

Title (en)

ELECTROMAGNETIC ACTUATOR AND CIRCUIT BREAKER INCLUDING SUCH AN ACTUATOR

Title (de)

ELEKTROMAGNETISCHER AKTUATOR UND SCHUTZSCHALTER MIT EINEM DERARTIGEN AKTUATOR

Title (fr)

ACTIONNEUR ÉLECTROMAGNÉTIQUE ET DISJONCTEUR COMPRENNANT UN TEL ACTIONNEUR

Publication

**EP 3218915 A1 20170920 (FR)**

Application

**EP 15793787 A 20151110**

Priority

- FR 1460896 A 20141112
- EP 2015076163 W 20151110

Abstract (en)

[origin: WO2016075118A1] The invention relates to an electromagnetic actuator (2) including a magnetic housing (20), a coil (22) that is rigidly connected to the housing and is capable of being connected to an electric circuit, a magnetic core (26) that is arranged in the coil and can move along a central axis (X2) defined by the coil and according to the strength of the current flowing in the coil, and a shunt (28) that is arranged in the coil and includes a magnetocaloric material (29) the magnetisation of which is temperature-dependent. The shunt is arranged in the coil along the central axis along a length (L) so as to create an air gap (E) between the shunt and the magnetic core. The actuator further includes means (31) for attaching the shunt to the housing that are designed to adjust said length.

IPC 8 full level

**H01H 71/14** (2006.01); **H01H 71/24** (2006.01); **H01H 71/40** (2006.01)

CPC (source: EP US)

**H01H 71/0207** (2013.01 - US); **H01H 71/142** (2013.01 - EP US); **H01H 71/2454** (2013.01 - EP US); **H01H 71/2463** (2013.01 - US);  
**H01H 71/40** (2013.01 - EP US); **H01H 71/402** (2013.01 - EP US); **H01H 2071/407** (2013.01 - EP US); **H01H 2235/01** (2013.01 - US)

Citation (search report)

See references of WO 2016075118A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**FR 3028349 A1 20160513; FR 3028349 B1 20161230;** EP 3218915 A1 20170920; EP 3218915 B1 20180822; US 10283301 B2 20190507;  
US 2017263404 A1 20170914; WO 2016075118 A1 20160519

DOCDB simple family (application)

**FR 1460896 A 20141112;** EP 15793787 A 20151110; EP 2015076163 W 20151110; US 201515519735 A 20151110