Title (en)

CONTROL VALVE FOR HIGH DENSITY LIQUID PUMPS

Publication

EP 0213419 B1 19891115 (DE)

Application

EP 86110730 A 19860802

Priority

DE 3528746 A 19850810

Abstract (en)

[origin: ES2001196A6] In a spool valve for thick matter pumps comprising at least one slide rod running forward and backward which is movable in a guide means and surrounded by a seal, and a drive consisting of working pistons associated with each slide rod, the working pistons each cooperating with one end of the slide rod directed out of a valve casing, and their driving cylinders ending a distance away from the valve casing, the end of the slide rod which runs forward out of the casing being cleaned of adhering thick matter during the backward movement of the piston, the invention provides for the guide means to be disposed on the inside and the seal separate therefrom to be disposed on the outside in front thereof on the valve casing, and for the parts supported loosely on each other in the operative connection between the working piston and the end of the slide rod to provide a gap which is used for assembling and dismounting the seal, the cleaning of the end of the slide rod being effected by the stripping action of the seal.

IPC 1-7

F04B 7/02; F04B 15/02

IPC 8 full level

F04B 15/02 (2006.01); F04B 7/02 (2006.01)

CPC (source: EP KR US)

F04B 7/02 (2013.01 - EP US); F04B 15/02 (2013.01 - KR); Y10S 277/91 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0213419 A1 19870311; **EP 0213419 B1 19891115**; AT E48025 T1 19891215; BR 8603800 A 19870317; CN 1008387 B 19900613; CN 86105968 A 19870311; DE 3528746 A1 19870212; DE 3666968 D1 19891221; ES 2001196 A6 19880501; GR 862040 B 19861224; JP H0788812 B2 19950927; JP S6291670 A 19870427; KR 870002376 A 19870331; KR 950013010 B1 19951024; TR 22569 A 19871120; US 4852467 A 19890801; ZA 866002 B 19870325

DOCDB simple family (application)

EP 86110730 A 19860802; AT 86110730 T 19860802; BR 8603800 A 19860808; CN 86105968 A 19860810; DE 3528746 A 19850810; DE 3666968 T 19860802; ES 8600973 A 19860808; GR 860102040 A 19860801; JP 18835986 A 19860811; KR 860006589 A 19860811; TR 3494286 A 19860808; US 16677888 A 19880307; ZA 866002 A 19860811