

Title (en)

METHOD AND DEVICE FOR RELEASING A BLOCK ON A BORE-CROWN DURING A BORING PROCESS

Title (de)

VERFAHREN UND VORRICHTUNG ZUM AUFHEBEN EINER BLOCKIERUNG EINER BOHRKRONE BEIM BOHREN

Title (fr)

PROCEDE ET DISPOSITIF D'ELIMINATION DU BLOCAGE D'UNE COURONNE LORS DU FORAGE

Publication

EP 1915505 A1 20080430 (DE)

Application

EP 06804333 A 20060811

Priority

- AT 2006000338 W 20060811
- AT 13862005 A 20050819

Abstract (en)

[origin: WO2007019594A1] The invention relates to a method and a device for releasing a block on a bore-crown (1) during a boring process, especially percussion boring or rotary percussion boring, for boring holes in the ground or rock, whereby a borehole is formed by a bore-crown (1) mounted on a boring rod (2) and connected thereto and acted upon by the boring rod to generate a rotational movement and optionally a percussive movement. According to the invention, when the bore-crown (1) is blocked, preventing the continuation of the boring process and especially another rotational movement of the bore-crown (1), the bore-crown (1) is subjected to a linear movement in the opposite direction to the boring direction by means of the boring rod (2), and to a rotational movement in a direction opposing the direction of the rotational displacement during the boring process by means of a corresponding connection (7, 9) between the end of the boring rod (2) facing the bore-crown (1), and the bore-crown (1), independently of a rotary drive for carrying out the boring process. As a result the borehole can be bored in a simple manner after releasing the block on the bore-crown (1).

IPC 8 full level

E21B 17/07 (2006.01); **E21B 31/00** (2006.01)

CPC (source: EP KR US)

E21B 17/073 (2013.01 - EP KR US); **E21B 31/03** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2007019594A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

BA HR

DOCDB simple family (publication)

WO 2007019594 A1 20070222; AU 2006281954 A1 20070222; AU 2006281954 B2 20110804; CA 2619175 A1 20070222; CA 2619175 C 20121211; EP 1915505 A1 20080430; EP 1915505 B1 20150311; EP 1915505 B8 20150506; JP 2009504950 A 20090205; KR 20080038341 A 20080506; PL 1915505 T3 20150930; RU 2008110501 A 20090927; RU 2391480 C2 20100610; US 2009133934 A1 20090528; ZA 200801213 B 20090128

DOCDB simple family (application)

AT 2006000338 W 20060811; AU 2006281954 A 20060811; CA 2619175 A 20060811; EP 06804333 A 20060811; JP 2008526318 A 20060811; KR 20087003684 A 20080215; PL 06804333 T 20060811; RU 2008110501 A 20060811; US 99039206 A 20060811; ZA 200801213 A 20080205