

Title (en)
FLUID OPERATED HAMMER

Publication
EP 0048142 B1 19850327 (EN)

Application
EP 81304169 A 19810911

Priority
AU PE553480 A 19800911

Abstract (en)
[origin: EP0048142A1] A fluid operated hammer comprising; a casing (11); a top sub (12) mounted to one end of the casing; a drill bit (13) mounted to the other end of the casing; a feed tube (20) located concentrically within the casing and extending for a portion of the length of the casing from said one end; and a piston (26) slidably mounted in the casing for longitudinal movement between the top sub and drill bit over said feed tube; said feed tube (20) being formed with at least one elongate aperture (24) wherein the longitudinal dimensions of said at least one aperture correspond to a significant proportion of the degree of reciprocation of said piston; a first passageway (29) provided in the piston and extending between the central bore and the external face thereof to provide a communication between the said at least one aperture and the space between the piston and the top sub when the piston is at or near the top sub and for a significant proportion of the degree of movement of the piston from the top sub to a drive the piston towards the other end of the casing; a rebate (25) formed in the internal face of the casing adjacent or near the other end; and a second passageway (30) in the piston and extending from the central bore thereof to the external face thereof to provide communication between said at least one aperture and said rebate when said piston is abutting said drill bit to admit fluid into the space between the piston and drill bit and drive the piston towards the one end.

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E21B 4/14

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CPC (source: EP)
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Cited by
EP0099594A3; AU676610B2; EP0083507A3; US5722495A; AU2006335401B2; KR101381565B1; US7353890B2; WO2007081253A1; WO9508690A1

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