

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.

IPC 1-7  
**E21B 4/14**; **B25D 9/16**

IPC 8 full level  
**B25D 9/12** (2006.01); **B25D 9/16** (2006.01); **E21B 4/14** (2006.01)

CPC (source: EP)  
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