

DOCDB simple family (application)

NL 2015050915 W 20151229; DK 15837147 T 20151229; EP 15837147 A 20151229; EP 19175074 A 20151229; NL 2014075 A 20141230;
PT 15837147 T 20151229