

Title (en)  
ELECTROMAGNETIC ACTUATING DEVICE

Title (de)  
ELEKTROMAGNETISCHE STELLVORRICHTUNG

Title (fr)  
DISPOSITIF DE RÉGLAGE ÉLECTROMAGNÉTIQUE

Publication  
**EP 2507485 B1 20131106 (DE)**

Application  
**EP 10781510 A 20101124**

Priority  
• DE 102009056609 A 20091202  
• EP 2010068071 W 20101124

Abstract (en)  
[origin: WO2011067142A1] The invention relates to an electromagnetic actuating device (1), comprising a housing (10), two actuating pins (8, 9), which are mounted in the housing so as to be movable independently of each other between a retracted non-working position and an extended working position, and an electrically energizable magnetic coil device for actuating the actuating pins and two permanent magnets (26, 27) which interact with the actuating pins with respect to the actuation. The permanent magnets are oriented so as to have opposite polarizations in the movement direction and are together associated with a stationary core region (28) of the magnetic coil device. The magnetic coil device is designed to generate a magnetic field, the direction of action of which reverses, dependent on the energizing of said magnetic coil device, wherein the magnetic field attracts the first permanent magnet and repels the second permanent magnet and vice versa. This is achieved in that the magnetic coil device should have two magnetic coils (29, 30) that are energizable independently of each other such that the magnetic field is generated with a first direction of action when the first magnetic coil is energized, and the magnetic field is generated with a second, reversed direction of action when the second magnetic coil is energized.

IPC 8 full level  
**F01L 13/00** (2006.01); **H01F 7/16** (2006.01)

CPC (source: EP US)  
**F01L 13/0036** (2013.01 - EP US); **H01F 7/124** (2013.01 - EP US); **H01F 7/1646** (2013.01 - EP US)

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

DOCDB simple family (publication)  
**DE 102009056609 A1 20110609**; CN 102639824 A 20120815; CN 102639824 B 20141217; EP 2507485 A1 20121010;  
EP 2507485 B1 20131106; JP 2013513054 A 20130418; JP 5746204 B2 20150708; US 2012235777 A1 20120920;  
WO 2011067142 A1 20110609

DOCDB simple family (application)  
**DE 102009056609 A 20091202**; CN 201080054620 A 20101124; EP 10781510 A 20101124; EP 2010068071 W 20101124;  
JP 2012541407 A 20101124; US 201013512982 A 20101124