

Title (en)
DRILL CROWN

Title (de)
BOHRKRONE

Title (fr)
COURONNE DE SONDAGE

Publication
EP 1415065 B1 20050112 (DE)

Application
EP 02759861 A 20020731

Priority
• AT 0200227 W 20020731
• AT 12012001 A 20010801

Abstract (en)
[origin: WO03012244A1] A drill crown (1) used for drilling purposes, especially for rotary percussion drilling of a mouth of a blast furnace. The drill crown (1) consists of a drilling head (4) provided with a plurality of hard material or hard metal inserts (6) and a base body (2) for connection to a drive element etc. in order to drive or impinge upon said drill crown. The hard material or hard metal inserts (6) are received in bores or openings (5) of the drill head (4). According to the invention, at least one hard material or hard metal insert (6) is provided with an at least partially curved or domed surface contour (11) on the end which is received in the drill head (4). Said contour cooperates with a complementary domed or curved surface of the drill head (4) and/or base body (2), whereby the percussive energy required for appropriate drilling power is transmitted in a reliable manner, even when the hard material or hard metal insert (6) is slackened.

IPC 1-7
E21B 10/56

IPC 8 full level
E21B 10/56 (2006.01)

CPC (source: EP US)
E21B 10/56 (2013.01 - EP US)

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03012244 A1 20030213; AR 035264 A1 20040505; AT E287024 T1 20050115; DE 50202009 D1 20050217; EP 1415065 A1 20040506;
EP 1415065 B1 20050112; ES 2236562 T3 20050716; TW I225431 B 20041221; US 2004182610 A1 20040923; US 6926104 B2 20050809;
ZA 200401101 B 20070131

DOCDB simple family (application)

AT 0200227 W 20020731; AR P020102931 A 20020801; AT 02759861 T 20020731; DE 50202009 T 20020731; EP 02759861 A 20020731;
ES 02759861 T 20020731; TW 91117274 A 20020801; US 76621404 A 20040129; ZA 200401101 A 20040211