

Title (en)

Method and boring tool for drilling into subterranean formations

Title (de)

Verfahren und Bohrerät zum Abteufen von Bohrungen in unterirdische Formationen

Title (fr)

Procédé et outil de forage pour le forage de puits dans les formations souterraines

Publication

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Application

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Priority

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Abstract (en)

[origin: EP0768446A1] The process for sinking a bore hole through underground formations which include special formations of strata with significantly different formation pressures to those in adjacent formations, comprises drilling a first bore hole using a tool carried on the lower end of a pipe train and driven by a deep-hole motor to a point close to the boundary of the first formation. To extend the hole through the special formation, a tubular housing carrying a driven bore-crown at its lower end is inserted with the drill, and this acts as a liner for the bore hole at least in the region of the special formation. Also claimed is a drilling device for the process, comprising a pipe train (3) and a drilling tool (4) comprising a deep-hole motor and a drill bit (10) enclosed in a tool housing (7) whose upper end can be connected to the lower end (5) of the pipe train (3). The drill bit (10) is attached to a drive shaft (9) extending beyond the end of the tool housing (7). An outer housing (11), whose length exceeds the depth of the special formation, has a bore-crown (20) and a removable connection (12) at its upper end to fix it to the pipe train. The outer housing (11) and the drilling tool are provided with interlocking mechanisms, of which an upper set (14) supports the tool housing (7) at a lowest position inside the outer housing (11), and a lower set (16) connects the drive shaft (9) of the deep-hole motor with a lower, independently rotatable part (17) of the outer housing so that it rotates with the drill bit.

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