

Title (en)  
Electromagnet with displacement converter

Title (de)  
Elektromagnet mit Wegumsetzer

Title (fr)  
Électroaimant avec convertisseur de déplacement

Publication  
**EP 1734540 A3 20070912 (DE)**

Application  
**EP 06012079 A 20060613**

Priority  
DE 102005027780 A 20050615

Abstract (en)  
[origin: EP1734540A2] The solenoid (7) comprises an armature (2) movable in an armature room (22) and a coil (1) to generate a magnetic field serving for moving the armature when flowed through by current. The armature acts on an armature bar (6). A path converter (4) comprising several compressible springs (41) is provided between the armature and armature bar, so as to effect a reduction of the stroke of the armature bar compared with the stroke of the armature. An independent claim is included for pressure control valve.

IPC 8 full level  
**H01F 7/16** (2006.01)

CPC (source: EP US)  
**H01F 7/1607** (2013.01 - EP US); **H01F 7/088** (2013.01 - EP US); **Y10T 137/86622** (2015.04 - EP US); **Y10T 137/86678** (2015.04 - EP US)

Citation (search report)

- [X] US 3211417 A 19651012 - RAY WILLIAM A
- [X] US 3018035 A 19620123 - PINTON PIERRE C
- [X] US 3988706 A 19761026 - SPRINGER COLBY M
- [X] GB 638005 A 19500531 - MAGNAVOX CO
- [A] US 2005099256 A1 20050512 - SUBRAMANIAN VISWANATHAN [US], et al

Cited by  
EP2299458A3; CN102797900A

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA HR MK YU

DOCDB simple family (publication)  
**EP 1734540 A2 20061220; EP 1734540 A3 20070912**; DE 102005027780 A1 20061221; US 2006284132 A1 20061221;  
US 7730906 B2 20100608

DOCDB simple family (application)  
**EP 06012079 A 20060613**; DE 102005027780 A 20050615; US 45222806 A 20060614