

Title (en)

Apparatus and methods for drilling a wellbore using casing

Title (de)

Vorrichtung und Verfahren zum Bohren eines Bohrlochs mit einem Futterrohr

Title (fr)

Appareil et procédés permettant de forer un puits utilisant un cuvelage

Publication

**EP 2278113 A2 20110126 (EN)**

Application

**EP 10181236 A 20040202**

Priority

- EP 04707464 A 20040202
- US 44408803 P 20030131
- US 45231703 P 20030305
- US 45220203 P 20030305
- US 45218603 P 20030305

Abstract (en)

Apparatus and methods for drilling with casing. In an embodiment, methods and apparatus for deflecting casing using a diverter apparatus are disclosed. In another embodiment, the apparatus comprises a motor operating system disposed in a motor system housing, a shaft operatively connected to the motor operating system, the shaft having a passageway, and a divert assembly disposed to direct fluid flow selectively to the motor operating system and the passageway in the shaft. In another aspect, methods and apparatus for directionally drilling a casing into the formation are disclosed. Methods and apparatus for measuring the trajectory of a wellbore while directionally drilling a casing into the formation are also described.

IPC 8 full level

**E21B 7/20** (2006.01); **E21B 7/06** (2006.01); **E21B 7/08** (2006.01); **E21B 7/18** (2006.01); **E21B 21/10** (2006.01); **E21B 33/14** (2006.01); **E21B 41/00** (2006.01); **E21B 47/01** (2012.01); **E21B 34/00** (2006.01)

CPC (source: EP US)

**E21B 7/06** (2013.01 - EP); **E21B 7/065** (2013.01 - EP); **E21B 7/18** (2013.01 - EP); **E21B 7/208** (2013.01 - EP); **E21B 10/61** (2013.01 - EP); **E21B 10/62** (2013.01 - EP); **E21B 21/103** (2013.01 - EP); **E21B 33/14** (2013.01 - EP); **E21B 41/0078** (2013.01 - EP); **E21B 47/01** (2013.01 - EP US); **E21B 2200/04** (2020.05 - EP)

Citation (applicant)

- US 2003111267 A1 20030619 - PIA GIANCARLO T [GB]
- US 2003183424 A1 20031002 - TULLOCH RORY MCCRAE [GB]
- WO 0181708 A1 20011101 - BRIT BIT LTD [GB], et al
- US 41945603 A 20030421
- US 3951219 A 19760420 - CORTES ABEL C

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004070159 A2 20040819**; **WO 2004070159 A3 20050324**; CA 2512641 A1 20040819; CA 2512641 C 20110405; CA 2808302 A1 20040819; CA 2808302 C 20170523; CA 2965252 A1 20040819; EP 1588015 A2 20051026; EP 1588015 B1 20171206; EP 2278111 A2 20110126; EP 2278111 A3 20171206; EP 2278112 A2 20110126; EP 2278112 A3 20171213; EP 2278113 A2 20110126; EP 2278113 A3 20171213; EP 2278114 A2 20110126; EP 2278114 A3 20171213; NO 20053567 D0 20050721; NO 20053567 L 20051031; NO 20131089 L 20051031; NO 333888 B1 20131014

DOCDB simple family (application)

**US 2004003164 W 20040202**; CA 2512641 A 20040202; CA 2808302 A 20040202; CA 2965252 A 20040202; EP 04707464 A 20040202; EP 10181151 A 20040202; EP 10181194 A 20040202; EP 10181236 A 20040202; EP 10181266 A 20040202; NO 20053567 A 20050721; NO 20131089 A 20130809