

Title (en)
Rock drill bit.

Title (de)
Gesteinsbohrer.

Title (fr)
Trépan de forage de roche.

Publication
EP 0685629 A3 19961218 (DE)

Application
EP 95810187 A 19950320

Priority
DE 4419641 A 19940604

Abstract (en)
[origin: EP0685629A2] The bit has a clamping shaft (1), a drill shaft (2) with at least four parallel adjacently arranged swarf grooves (4-7). A drill head (3) of hard metal is connected with the drill shaft with four peripherally distributed discharge grooves (8-11) running in the longitudinal direction of the drill head. The discharge grooves have a differently sized internal cross-section, that of two first diametrically opposed discharge grooves (8,10) being larger than that of two second diametrically opposed discharge grooves (9,11). The discharge grooves have a differently sized radial distance from the centre of the drill head. <IMAGE>

IPC 1-7
E21B 10/44

IPC 8 full level
E21B 10/46 (2006.01); **B23B 51/00** (2006.01); **B23B 51/02** (2006.01); **B28D 1/14** (2006.01); **E21B 10/44** (2006.01); **E21B 10/58** (2006.01)

CPC (source: EP KR US)
B28D 1/14 (2013.01 - KR); **E21B 10/445** (2013.01 - EP US)

Citation (search report)
• [YD] US 2673716 A 19540330 - AVERY CLYDE E
• [Y] EP 0452255 A2 19911016 - HILTI AG [LI]
• [A] US 2370706 A 19450306 - ANDREASSON RUDOLF W
• [A] GB 512830 A 19390927 - JOHN JOSEPH RAWLINGS, et al

Cited by
DE102008022945A1; EP1190797A1; CN105108211A; EP3437773A1; EP2116321A1

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