

Title (en)
Drilling tool with tool body and cutting inserts

Title (de)
Bohrwerkzeug mit Trägerkörper und Schneidkörpern

Title (fr)
Outil de forage avec support et éléments de coupe

Publication
EP 0707129 B1 19990616 (DE)

Application
EP 95810469 A 19950717

Priority
DE 4436916 A 19941015

Abstract (en)
[origin: EP0707129A2] The drill body (3) carries one or more cutters (4) of radial width (R), with tapering relief rearward (K), and having both radial and axial projection from the body. The rearward taper terminates in a novel reduced step (S) which improves the long-term cutting and wearing characteristics. The maximum axial projection (B) of the free end of the cutter from the step, is 0.3-0.5 times the total axial length of the cutter. The step is located close to the tip of the body, at the cutting end. The projecting radial width of the cutter reduces by 30% at the step, on both sides of the cutter. The body may be a core drill, in which the radial cutter width, at first tapering rearward, is then similarly step-reduced into the inner and outer contours of the body.

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E21B 10/36; **E21B 10/02**; **E21B 10/58**

IPC 8 full level
E21B 10/46 (2006.01); **B28D 1/04** (2006.01); **E21B 10/02** (2006.01); **E21B 10/36** (2006.01); **E21B 10/48** (2006.01); **E21B 10/58** (2006.01)

CPC (source: EP KR US)
B28D 1/041 (2013.01 - EP KR US); **E21B 10/48** (2013.01 - EP US); **E21B 10/48** (2013.01 - KR)

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AT CH DE DK FR GB IT LI NL SE

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EP 0707129 A2 19960417; **EP 0707129 A3 19970806**; **EP 0707129 B1 19990616**; AT E181398 T1 19990715; CA 2160042 A1 19960416; CA 2160042 C 19990112; CN 1081280 C 20020320; CN 1128321 A 19960807; DE 4436916 A1 19960418; DE 59506217 D1 19990722; DK 0707129 T3 19991213; FI 111980 B 20031015; FI 954850 A0 19951012; FI 954850 A 19960416; HU 216401 B 19990628; HU 9502975 D0 19951228; HU T72769 A 19960528; JP 3706664 B2 20051012; JP H08199964 A 19960806; KR 100318971 B1 20020422; KR 960014591 A 19960522; US 5628376 A 19970513

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