

Title (en)  
ELECTROMAGNETIC ACTUATOR WITH PERMANENT MAGNET

Title (de)  
ELEKTROMAGNETISCHES STELLGLIED MIT PERMANENTMAGNET

Title (fr)  
ACTIONNEUR ÉLECTROMAGNÉTIQUE À AIMANT PERMANENT

Publication  
**EP 2406805 B1 20150128 (FR)**

Application  
**EP 10715295 A 20100305**

Priority  
• FR 2010050370 W 20100305  
• FR 0951463 A 20090309

Abstract (en)  
[origin: WO2010103218A1] The invention relates to an electromagnetic actuator with flux bypass, comprising a permanent magnet (5), a ferromagnetic armature (1), a keeper (2) which defines at least one air gap with the armature (1) and which can move between an open position and a closed position, mechanical return means for returning the keeper (2) to the open position, and at least one electric conductor capable of generating a magnetic flux in the armature (1). The actuator is characterised in that the armature (1) forms a closed magnetic loop in which the conductor(s) are capable of generating a magnetic flux. The magnet is disposed in the mobile keeper (2) and generates fluxes in two magnetic circuits in parallel, one of which comprises a portion of the armature (1), while the other is formed in the keeper (2) and comprises a plug area (7) that can be saturated by the magnet (5) or an air zone.

IPC 8 full level  
**H01H 71/32** (2006.01)

CPC (source: EP)  
**H01H 71/321** (2013.01); **H01H 71/2436** (2013.01)

Cited by  
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