

Title (en)  
ROTATABLE SINGLE-PHASE ELECTROMAGNETIC ACTUATOR WITH A MAGNETIC SPRING, AND ELECTRICALLY OPERATED VALVE USING SAME

Title (de)  
EINPHASIGE ELEKTROMAGNETISCHE DREHBARE BETÄTIGUNGSVORRICHTUNG MIT MAGNETFEDER UND ELEKTRISCHES VENTIL MIT EINER SOLCHEN BETÄTIGUNGSVORRICHTUNG

Title (fr)  
ACTIONNEUR ELECTROMAGNETIQUE MONOPHASE ROTATIF A RESSORT MAGNETIQUE ET VANNE ELECTRIQUE METTANT EN OEUVRE UN TEL ACTIONNEUR

Publication  
**EP 0886875 A1 19981230 (FR)**

Application  
**EP 97900660 A 19970116**

Priority  
• FR 9700080 W 19970116  
• FR 9600496 A 19960117

Abstract (en)  
[origin: WO9726667A1] A single-phase electromagnetic actuator with a torque caused by a constant current over a major part of the working stroke, and a magnetic righting torque about an inoperative position that is stable in the absence of a current. The actuator comprises a stationary device (1) consisting of stator circuit energised by at least one electric coil, and a rotatably movable device (2) comprising a thin magnet with 2N pairs of magnetic poles magnetised in alternate directions. The actuator further comprises righting means for returning the movable device (2) to a predetermined inoperative angular position, said righting means being magnetic or magnetostatic means consisting of a thin auxiliary righting magnet (34) arranged in the air gap, provided with 2N pairs of magnetic poles magnetised in alternate directions, and secured to the stator poles.

IPC 1-7  
**H01F 7/14**

IPC 8 full level  
**H01F 7/14** (2006.01)

CPC (source: EP)  
**H01F 7/145** (2013.01)

Citation (search report)  
See references of WO 9726667A1

Cited by  
CN109764221A; WO2017005870A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 9726667 A1 19970724**; AT E396486 T1 20080615; DE 69738708 D1 20080703; EP 0886875 A1 19981230; EP 0886875 B1 20080521; FR 2744559 A1 19970808; FR 2744559 B1 19980410; JP 2000503165 A 20000314

DOCDB simple family (application)  
**FR 9700080 W 19970116**; AT 97900660 T 19970116; DE 69738708 T 19970116; EP 97900660 A 19970116; FR 9600496 A 19960117; JP 50871797 A 19970116