

Title (en)
ELECTROMAGNETIC SWITCHING DEVICE AND METHOD FOR THE OPERATION THEREOF

Title (de)
ELEKTROMAGNETISCHES SCHALTGERÄT SOWIE VERFAHREN ZUM BETRIEB DES ELEKTROMAGNETISCHEN SCHALTGERÄTS

Title (fr)
APPAREIL DE COMMUTATION ELECTROMAGNETIQUE, ET PROCEDE POUR FAIRE FONCTIONNER UN APPAREIL DE COMMUTATION ELECTROMAGNETIQUE

Publication
EP 1891654 B1 20100811 (DE)

Application
EP 05759034 A 20050616

Priority
DE 2005001082 W 20050616

Abstract (en)
[origin: WO2006133659A1] Disclosed is an electromagnetic switching device (1, 2, 3) comprising a number of fixed contact pieces (12), a solenoid-operated mechanism (6), a contact support (4) which can be moved counter to restoring means with the aid of the solenoid-operated mechanism (6) and on which a number of movable contact pieces (9) are arranged, and an off stop (14) for the contact support (4). A sensor (32) is provided for detecting the position of the contact support (4) while a control unit (25) is provided which is connected to the sensor (32) and regulates and/or controls the solenoid-operated mechanism (6) during a switch-off process in order to decelerate the contact support (4) before the same hits the off stop (14). Also disclosed is a method for operating such a switching device (1, 2, 3). The contact support (4) transmits only a small momentum to the off stop (14), thus reducing the load applied to the involved parts. Such a switching device (1, 2, 3) therefore has a longer service life than conventional switching devices.

IPC 8 full level
H01H 47/32 (2006.01); **H01F 7/18** (2006.01); **H01H 47/22** (2006.01)

CPC (source: EP US)
H01H 47/22 (2013.01 - EP US); **H01H 47/325** (2013.01 - EP US); **F02D 2041/2037** (2013.01 - EP US); **H01F 7/1638** (2013.01 - EP US); **H01F 2007/185** (2013.01 - EP US); **H01F 2007/1894** (2013.01 - EP US); **H01H 1/50** (2013.01 - EP US); **H01H 11/0062** (2013.01 - EP US); **H01H 50/44** (2013.01 - EP US); **H01H 51/22** (2013.01 - EP US); **H01H 2071/048** (2013.01 - EP US)

Cited by
DE102010041214A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2006133659 A1 20061221; AT E477582 T1 20100815; CN 101203931 A 20080618; CN 101203931 B 20120404; DE 502005010094 D1 20100923; EP 1891654 A1 20080227; EP 1891654 B1 20100811; US 2008192402 A1 20080814; US 7933109 B2 20110426

DOCDB simple family (application)
DE 2005001082 W 20050616; AT 05759034 T 20050616; CN 200580050168 A 20050616; DE 502005010094 T 20050616; EP 05759034 A 20050616; US 92220605 A 20050616