Title (en)

DEVICE FOR REMOVING PARAFFIN AND OTHER DEPOSITS FROM THE INTERNAL SURFACE OF PIPES

Publication

EP 0523236 A4 19951018 (DE)

Application

EP 91920786 A 19911022

Priority

- SU 4907025 A 19910128
- SU 9100209 W 19911022

Abstract (en)

[origin: EP0523236A1] The device contains cleaning heads (4, 5) which are arranged on a shaft (1) with the possibility of free rotation. The heads (4, 5) rotate in opposite directions when the device is retracted and extended on a tension member (10) in an upcurrent. The cutting elements - blades (6) - which have an involute profile and lie on spirals directed in opposite directions, cut off the deposits. During lowering, cutting collars (14) of the blades (6), which are attached in the bottom part of the bottom head (5), perform "rough" cutting, the blades (6) of the two heads (4, 5) comminute the cut-off pieces and chips, while the cutting collars (13) in the top part of the top head (4) perform a "finishing operation" on the inner surface of the rising pipes. Mathematical relationships are cited which identify the ratio of the parameters of the components of the device: the height of the heads (4, 5) and the setting angle of the blades (6), the lengths of the shaft (1) and the stabiliser (8), their masses, the step width of the blades (6) and of the diameter of the heads (4, 5). <IMAGE>

IPC 1-7

E21B 37/02

IPC 8 full level

E21B 37/02 (2006.01); **E21B 37/04** (2006.01)

CPC (source: EP US)

E21B 37/04 (2013.01 - EP US)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 9213171A1

Cited by

FR2707335A1; US9140100B2; WO2010017899A3

Designated contracting state (EPC)

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EP 0523236 A1 19930120; **EP 0523236 A4 19951018**; **EP 0523236 B1 19990217**; CA 2083599 A1 19920729; CA 2083599 C 19970715; DE 59109100 D1 19990325; RU 2041341 C1 19950809; US 5372191 A 19941213; WO 9213171 A1 19920806

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