

Title (en)

Permanent magnetic kind of actuation for a switch

Title (de)

Permanentmagnetischer Antrieb für einen Schalter

Title (fr)

Entraînement permanent-magnétique pour un commutateur

Publication

EP 0883146 B2 20110803 (DE)

Application

EP 98102629 A 19980216

Priority

DE 19709089 A 19970306

Abstract (en)

[origin: DE19709089A1] The drive has a laminated yoke, in which slides a mobile armature coupled to the movable contact stalk. There is at least one permanent magnet, generating a magnetic flux in the yoke, and at least one coil, moving the armature from one position into another one. In order to prevent eddy currents, the armature of solid material is fitted with slits, pref. extending in the armature movement direction. Typically the armature is rectangular, with the slits located on the wide side and the narrow long side, orthogonally to the respective surface and are filled with insulating material.

IPC 8 full level

H01H 33/38 (2006.01); **H01F 7/08** (2006.01); **H01F 7/16** (2006.01); **H01H 33/666** (2006.01); **H01H 51/22** (2006.01); **H01F 7/122** (2006.01)

CPC (source: EP)

H01F 7/081 (2013.01); **H01F 7/1615** (2013.01); **H01H 33/6662** (2013.01); **H01H 51/2209** (2013.01); **H01F 2007/086** (2013.01); **H01F 2007/1669** (2013.01); **H01F 2007/1676** (2013.01)

Citation (opposition)

Opponent :

- WO 9507542 A1 19950316 - MCKEAN BRIAN ASS LTD [GB], et al
- GB 551790 A 19430310 - DUNLOP RUBBER CO, et al
- US 5461205 A 19951024 - SCHULMAN MICHAEL B [US]

Cited by

US10147572B2

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

DE 19709089 A1 19980910; DE 59812462 D1 20050210; EP 0883146 A2 19981209; EP 0883146 A3 19990519; EP 0883146 B1 20050105; EP 0883146 B2 20110803

DOCDB simple family (application)

DE 19709089 A 19970306; DE 59812462 T 19980216; EP 98102629 A 19980216