

Title (en)
DOWN-THE-HOLE DRILLING

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Application
EP 79100010 A 19790102

Priority
ZA 7891 A 19780106

Abstract (en)
[origin: EP0003103A2] This invention concerns down-the-hole drilling, where there is a persistent problem in providing an adequately controlled flow of flushing fluid to the face of the drill bit. In known down-the-hole drills turbulence and closed circuits of the flushing fluid tend to erode the bit and reduce its lifespan. The invention seeks to lessen these drawbacks by providing for the flow of flushing fluid to be divided into a component directed along a first cavity (22, 24) which terminates at the face (18) of the bit and another component directed along a second cavity (28, 30) which terminates above the face and is deflected up the drill hole. Weakening of the bit is avoided if there is at most one bore through the bit for flushing fluid.

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E21B 10/38 (2006.01)

CPC (source: EP)
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Citation (search report)

- [D] GB 1071418 A 19670607 - P & V MINING & ENGINEERING LTD
- US 3269471 A 19660830 - ALEXANDER ROBERT T
- US 321023 A 18850630
- CA 871004 A 19710518 - HARD METALS CANADA LTD
- US 3299974 A 19670124 - JOHN CLEMMOW RAYMOND
- US 2507221 A 19500509 - ORVILLE PHIPPS
- AU 450556 B2 19740711
- US 3155180 A 19641103 - MACSWEEN GEORGE A
- US 3866746 A 19750218 - CURINGTON ALFRED R
- US 3991834 A 19761116 - CURINGTON ALFRED R
- FR 2200434 A1 19740419 - BOEHLER & CO AG GEB [AT]
- US 1943880 A 19340116 - REA WALTER C
- [AD] US 3225841 A 19651228 - THOMPSON CHARLES T
- [AD] DE 1238864 B 19670420 - FRITZ ZIMMERMANN

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