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(54) Downhole mud diverter tools

(57) 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).





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