

Title (en)
Drilling tool.

Title (de)
Bohrwerkzeug.

Title (fr)
Outil de forage.

Publication
EP 0392544 B1 19940720 (DE)

Application
EP 90107054 A 19900412

Priority
DE 3912067 A 19890413

Abstract (en)
[origin: EP0392544A2] The drilling tool comprises a tubular outer housing (1) which, via connection means, can be connected at its top end to a drill-pipe string and at its bottom end to a drill bit (2), a pilot drilling unit (3) which, by means of a catch device (4), can be drawn up out of the outer housing (1) and can be put down into the outer housing (1) and is also axially displaceable in the latter during the drilling operation, and a deep-hole motor (16) operated by drilling fluid. The pilot drilling unit (3) is supported in longitudinal guides (18) in such a way as to non-rotatable relative to these longitudinal guides (18) but axially displaceable inside the outer housing (1), has reaction surfaces (5) which can be acted upon by the pressure of the drilling fluid to produce an axial feed force acting on the pilot drilling unit (3) in the bottom direction, and has a rotary body which can be rotationally driven by the deep-hole motor (16) and in turn carries a rotary boring bit (10). In this arrangement, the outer housing (1) forms the stator of the deep-hole motor designed as a turbine (16), and a tubular inner housing (17) rotatably supported in the outer housing (1) forms the rotor of the turbine (16), and the longitudinal guides (18) supporting the pilot drilling unit in operation are provided in the inner housing (17).

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