Title (en)

DEVICE FOR GENERATING PRESSURE PULSES IN A DRILLING FLUID

Publication

EP 0290938 A3 19900725 (DE)

Application

EP 88107134 A 19880504

Priority

DE 3715512 A 19870509

Abstract (en)

[origin: EP0290938A2] A device for generating pressure pulses in a drilling fluid flowing down through a drill-pipe string (1) comprises a valve arranged in the drill-pipe string (1) and having an axially displaceable, tubular main valve body (4), a fixed, tubular support body (5) which is arranged coaxially in the main valve body (4) and in the overlapping area with the main valve body (4) defines with the latter a cylindrical gap (18), and an auxiliary valve (13, 14) which can be actuated by means of a drive (15). The outer part (3) and the main valve body (4) define between them a restriction section (28) with a cross-section of flow which can be varied as a function of the position of the main valve body (4), and the main valve body (4) and the support body (5) surround an inner flow passage (21, 12, 10) whose inlet opening (25) is provided centrally in the end part (22) of the main valve body (4) and whose outlet opening (13) is arranged centrally on the bottom closed base part (8) of the support body (5) and can be cleared and closed by means of the auxiliary valve body (14). In this arrangement, drilling fluid can flow freely through the gap (18) between the main valve body (4) and the support body (5), and the gap (18) forms a narrow restriction section (29; 30) in the overlapping area.

IPC 1-7

E21B 47/12

IPC 8 full level

E21B 47/18 (2012.01)

CPC (source: EP US)

E21B 47/24 (2020.05 - EP US)

Citation (search report)

- [A] US 3065416 A 19621120 JETER JOHN D
- [AD] US 3958217 A 19760518 SPINNLER RALPH F
- [A] FR 1603706 A 19710524
- [A] DE 1583012 B1 19710318 INST BUROVOI TEKHNIK

Designated contracting state (EPC)

AT BE FR GB NL

DOCDB simple family (publication)

DE 3715512 C1 19881027; EP 0290938 A2 19881117; EP 0290938 A3 19900725; US 4905778 A 19900306

DOCDB simple family (application)

DE 3715512 A 19870509; EP 88107134 A 19880504; US 19140788 A 19880509