

Title (en)

EARTH BORING DEVICE, METHOD OF MANUFACTURING A DEVICE FOR BORING IN EARTH, METHOD OF SERVICING A DEVICE FOR BORING IN EARTH AND USE OF A DEVICE FOR BORING IN EARTH

Title (de)

VORRICHTUNG ZUM BOHREN IN ERDREICH, VERFAHREN ZUM HERSTELLEN EINER VORRICHTUNG ZUM BOHREN IN ERDREICH, VERFAHREN ZUM WARTEN EINER VORRICHTUNG ZUM BOHREN IN ERDREICH UND VERWENDUNG EINER VORRICHTUNG ZUM BOHREN IN ERDREICH

Title (fr)

DISPOSITIF DE FORAGE DANS LE SOL, PROCÉDÉ DE FABRICATION D'UN DISPOSITIF DE FORAGE DANS LE SOL, PROCÉDÉ D'ENTRETIEN D'UN DISPOSITIF DE FORAGE DANS LE SOL ET UTILISATION D'UN DISPOSITIF DE FORAGE DANS LE SOL

Publication

EP 3693532 B1 20230125 (DE)

Application

EP 20156549 A 20200211

Priority

DE 102019000932 A 20190211

Abstract (en)

[origin: US2020256126A1] A ground drilling device comprising a housing, a lengthwise movable drilling head tip arranged in the housing, and a bearing for supporting the drilling head tip in the housing during its lengthwise movement.

IPC 8 full level

E21B 10/40 (2006.01); **E21B 4/06** (2006.01); **E21B 4/14** (2006.01); **E21B 7/26** (2006.01)

CPC (source: EP US)

E21B 1/00 (2013.01 - US); **E21B 4/003** (2013.01 - US); **E21B 4/06** (2013.01 - EP US); **E21B 4/145** (2013.01 - EP); **E21B 7/26** (2013.01 - EP); **E21B 10/40** (2013.01 - EP)

Citation (examination)

US 2017334052 A1 20171123 - PÜTTMANN FRANZ-JOSEF [DE], et al

Designated contracting state (EPC)

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DOCDB simple family (publication)

EP 3693532 A1 20200812; **EP 3693532 B1 20230125**; AU 2020200965 A1 20200827; AU 2020200965 B2 20220127; DE 102019000932 A1 20200813; PL 3693532 T3 20230320; US 11280134 B2 20220322; US 2020256126 A1 20200813

DOCDB simple family (application)

EP 20156549 A 20200211; AU 2020200965 A 20200211; DE 102019000932 A 20190211; PL 20156549 T 20200211; US 202016781351 A 20200204