

Title (en)  
ELECTROMAGNETIC ACTUATOR APPARATUS.

Title (de)  
ELEKTROMAGNETISCHES BETÄTIGUNGSGERÄT.

Title (fr)  
APPAREIL D'ACTIONNEMENT ELECTROMAGNETIQUE.

Publication  
**EP 0179911 A1 19860507 (EN)**

Application  
**EP 84901014 A 19840305**

Priority  
JP 8400084 W 19840305

Abstract (en)  
The actuator uses permanent magnet and electromagnet circuits with magnetomotive forces in parallel. A coil wound (11) fixed member (12) defines an air gap (13) in which a movable member (14) of magnetic material may move between two fixed member poles (12a,b) to come into contact with either. Permanent magnets (16) on the fixed member yoke (17) have the same poles facing the movable member and separated from it by small gaps (15). The actuator may function bistable or be made monostable, e.g. by spring loading the movable member.

Abstract (fr)  
Un appareil d'actionnement électromagnétique est doté d'un aimant permanent (16) inséré parallèlement à un circuit magnétique formé par un élément fixe (12) autour duquel est enroulé une bobine (11) et par un élément mobile (14). L'élément mobile (14) est retenu dans l'entrefer à l'intérieur de l'élément fixe (12), si bien qu'il fonctionne d'une manière bistable ou monostable.

IPC 1-7  
**H01F 7/08**; **H01F 7/16**

IPC 8 full level  
**H01F 7/16** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP)  
**H01F 7/1646** (2013.01); **H01F 7/122** (2013.01)

Cited by  
FR2828000A1; EP1593130A4; EP0225388A4; US8179217B2; GB2429032A; GB2429032B; DE8900779U1; DE4108601A1; DE4108601C2; EP0272164A3; FR2606927A1; US7106159B2; WO2004073139A2; WO03012805A3

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FR

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**WO 8504044 A1 19850912**; AU 2650384 A 19850924; AU 569879 B2 19880225; DE 3490674 T1 19860515; EP 0179911 A1 19860507; EP 0179911 A4 19860723; EP 0179911 B1 19890607; GB 2165096 A 19860403; GB 2165096 B 19871231; GB 8523400 D0 19851023

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