

Title (en)
Downhole mud diverter tools

Title (de)
Vorrichtungen zur Spülungsumlenkung in einem Bohrloch

Title (fr)
Outils défecteurs de boue de forage en fond de puits

Publication
EP 1081330 A3 20010502 (EN)

Application
EP 00307400 A 20000829

Priority
GB 9920731 A 19990903

Abstract (en)
[origin: EP1081330A2] A downhole fluid diverter tool (10) has an axial through-bore (13) and fluid passages (18) extending through its side wall. Normally-closed pressure-actuated valve means (20) are located in the fluid passages whereby a proportion of a flow of drilling fluid passing through the cylindrical body may be diverted through the fluid passages (18) by increasing the fluid pressure in the interior of the tool such that the valve means (10) open. Each valve means (20) includes a piston member (28) housed in the side wall and movable in a direction parallel to said longitudinal axis so as to open and close said fluid passage. Each piston member (28) is slidably located in a bore which extends parallel to the longitudinal axis of the tool, said bore having a concave end surface (36), said fluid passage intersecting said concave end surface, said piston member (28) having a generally convex complementary end surface adapted to seat against said concave end surface so as to close said fluid passage, and said valve means further including bias means for urging said convex end surface of said piston (28) into engagement with said concave end surface (36) of said bore. The valve means (20) comprises a housing adapted to be located in a pocket formed in the exterior surface of the body of the tool (10).

IPC 1-7
E21B 21/10

IPC 8 full level
E21B 21/10 (2006.01)

CPC (source: EP)
E21B 21/103 (2013.01)

Citation (search report)
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• [DY] WO 9604458 A1 19960215 - STEWART ARTHUR DEACEY [GB], et al
• [A] US 3334697 A 19670808 - EDWARDS JACK H, et al
• [A] EP 0322170 A2 19890628 - GAS RES INST [US]

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