

Title (en)
Improvements in rotary drill bits.

Title (de)
Drehbohrmeissel.

Title (fr)
Trépan de forage rotatif.

Publication
EP 0145422 A2 19850619 (EN)

Application
EP 84308323 A 19841130

Priority

- GB 8332343 A 19831203
- GB 8405179 A 19840228

Abstract (en)
A rotary drill bit for use in drilling or coring deep holes in subsurface formations comprises a bit body (10) having a shank (11) for connection to a drill string, a plurality of cutting elements (14) mounted at the surface of the bit body, and a channel in the bit body for supplying drilling fluid to nozzles (17) in the surface of the bit body for cooling and/or cleaning the cutting elements. The cutting elements (14) each comprise a thin hard facing layer (19), defining a front cutting face, bonded to a less hard backing layer (20), and the cutting element is mounted on a carrier (22) which is received in a socket (23) in the bit body in such manner that, at least before any wear of the bit has occurred, the carrier (22) is wholly shrouded by the material of the bit body, the carrier 22 being formed from material which is less hard than the backing layer (20) of the cutting element (14).

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IPC 8 full level
E21B 10/56 (2006.01); E21B 10/567 (2006.01)

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Cited by
AU588677B2; EP0332474A1; US4947945A

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EP 0145422 A2 19850619; EP 0145422 A3 19860528; AU 3592584 A 19850606; BR 8406134 A 19850924; GB 2151283 A 19850717;
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