

Title (en)

CONTROLLING MOTOR, IN PARTICULAR FOR QUICK-ACTION STOP VALVES

Title (de)

STELLMOTOR, INSBESONDERE FÜR EIN SCHNELLSCHLUSSVENTIL

Title (fr)

MOTEUR DE COMMANDE, NOTAMMENT POUR SOUPAPES A FERMETURE RAPIDE

Publication

EP 0725889 B1 19970423 (DE)

Application

EP 94929481 A 19941017

Priority

- DE 9401228 W 19941017
- DE 4337113 A 19931029

Abstract (en)

[origin: WO9512057A1] A controlling motor for moving a stem (1) along an axis (2) has a hydraulic actuator (3, 14) with a cylinder (3) in which a piston (14) that is frictionally linked to the stem (1) is slidingly and sealingly mounted, as well as a compression spring (17) that is frictionally linked to the stem (1) and acts against the actuator (3, 14). The controlling motor has a trigger (4) with an inflow area (5) into which hydraulic fluid may be introduced, a pressure area (7) that communicates with the inflow area (5) through a diaphragm (8) and is connected to the actuator (3, 14), and a drainage area (9) from which the hydraulic fluid may be evacuated without pressure, as well as a switching element (10) that links the pressure area (7) to the drainage area (9) when a positive pressure differential occurs between the pressure area (7) and the inflow area (5), and that otherwise shuts off the drainage area (9). The stem (1) may be pushed out of the cylinder (3) by the compression spring (17) and may be drawn into the cylinder (3) when hydraulic fluid is applied to the inflow area (5). This controlling motor is particularly suitable for driving a rising stem quick-action stop valve (23), such as those often used for example in steam power stations.

IPC 1-7

F01D 21/18; **F15B 13/02**

IPC 8 full level

F01D 25/00 (2006.01); **F01D 17/26** (2006.01); **F01D 21/00** (2006.01); **F01D 21/18** (2006.01); **F15B 11/024** (2006.01); **F15B 11/06** (2006.01); **F15B 13/02** (2006.01); **F15B 15/00** (2006.01); **F15B 15/14** (2006.01); **F16K 31/122** (2006.01)

CPC (source: EP US)

F01D 21/18 (2013.01 - EP US); **F15B 11/024** (2013.01 - EP US); **F15B 2011/0243** (2013.01 - EP US); **Y10S 91/03** (2013.01 - EP US)

Cited by

DE112004000191B4; RU2681561C1

Designated contracting state (EPC)

CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9512057 A1 19950504; BR 9407901 A 19961119; CN 1055148 C 20000802; CN 1133624 A 19961016; CZ 120196 A3 19970115; CZ 286873 B6 20000712; DE 59402560 D1 19970528; EP 0725889 A1 19960814; EP 0725889 B1 19970423; ES 2101576 T3 19970701; JP 2762400 B2 19980604; JP H08511327 A 19961126; PL 182380 B1 20011231; PL 314006 A1 19960805; RU 2132468 C1 19990627; US 5848779 A 19981215

DOCDB simple family (application)

DE 9401228 W 19941017; BR 9407901 A 19941017; CN 94193885 A 19941017; CZ 120196 A 19941017; DE 59402560 T 19941017; EP 94929481 A 19941017; ES 94929481 T 19941017; JP 51234594 A 19941017; PL 31400694 A 19941017; RU 96110210 A 19941017; US 63995596 A 19960429