

Title (en)
HYDRAULIC DOWN-THE-HOLE ROCK DRILL

Title (de)
GESTEINSBOHRGERÄT MIT HYDRAULISCHEM ANTRIEB IM BOHRLOCH

Title (fr)
PERFORATRICE HYDRAULIQUE A ROCHE POUR LE FOND DU TROU

Publication
EP 0543806 B1 19960117 (EN)

Application
EP 90911460 A 19900712

Priority
SE 9000490 W 19900712

Abstract (en)
[origin: WO9201138A1] A hydraulic down-the-hole rock drill is adapted to be driven by pressure water. The spent drive fluid is utilised as a flushing medium to flush the debris out of the borehole. The piston hammer (20) is guided at its front and rear ends and a continuously pressurized chamber (28) extends around the piston hammer all the way between the two guiding portions (22, 27). The front guiding portion (22) has a smaller diameter than the rear guiding portion (27) so that the piston hammer will have a differential piston area in the chamber (28). Thus, the pressure in the chamber (28) will provide a continuous force backwards on the piston hammer and cause the return stroke of the piston hammer when a valve controlled cylinder chamber (34) at the rear end of the piston hammer is depressurized.

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E21B 4/14; B25D 9/16

IPC 8 full level
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