

Title (en)
CORE BIT WITH DAMPED GUIDED CYLINDRICAL SHANK

Publication
EP 0111143 B1 19880727 (DE)

Application
EP 83110850 A 19831029

Priority
DE 3242137 A 19821113

Abstract (en)
[origin: US4537448A] A rotary excavating head is provided with a plurality of peripherally spaced tool holders supporting respective picks, each pick having a shank which is rotatable about its own axis and limitedly shiftable within a socket formed by the respective tool holder. A space of variable volume, formed between the shank end and the bottom of the socket, communicates via a check valve with a source of water whose supply pressure urges the pick outward, this space opening onto a restricted passage that terminates at a nozzle through which the water is sprinkled onto a mine face or tunnel wall attacked by the head when the respective pick is forced back against the water pressure by its encounter with the mineral matter to be fragmented. The restricted passage may include a pressure-relief valve; the nozzle may be constituted by a narrow annular clearance separating the shank of the pick from the cylindrical wall of the socket.

IPC 1-7
E21C 35/18; **E21C 35/22**; **E21D 9/10**

IPC 8 full level
E21C 35/18 (2006.01); **E21C 35/187** (2006.01); **E21C 35/22** (2006.01); **E21D 9/10** (2006.01)

CPC (source: EP US)
E21C 35/18 (2013.01 - EP US); **E21C 35/1837** (2020.05 - EP); **E21C 35/187** (2013.01 - EP US); **E21C 35/1837** (2020.05 - US)

Cited by
EP0231107A1; EP2905520A1; US9874291B2

Designated contracting state (EPC)
AT BE FR GB SE

DOCDB simple family (publication)
EP 0111143 A2 19840620; **EP 0111143 A3 19851121**; **EP 0111143 B1 19880727**; AT E36033 T1 19880815; DE 3242137 A1 19840517; DE 3242137 C2 19850605; JP S59158895 A 19840908; US 4537448 A 19850827; ZA 838407 B 19840725

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