

Title (en)
ELECTROMAGNETIC DRIVE FOR SWITCHING DEVICES

Title (de)
ELEKTROMAGNETISCHER ANTRIEB FÜR SCHALTGERÄTE

Title (fr)
ENTRAÎNEMENT ELECTROMAGNETIQUE POUR DES COMMUTATEURS

Publication
EP 1590822 A1 20051102 (DE)

Application
EP 04706610 A 20040130

Priority

- DE 2004000203 W 20040130
- DE 10305465 A 20030204

Abstract (en)
[origin: WO2004070760A1] The invention relates to an electromagnetic drive (1) for a switching device, especially a medium-voltage switching device, comprising a drive unit (2) consisting of a magnet body (5), an armature (8) which is at least partially moveably arranged therein, at least one drive magnet (5) producing a permanent magnetic drive field and at least one conductor (10) extending at least partially inside said magnetic drive field. A locking unit (3) is provided in order to lock the armature (8) in at least one end position. In order to provide an electromagnetic drive which can be fixed in an end position in a simple manner, ensuring simple control thereof, the locking unit (3) comprises at least one soft magnetic moving part (15) which is firmly connected to the armature (8) and which bridges an air gap (18) for a permanent magnetic locking field in the end position of the armature (8), whereby the magnetic locking field is produced independently from the magnetic driving field by at least one locking magnet (16) which is associated with a pull-off coil (17) through which current can flow independently of the conductor in order to pull the armature out of its end position.

IPC 1-7
H01H 53/01

IPC 8 full level
H01F 7/06 (2006.01); **H01H 53/015** (2006.01)

CPC (source: EP)
H01F 7/066 (2013.01); **H01H 33/6662** (2013.01); **H01H 53/015** (2013.01)

Citation (search report)
See references of WO 2004070760A1

Designated contracting state (EPC)
FR GB IT

DOCDB simple family (publication)
WO 2004070760 A1 20040819; CN 100364027 C 20080123; CN 1745448 A 20060308; DE 10305465 B3 20041202; EP 1590822 A1 20051102; EP 1590822 B1 20090408; JP 2006516799 A 20060706; RU 2005127595 A 20070310; RU 2324252 C2 20080510

DOCDB simple family (application)
DE 2004000203 W 20040130; CN 200480003274 A 20040130; DE 10305465 A 20030204; EP 04706610 A 20040130; JP 2006501490 A 20040130; RU 2005127595 A 20040130