

Title (en)

DEVICE FOR PRODUCING A DRILL HOLE IN ROCK MATERIAL

Title (de)

VORRICHTUNG ZUM HERSTELLEN EINES BOHRLOCHES IN GESTEINSMATERIAL

Title (fr)

DISPOSITIF DE CRÉATION D'UN TROU DE FORAGE DANS LA ROCHE

Publication

EP 2145078 A1 20100120 (DE)

Application

EP 08733243 A 20080418

Priority

- AT 2008000140 W 20080418
- AT 6052007 A 20070419

Abstract (en)

[origin: WO2008128266A1] The invention relates to a device for producing a drill hole in rock material, comprising a core drill bit (2) arranged on the drill string (1) and projecting from the diameter of the drill string (1) with its diameter. The drill string (1) is surrounded by a casing pipe (3) in at least the terminal zone behind the core drill bit (2), said casing pipe (3) being slotted at least across a part of its length. The device according to the invention is characterized in that for expanding the casing pipe (3), the slotted casing pipe (3) has an internal thread (5) at least across part of its slotted length and that a thread-guided mandrel (8) having an external thread (9) is provided between the internal thread (5) and the core drill bit (2) and can be engaged with the internal thread (5). Said thread-guided mandrel (8) can be retractably screwed into the internal thread (5) by means of the drill string (1) until its external thread (9) engages with the internal thread (5), preferably by means of a form-lock connection with the drill string (1), at least one of the threads (5 or 9) being conical.

IPC 8 full level

E21D 21/00 (2006.01)

CPC (source: EP)

B41J 3/40733 (2020.08); **E21D 21/0033** (2013.01); **E21D 21/0053** (2016.01)

Citation (search report)

See references of WO 2008128266A1

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

WO 2008128266 A1 20081030; AT 505335 A1 20081215; AT 505335 B1 20091215; AT E475779 T1 20100815; DE 502008001049 D1 20100909; EP 2145078 A1 20100120; EP 2145078 B1 20100728

DOCDB simple family (application)

AT 2008000140 W 20080418; AT 08733243 T 20080418; AT 6052007 A 20070419; DE 502008001049 T 20080418; EP 08733243 A 20080418