

Title (en)

SOLENOID ACTUATOR WITH POSITION-INDEPENDENT FORCE

Title (de)

SOLENOID-BETÄTIGUNGSGLIED MIT POSITIONSUNABHÄNGIGER KRAFT

Title (fr)

ACTIONNEUR A SOLENOIDE A FORCE INDEPENDANTE DE LA POSITION

Publication

EP 1428236 A4 20090826 (EN)

Application

EP 02742286 A 20020621

Priority

- US 0220020 W 20020621
- US 88631201 A 20010621

Abstract (en)

[origin: WO03001547A1] A device and method for control of a moving member (15) of a solenoid having a coil (13), air gap (25) and moving member (15) over the entire range of the movement. A sensor (17) is used for sensing the instantaneous value of the flux density in the air gap (25), and is converted to a voltage proportional to the intensity of the value. The value is converted to a unipolar drive current. The preferred sensor (17) is a Hall effect semiconductor magnetic field sensor. The solenoid (10) may include a bias (23) restraining the moving member (15).

IPC 1-7

H01H 47/00; G01R 33/00; H01L 43/06; G01B 7/14

IPC 8 full level

H01F 7/16 (2006.01); **H01F 7/18** (2006.01)

CPC (source: EP)

H01F 7/1607 (2013.01); **H01F 7/1844** (2013.01); **G05B 2219/41333** (2013.01)

Citation (search report)

- [DXY] US 5621293 A 19970415 - GENNESSEAU ANDRE [FR]
- [DY] US 4665348 A 19870512 - STUPAK JR JOSEPH J [US]
- [Y] US 5003211 A 19910326 - GROOM NELSON J [US]
- See references of WO 03001547A1

Cited by

US9347579B2

Designated contracting state (EPC)

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