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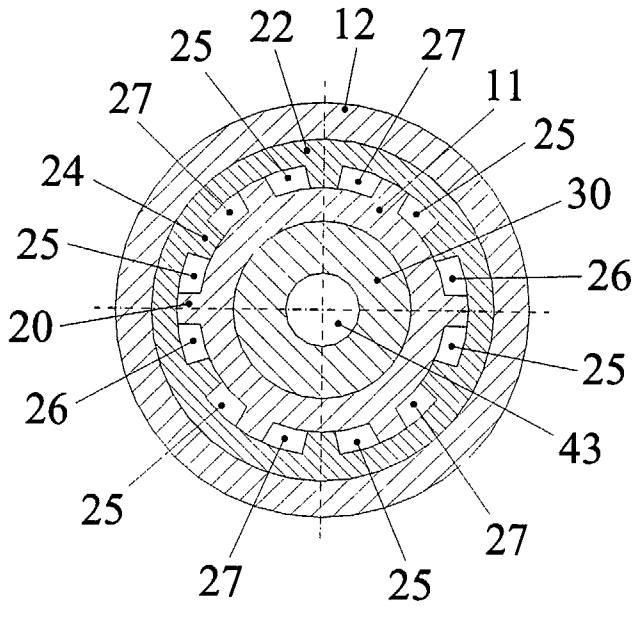
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(54) Title: LIQUID DRIVEN DOWNHOLE DRILLING MACHINE



(57) Abstract: In a liquid downhole drilling machine, the guiding bushing (31) for the drill bit is rotatably journaled in the housing (11, 12) and, via a one-way coupling (29), coupled to a turning sleeve (22) that has axial ridges (24) that bound a number of chambers (25, 26, 27) and form turning pistons for turning the turnable sleeve to and fro. A number of these chambers are coupled to be pressurised and depressurised simultaneously with said pressure chamber (47) with the piston area (46) for urging the piston hammer (30) forwards. As a result, the drill bit (13) will be indexed a defined angle between each impact so that the button inserts of the drill bit will change contact points with the rock between every impact and fragment the rock efficiently. The drill tube is not rotated.

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