

Title (en)

APPARATUS FOR OPTIONAL STRAIGHT OR DIRECTIONAL DRILLING UNDERGROUND FORMATIONS

Publication

**EP 0163946 B1 19890405 (EN)**

Application

**EP 85105353 A 19850502**

Priority

- DE 3417743 A 19840512
- DE 3423465 A 19840626

Abstract (en)

[origin: EP0163946A1] A device for selective straight or directional drilling in subterranean rock formations consists of a rotary drilling tool having a tool main axis (8) and comprising a housing (3) which comprises several sections and can be connected to a drill string (4), the housing (3) having a down-hole motor for driving a drill bit (13) by means of a driven shaft (12). For straight drilling, the housing (3) can be set in independent, slow rotation about the tool main axis (8) by being turned by the drill string (4), and for directional drilling can be aligned and fixed against turning. The lower section (10) of the housing adjacent to the drill bit and mounting the driven shaft is deflected relative to the tool main axis, and this section (10) is connected to an upper section (11) by an intermediate section which has an axis which intersects the axes of the upper and lower section. The device may include a plurality of interchangeable intermediate sections.

IPC 1-7

**E21B 7/06; E21B 7/10; E21B 17/10**

IPC 8 full level

**E21B 7/06** (2006.01); **E21B 7/10** (2006.01); **E21B 17/10** (2006.01)

CPC (source: EP)

**E21B 7/068** (2013.01); **E21B 7/10** (2013.01); **E21B 17/10** (2013.01)

Citation (examination)

- GB 636879 A 19500510 - ROLEN ARSENJEVITCH JOANNESJAN, et al
- US 3260318 A 19660712 - NEILSON WILLIAM J, et al

Cited by

US5094304A; GB2336171A; US6158533A; GB2336171B; US6328119B1; US9523244B2

Designated contracting state (EPC)

BE FR GB NL

DOCDB simple family (publication)

**EP 0163946 A1 19851211; EP 0163946 B1 19890405; CA 1235686 A 19880426; NO 162926 B 19891127; NO 162926 C 19900307;**  
NO 851885 L 19851113

DOCDB simple family (application)

**EP 85105353 A 19850502; CA 480696 A 19850503; NO 851885 A 19850510**