Title (en)

AXIAL BALANCING DEVICE FOR DOWNHOLE DRILLING MOTORS

Publication

EP 0209310 A3 19880511 (EN)

Application

EP 86305258 A 19860708

Priority

GB 8517747 A 19850713

Abstract (en)

[origin: EP0209310A2] A downhole drilling motor is described which has an outer drill casing (11), a shaft (12) for driving a drill bit connected thereto, and the shaft (12) being rotatable relative to the casing (11). A turbine (15) is disposed between the casing (11) and the shaft (12) to permit the shaft (12) to be rotated. A pressurised fluid can be admitted via an inlet (13) and is transmitted to the turbine (15) via a passage (20) to effect operation. The shaft is provided with reaction means which includes a sleeve (17) mounted on the shaft (12) and which sleeve and shaft have pressure surfaces (23, 24) which can be acted on by the pressure fluid to produce a force acting counter to the normal hydraulic thrust on the shaft (12) to produce a reduced resultant hydraulic thrust on the shaft (12). In a preferred arrangement, the reaction member and thrust bearing is located above the turbine (15) so that the unit can be replaced as a whole.

IPC 1-7

F03B 13/02; E21B 4/02

IPC 8 full level

E21B 4/02 (2006.01); F03B 13/02 (2006.01)

CPC (source: EP)

E21B 4/02 (2013.01); F03B 13/02 (2013.01)

Citation (search report)

- [X] FR 1161543 A 19580901
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- [A] US 4260032 A 19810407 FOX FRED K
- [A] US 4493381 A 19850115 KAJIKAWA MASAUEMON [JP], et al
- [A] US 4308927 A 19820105 FOX FRED K
- [A] FR 2240345 A1 19750307 ALSTHOM CGEE [FR]

Cited by

CN108716362A; CN102434354A; CN105275720A

Designated contracting state (EPC)

DE FR GB

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