

Title (en)  
Steerable rotary drilling system

Title (de)  
Steuerbares Rotary-Bohrsystem

Title (fr)  
Système de forage rotatif à déviation réglable

Publication  
**EP 0806542 A3 19980902 (EN)**

Application  
**EP 97303135 A 19970508**

Priority  
GB 9609659 A 19960509

Abstract (en)  
[origin: EP0806542A2] A steerable rotary drilling system comprises a bottom hole assembly which includes a drill bit (1) and a bias unit (10) which is rotatable with the drill bit and includes peripheral actuators (13) which are displaceable laterally as the bias unit rotates to impart a lateral bias to the drill bit. A roll stabilised control unit (9) controls the displacement of the actuators (13) so as to control the direction of drilling. The bottom hole assembly also includes at least one geophysical sensor (53) which is responsive to a characteristic of the subsurface formation (51, 52) in the vicinity of the bottom hole assembly. The sensor (53) provides an output signal corresponding to the current value of the characteristic, and means are provided for automatically modifying the operation of the control unit (9), and hence operation of the rotatable bias unit (10), in response to said output signal, so that the direction in which the drill bit (1) is steered is influenced by the characteristic of the surrounding formation. <IMAGE>

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**E21B 7/06**

IPC 8 full level  
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**E21B 4/006** (2013.01 - EP); **E21B 7/06** (2013.01 - EP); **E21B 41/0085** (2013.01 - EP); **E21B 44/005** (2013.01 - EP);  
**E21B 47/01** (2013.01 - EP US)

Citation (search report)  
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