

Title (en)
ELECTROMAGNETIC DRIVE

Title (de)
ELEKTROMAGNETISCHER ANTRIEB

Title (fr)
ENTRAÎNEMENT ÉLECTROMAGNÉTIQUE

Publication
EP 2732455 A1 20140521 (DE)

Application
EP 12753691 A 20120823

Priority

- DE 102011082114 A 20110905
- EP 2012066398 W 20120823

Abstract (en)

[origin: CA2847457A1] The invention relates to, inter alia, an electromagnetic drive (10) for an electrical switch (20), in particular an electrical circuit breaker, with at least one movable armature (60), which can implement a lifting movement along a predetermined pushing direction (P), can be connected indirectly or directly to a movable switching contact (21) of the switch (20), and, in a closed position (61), closes a magnetic circuit (M1, M2) of the drive (10) at a first armature-side stop face (62) with a first magnetically conductive yoke part (100) of the drive (10) and at a second armature-side stop face (63) with a second magnetically conductive yoke part (105) of the drive (10), with at least one permanent magnet (90, 95), which produces a magnetic field for the magnetic circuit (M1, M2) and a holding force for holding the armature (60) in the closed position (61), and with at least one coil (80), which is arranged in such a way that a magnetic flux can be brought about by a current flow through the coil (80), which magnetic flux is directed in the same direction as or in opposition to the magnetic flux of the permanent magnet (90, 95) in the magnetic circuit (M1, M2), wherein the electromagnetic drive (10) provides the possibility of a readjustment state after installation by virtue of self-adjustment of the position of the first yoke part (100) and the second yoke part (105) relative to one another being possible as a result of the magnetic force of the permanent magnet (90, 95), and wherein the yoke parts (100, 105) can be brought into a fixedly installed state, in which the alignment of the yoke parts (100, 105) is fixed independently of the further positioning of the armature (60).

IPC 8 full level
H01H 3/28 (2006.01); **H01F 7/122** (2006.01); **H01F 7/127** (2006.01); **H01F 7/16** (2006.01); **H01H 33/666** (2006.01)

CPC (source: EP RU US)
H01F 7/122 (2013.01 - RU); **H01F 7/1615** (2013.01 - EP US); **H01F 7/1623** (2013.01 - EP US); **H01H 3/28** (2013.01 - EP RU US); **H01H 33/666** (2013.01 - RU); **H01H 33/6662** (2013.01 - EP US); **H01F 7/127** (2013.01 - EP US)

Citation (search report)
See references of WO 2013034445A1

Cited by
EP3182436A1

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 102011082114 B3 20130131; AU 2012306587 A1 20140306; AU 2012306587 B2 20160728; AU 2012306587 C1 20170202; BR 112014004810 A2 20170321; BR 112014004810 B1 20210105; BR 112014004810 B8 20210413; CA 2847457 A1 20130314; CA 2847457 C 20200728; CN 103782358 A 20140507; CN 103782358 B 20161012; EP 2732455 A1 20140521; EP 2732455 B1 20150520; ES 2538237 T3 20150618; HK 1193496 A1 20140919; MX 2014002610 A 20140414; PT 2732455 E 20150911; RU 2014112932 A 20151020; RU 2608563 C2 20170123; US 2014210576 A1 20140731; US 8975992 B2 20150310; WO 2013034445 A1 20130314

DOCDB simple family (application)
DE 102011082114 A 20110905; AU 2012306587 A 20120823; BR 112014004810 A 20120823; CA 2847457 A 20120823; CN 201280043106 A 20120823; EP 12753691 A 20120823; EP 2012066398 W 20120823; ES 12753691 T 20120823; HK 14106746 A 20140704; MX 2014002610 A 20120823; PT 12753691 T 20120823; RU 2014112932 A 20120823; US 201214342833 A 20120823