

Title (en)

Electromagnetic actuator, in particular for solenoid valves as actuators for fluids

Title (de)

Elektromagnetantrieb, insbesondere für Elektromagnetventile als Stellglieder für Fluide

Title (fr)

Actionneur électromagnétique, en particulier pour vannes électromagnétiques comme organes de commande pour fluides

Publication

EP 0696809 A3 19960403 (DE)

Application

EP 95250180 A 19950725

Priority

DE 4429402 A 19940809

Abstract (en)

[origin: EP0696809A2] The operating drive uses an electromagnetic (17) and a cooperating magnetic yoke (16), attached magnetic armatures (18,19) positioned centrally relative to the coil and displaced coaxially relative to one another to provide a variable air-gap (20). The electromagnetic force is determined by the size of the air-gap for each energising current and by the force characteristic of a flexure spring (22) acting on the movable armature (19). A conical dished flexure spring (22a) is used, positioned on the outside of the air-gap and supported in the axial direction between a fixed stop (24) provided by the stationary armature and an annular stop (25) provided by the movable armature.

IPC 1-7

H01F 7/13

IPC 8 full level

F16K 31/06 (2006.01); **H01F 7/13** (2006.01)

CPC (source: EP)

H01F 7/13 (2013.01)

Citation (search report)

- [X] DE 3310997 A1 19840927 - HERION WERKE KG [DE]
- [A] US 4635683 A 19870113 - NIELSEN ARNOLD D [US]
- [AD] DE 3539145 A1 19870507 - HONEYWELL BV [NL]
- [A] EP 0535394 A1 19930407 - MESSER GRIESHEIM GMBH [DE]

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0696809 A2 19960214; EP 0696809 A3 19960403; EP 0696809 B1 19980701; DE 4429402 A1 19960215; DE 4429402 C2 19960718; DE 59502676 D1 19980806

DOCDB simple family (application)

EP 95250180 A 19950725; DE 4429402 A 19940809; DE 59502676 T 19950725