

Title (en)
DOWN-THE-HOLE-DRILL

Publication
EP 0233038 A3 19881123 (EN)

Application
EP 87300928 A 19870203

Priority
ZA 86768 A 19860203

Abstract (en)
[origin: EP0233038A2] A down-the-hole drill is hydraulically powered with air flushing. The rotation motor (16) is on the drill string (10) and rotates a percussion hammer (20) to which the drill bit is chucked. Hydraulic fluid flows in umbilicals (11) clipped into grooves on the sides of the drill rods. The shuttle valve (26) for the hammer is in line with the piston (25).

IPC 1-7
E21B 4/16; **E21B 21/12**; **E21B 21/14**; **E21B 17/18**; **E21B 17/10**; **E21B 4/14**; **E21B 21/08**; **E21B 44/00**

IPC 8 full level
E21B 4/14 (2006.01); **E21B 4/16** (2006.01); **E21B 17/10** (2006.01); **E21B 17/18** (2006.01); **E21B 21/08** (2006.01); **E21B 21/12** (2006.01); **E21B 21/14** (2006.01); **E21B 44/00** (2006.01)

CPC (source: EP)
E21B 4/14 (2013.01); **E21B 4/16** (2013.01); **E21B 17/1035** (2013.01); **E21B 17/18** (2013.01); **E21B 21/12** (2013.01); **E21B 21/14** (2013.01); **E21B 44/005** (2013.01)

Citation (search report)

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EP 0233038 A2 19870819; **EP 0233038 A3 19881123**; AU 581800 B2 19890302; AU 6807387 A 19870806; FI 870444 A0 19870202; FI 870444 A 19870804; NO 870405 D0 19870202; NO 870405 L 19870804

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