

Title (en)  
GROUND ANCHOR

Title (de)  
BODENANKER

Title (fr)  
DISPOSITIF D'ANCRAGE DANS UN SOL MULTICOUCHES

Publication  
**EP 2379811 A1 20111026 (FR)**

Application  
**EP 09803880 A 20091216**

Priority  
• FR 2009052578 W 20091216  
• FR 0950051 A 20090106

Abstract (en)  
[origin: WO2010079277A1] The invention relates to an anchoring device, in which a positioning plate (5), intended for bearing on the surface of the soil, is mounted on a hollow rod (2), the rod supporting in series, from the positioning plate (5) towards the free end (22), at least one helical disc (6) followed by a drilling disc (8), characterised in that the rod extends beyond the drilling disc opposite the plate (5), and in that a bit (4) is arranged on the free end of said rod, such that a first portion of the rod (2), suitable for being screwed into at least one first soil layer, extends from the plate (5) to the drilling disc, and such that a second portion of the rod (2), suitable for anchoring in a second soil layer, extends from the drilling disc (8) to the bit (4).

IPC 8 full level  
**E02D 5/80** (2006.01)

CPC (source: EP US)  
**E02D 1/02** (2013.01 - EP US); **E02D 5/801** (2013.01 - EP US); **E02D 5/808** (2013.01 - EP US); **E02D 7/22** (2013.01 - EP US); **E02D 27/50** (2013.01 - EP US); **E21D 20/003** (2013.01 - US); **E21D 20/021** (2013.01 - US); **E21D 20/025** (2013.01 - US); **E21D 20/028** (2013.01 - US)

Citation (search report)  
See references of WO 2010079277A1

Cited by  
CN111980734A

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)  
**FR 2940807 A1 20100709; FR 2940807 B1 20110204**; CY 1117099 T1 20170405; DK 2379811 T3 20160111; EP 2379811 A1 20111026; EP 2379811 B1 20151014; ES 2554171 T3 20151216; HR P20151271 T1 20160101; HR P20151271 T2 20160115; HU E026606 T2 20160628; PL 2379811 T3 20160429; PT 2379811 E 20160205; SI 2379811 T1 20160229; SM T201600067 B 20160429; US 2012009022 A1 20120112; US 2015128509 A1 20150514; US 2015132068 A1 20150514; US 9097112 B2 20150804; US 9869177 B2 20180116; WO 2010079277 A1 20100715

DOCDB simple family (application)  
**FR 0950051 A 20090106**; CY 161100027 T 20160113; DK 09803880 T 20091216; EP 09803880 A 20091216; ES 09803880 T 20091216; FR 2009052578 W 20091216; HR P20151271 T 20151125; HU E09803880 A 20091216; PL 09803880 T 20091216; PT 09803880 T 20091216; SI 200931346 T 20091216; SM 201600067 T 20160304; US 200913143529 A 20091216; US 201013516711 A 20100928; US 201514605139 A 20150126