

Title (en)  
ELECTROMAGNET ARRANGEMENT FOR A SWITCH

Title (de)  
ELEKTROMAGNETANORDNUNG FÜR EINEN SCHALTER

Title (fr)  
DISPOSITIF A ELECTROAIMANT POUR INTERRUPTEUR

Publication  
**EP 1417694 B1 20070307 (DE)**

Application  
**EP 02794737 A 20020727**

Priority  
• DE 10140559 A 20010817  
• EP 0208402 W 20020727

Abstract (en)  
[origin: WO03017308A1] The invention relates to an electromagnet arrangement for a switch (contractor), comprising a main magnetic circuit (MK1) consisting of a magnet yoke (10) and a magnet armature (60) impinged upon by a readjusting device (36), a contact apparatus of said switch which actively co-operates with the magnet armature (60), at least one permanent magnet for the production of a retaining force arranged in the main magnet circuit (MK1), at least one exciter coil (30,32) which is associated with the magnet yoke (10) and which is used to produce the attraction force for the magnet armature (60), and a control circuit, whereby a secondary shunt circuit (MK2) is formed parallel to the main magnet circuit (MK1), said shunt circuit also being able to be closed via the magnet armature (60) and comprised of two pole limbs (11) and a yoke arch (24) arranged on the magnet armature (10) opposite the pole surfaces which is interrupted by a remanence gap (25).

IPC 8 full level  
**H01H 71/32** (2006.01); **H01H 47/22** (2006.01); **H01H 50/42** (2006.01); **H01H 51/22** (2006.01)

CPC (source: EP US)  
**H01H 47/226** (2013.01 - EP US); **H01H 50/42** (2013.01 - EP US); **H01H 51/22** (2013.01 - EP US); **H01H 71/321** (2013.01 - EP US)

Citation (examination)  
US 3579050 A 19710518 - BASU RABINDRA N, et al

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**WO 03017308 A1 20030227**; AT E356422 T1 20070315; DE 10140559 A1 20030227; DE 50209670 D1 20070419; EP 1417694 A1 20040512; EP 1417694 B1 20070307; US 2004027775 A1 20040212; US 6906605 B2 20050614

DOCDB simple family (application)  
**EP 0208402 W 20020727**; AT 02794737 T 20020727; DE 10140559 A 20010817; DE 50209670 T 20020727; EP 02794737 A 20020727; US 39934403 A 20030416