

Title (en)

Steerable bit assembly and methods

Title (de)

Steuerbare Bohrmeißelanordnung und entsprechende Verfahren

Title (fr)

Ensemble trépan orientable et procédés

Publication

**EP 1923534 B1 20101110 (EN)**

Application

**EP 08001582 A 20040913**

Priority

- EP 04783755 A 20040913
- US 50305303 P 20030915

Abstract (en)

[origin: EP1923534A1] A drilling system includes a steerable bottomhole assembly (BHA) (108) having a steering unit (120) and a control unit (122) that provide dynamic control of drill bit (112) orientation or tilt. Exemplary steering units (120) can adjust bit orientation at a rate that approaches or exceeds the rotational speed of the drill string (110) or drill bit (112), can include a dynamically adjustable articulated joint having a plurality of elements that deform in response to an excitation signal, can include adjustable independently rotatable rings for selectively tilting the bit, and/or can include a plurality of selectively extensible force pads. The force pads are actuated by a shape change material that deforms in response to an excitation signal.

IPC 8 full level

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CPC (source: EP)

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Cited by

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