

Title (en)
Improvements in or relating to drill bits.

Title (de)
Bohrmeissel.

Title (fr)
Trépan de forage.

Publication
EP 0225101 A2 19870610 (EN)

Application
EP 86308956 A 19861117

Priority
GB 8528894 A 19851123

Abstract (en)
A rotary drill bit for drilling deep holes in subsurface formations comprises a bit body (10) having a shank for connection to a drill string and a plurality of elements (16,22) mounted on the bit body (10) for cutting, abrading or bearing on the formation being drilled. The bit body (10) includes a fixed structure (11) and a movable structure (17), each carrying elements (16,22) for acting on the formation, the movable structure (17) being capable of reversible movement relatively to the fixed structure (11) between two limiting positions, the relative movement providing at least two configurations in which there are different distributions, between said elements (16,22), of the loads applied to the bit during its engagement with the formation. Control means, such as hydraulic means (29,30), are provided to control the movement of the movable structure (17), and hence the load distribution between the elements (16,22), automatically in response to the torque and/or axial loads applied to the bit.

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IPC 8 full level
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CPC (source: EP US)
E21B 10/14 (2013.01 - EP); **E21B 10/62** (2013.01 - EP US)

Cited by
CN101765695A; US7841426B2; US10132122B2; US11428050B2; US9670736B2; US9657527B2; US10557311B2; US11795763B2;
WO2011046744A2; US9782857B2; US10072462B2; US10190366B2; US9982488B2; US10107039B2; US10316589B2; US10871036B2

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