

Title (en)
Magnetic catch for closure of an opening

Title (de)
Magnetschnäpper zum Verschliessen einer Öffnung

Title (fr)
Verrou magnétique destiné à fermer une ouverture

Publication
EP 2284340 B1 20140226 (DE)

Application
EP 09011489 A 20090908

Priority
DE 102009037036 A 20090813

Abstract (en)
[origin: EP2284340A2] The catch has magnets (4) attached to a fixed part (2), where the magnets sealed with a yoke (3) comprise a permanent magnet (5). Magnetic field closure is generated within the former magnets by switching magnets (7) that connect pole shoes (6) of the former magnets. Magnetization direction of the switching magnets runs along the connection of the shoes. The switching magnets are magnetized to change magnetic field discharge of the former magnets. The shoes are detected by measurement of a sensor e.g. winding (8), coil (9) and Hall sensor or giant magnetoresistance (GMR) sensor (11). The sensor is arranged as a Hall sensor or giant magneto-resistance (GMR) sensor or as a resistance strain gauge. The switching magnets comprise aluminum nickel and cobalt magnetic substance.

IPC 8 full level
E05C 19/16 (2006.01); **F16P 3/08** (2006.01); **H01F 7/02** (2006.01)

CPC (source: EP)
E05C 19/166 (2013.01); **H01F 7/0263** (2013.01); **E05B 2047/0068** (2013.01); **E05C 19/16** (2013.01)

Cited by
FR3079126A1; RU2650067C2; CN111542901A; KR20200099534A; CN103809764A; DE202014006319U1; SE2150100A1; SE546080C2; US9347247B2; US11454049B2; WO2016146089A3; WO2019121000A1; WO2015065685A1; WO2015086333A1

Designated contracting state (EPC)
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 SE SI SK SM TR

DOCDB simple family (publication)
EP 2284340 A2 20110216; EP 2284340 A3 20110601; EP 2284340 B1 20140226; DE 102009037036 A1 20110217; EP 2284341 A2 20110216; EP 2284341 A3 20110608; EP 2284341 B1 20140226; ES 2452140 T3 20140331; ES 2454271 T3 20140410

DOCDB simple family (application)
EP 09011489 A 20090908; DE 102009037036 A 20090813; EP 10008400 A 20100812; ES 09011489 T 20090908; ES 10008400 T 20100812