

Title (en)  
MAGNETIC LEVITATION ACTUATOR

Title (de)  
MAGNETSCHWEBEBETÄTIGER

Title (fr)  
ACTIONNEUR MAGNETIQUE A LEVITATION

Publication  
**EP 1525595 B1 20081231 (FR)**

Application  
**EP 03756515 A 20030730**

Priority  
• FR 0302410 W 20030730  
• FR 0209882 A 20020802

Abstract (en)  
[origin: US2005237140A1] A magnetic actuator including a mobile magnetic part, a fixed magnetic part, and a mechanism for triggering displacement of the mobile magnetic part relatively to the fixed magnetic part. At least two amagnetic supports, placed in different planes, delimit a gap between them, the fixed magnetic part being integral with at least one of the supports. The supports each have an abutment area for the mobile magnetic part, the abutment area being distinct from the fixed magnetic part. The mobile magnetic part is in levitation in the gap between both supports by magnetic guiding due to the fixed magnetic part when it does not abut against the abutment area of one of the supports. The mobile magnetic part can assume plural stable magnetic positions; in each of these positions, it abuts against a support.

IPC 8 full level  
**H01F 7/16** (2006.01); **F15C 5/00** (2006.01); **H01H 50/00** (2006.01); **H01F 7/122** (2006.01); **H01F 7/124** (2006.01); **H01H 3/24** (2006.01); **H01H 37/58** (2006.01); **H01H 51/22** (2006.01); **H01H 67/22** (2006.01)

CPC (source: EP US)  
**H01F 7/1646** (2013.01 - EP US); **H01H 50/005** (2013.01 - EP US); **H01F 7/122** (2013.01 - EP US); **H01F 7/124** (2013.01 - EP US); **H01H 3/24** (2013.01 - EP US); **H01H 37/58** (2013.01 - EP US); **H01H 51/22** (2013.01 - EP US); **H01H 67/22** (2013.01 - EP US); **H01H 2037/008** (2013.01 - EP US)

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