

Title (en)

SELF-STEERING DRILL STRING PIPE FOR ROTATING DRILL STRINGS OF ROCK DRILLING MACHINES

Publication

**EP 0324870 B1 19910710 (DE)**

Application

**EP 88100657 A 19880119**

Priority

EP 88100657 A 19880119

Abstract (en)

[origin: EP0324870A1] In a self-steering drill string pipe (1) for rotating drill strings of rock drilling machines which has an inner drilling shaft (2) with a flushing channel (4), which inner drilling shaft (2) can be connected to the drill string and the drilling tool, and a housing (10) which is mounted on this drilling shaft (2) in such a way as to be rotationally movable about the drilling shaft (2) and on which swing-out control strips (11-14) are arranged on the outside and in which the parts of the hydrostatic drives (24) acting on the control strip as well as the electronic (20) and electric control system are accommodated, the power requirement being produced by the rotary movement during the drilling operation, provision is made according to the invention for an annular space (26) to be present between the drilling shaft (2) and the housing (10), which annular space (26) has a radial connection (27) to the flushing channel of the drilling shaft and is closed off at both ends by one rotary non-return valve (28, 29) each sealing against the borehole flushing fluid, and for the annular space (26) to serve as a tank for the working fluid of the hydraulic system, which working fluid is formed by the borehole flushing fluid.

IPC 1-7

**E21B 7/06**; **E21B 47/022**; **E21B 47/12**

IPC 8 full level

**E21B 7/06** (2006.01); **E21B 21/00** (2006.01); **E21B 47/022** (2012.01); **E21B 47/18** (2012.01)

CPC (source: EP US)

**E21B 4/02** (2013.01 - EP US); **E21B 7/062** (2013.01 - EP US); **E21B 47/022** (2013.01 - EP US); **E21B 47/18** (2013.01 - EP US)

Cited by

WO9318273A1; EP0486752A1; EP0486751A1; DE4037259A1; EP0459008A3; AU673996B2; US5603386A

Designated contracting state (EPC)

AT BE CH DE FR GB LI SE

DOCDB simple family (publication)

**EP 0324870 A1 19890726**; **EP 0324870 B1 19910710**; AT E65111 T1 19910715; AU 2833689 A 19890720; AU 616930 B2 19911114; BR 8900201 A 19890912; DE 3863640 D1 19910814; JP H01287391 A 19891120; US 5000272 A 19910319; ZA 89251 B 19891025

DOCDB simple family (application)

**EP 88100657 A 19880119**; AT 88100657 T 19880119; AU 2833689 A 19890110; BR 8900201 A 19890118; DE 3863640 T 19880119; JP 787489 A 19890118; US 29704689 A 19890117; ZA 89251 A 19890112