

Title (en)
Control unit for an electric switch and method for the manufacture thereof

Title (de)
Steuereinheit für einen elektrischen Schalter und Verfahren zu seiner Herstellung

Title (fr)
Dispositif de commande pour un interrupteur électrique et procédé pour sa fabrication

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Application
EP 97203319 A 19971027

Priority
NL 1004438 A 19961105

Abstract (en)
Control unit (1) for an electric switch, comprising a yoke (3) of magnetic material, an armature (4), a coil (9), a permanent magnet (13) and spring means (10). The yoke (3) consists of a base part (5) and two legs (6,7) which extend at a distance from each other and in the same direction from the base part (5), and at right angles thereto. The armature (4) is made of magnetic material, bridges the free ends of the yoke legs (6,7) and is movably supported. The permanent magnet (13) is fitted in such a way that the magnetic lines of flux run through the armature (4) and the yoke (3). The coil (9) is fitted on the yoke (3). At one side the spring means (10) act upon an armature part (11) extending beyond a yoke leg face which faces away from the other yoke leg, the armature (4) assuming a first position under the influence of the magnetic field of the permanent magnet (13), against the spring force of the spring means (10), and being able to assume a second position under the influence of the magnetic field created by an electric current which flows through the coil (9) and exceeds a preset limit value. At the other side the spring means (10) act upon a yoke projection (12) extending beyond the abovementioned yoke leg face at a distance from the projecting armature part (11). The armature (4) and yoke (3) are made of flat magnetic material. <IMAGE>

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H01H 71/32

IPC 8 full level
H01H 71/32 (2006.01)

CPC (source: EP)
H01H 71/323 (2013.01)

Citation (search report)

- [Y] DE 1564531 A1 19691016 - RABBEAU KURT
- [Y] FR 2383518 A1 19781006 - BACO SA ANCT BAUMGARTEN CONST [FR]
- [Y] EP 0337900 A1 19891018 - MERLIN GERIN [FR]
- [Y] FR 2075891 A1 19711015 - FELTEN & GUILLEAUME GMBH
- [A] FR 2309031 A1 19761119 - MANG ETS GERARD [FR]
- [A] FR 1559815 A 19690314
- [A] FR 1479460 A 19670505 - IND ELECTR DE LA SEINE L
- [AD] FR 2697670 A1 19940506 - MERLIN GERIN [FR]

Cited by
DE102008003596A1; FR2987493A1; CN104246957A; WO2013128125A1

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