Title (en)

ELECTROMAGNETICALLY ACTUATABLE ADJUSTMENT DEVICE AND OPERATIONAL METHOD THEREFOR

Title (de)

ELEKTROMAGNETISCH BETÄTIGBARE STELLVORRICHTUNG UND VERFAHREN ZUM BETREIBEN DER STELLVORRICHTUNG

Title (fr)

DISPOSITIF DE REGLAGE A COMMANDE ELECTROMAGNETIQUE ET PROCEDE PERMETTANT DE LE FAIRE FONCTIONNER

Publication

EP 1012447 A1 20000628 (DE)

Application

EP 98951360 A 19980907

Priority

- DE 19739840 A 19970911
- EP 9805670 W 19980907

Abstract (en)

[origin: EP1262639A2] A servo drive for a valve in an internal combustion engine has an armature (4) fitted at right angles to the valve stem (3). The armature is held midway between two solenoids (6,7) by opposing springs and is displaced in either direction by the solenoids. A displacement sensor on the valve stem enables the control circuit (11) to monitor the exact position of the valve and to calculate the rate at which the valve is displaced. This enables the control system to achieve accurate valve action irrespective of the ambient conditions e.g. viscosity of the lubricant, temperature variation etc.

IPC 1-7

F01L 9/04

IPC 8 full level

G01B 7/00 (2006.01); **F01L 9/20** (2021.01); **F02D 13/02** (2006.01); **F02D 35/00** (2006.01); **F02D 41/20** (2006.01); **F02D 41/24** (2006.01); **F16K 31/06** (2006.01); **G01B 21/00** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP US)

F01L 9/20 (2021.01 - EP US); **F02D 35/0007** (2013.01 - EP US); **F02D 41/20** (2013.01 - EP US); **F02D 41/2464** (2013.01 - EP US); F02D 13/0253 (2013.01 - EP US); F02D 2041/001 (2013.01 - EP US); F02D 2041/2017 (2013.01 - EP US); F02D 2041/2055 (2013.01 - EP US); F02D 2041/2058 (2013.01 - EP US); F02D 2041/2079 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

US 6321700 B1 20011127; AT E283969 T1 20041215; DE 19739840 A1 19990318; DE 19739840 C2 20021128; DE 59812342 D1 20050105; EP 1012447 A1 20000628; EP 1262639 A2 20021204; EP 1262639 A3 20030326; EP 1262639 A9 20031112; EP 1262639 B1 20041201; JP 2001515984 A 20010925; WO 9913202 A1 19990318

DOCDB simple family (application)

US 50842300 A 20000313; AT 02018320 T 19980907; DE 19739840 A 19970911; DE 59812342 T 19980907; EP 02018320 A 19980907; EP 9805670 W 19980907; EP 98951360 A 19980907; JP 2000510967 A 19980907