

Title (en)

MAGNETIC LATCHING RELAY CAPABLE OF RESISTING SHORT-CIRCUIT CURRENT

Title (de)

MAGNETVERRIEGELUNGSRELAIS MIT WIDERSTANDSFÄHIGKEIT GEGEN KURZSCHLUSSSTROM

Title (fr)

RELAIS DE VERROUILLAGE MAGNÉTIQUE POUVANT RÉSISTER À UN COURANT DE COURT-CIRCUIT

Publication

EP 3608938 B1 20220302 (EN)

Application

EP 18777975 A 20180330

Priority

- CN 201710213323 A 20170401
- CN 2018081417 W 20180330

Abstract (en)

[origin: EP3608938A1] Disclosed is a magnetic latching relay capable of resisting a short-circuit current. The magnetic latching relay comprises a contact portion. The contact portion is comprised of two sets of movable spring portions (1, 2) substantially parallel to each other. The movable spring portions comprise movable leafs (11, 21), movable contacts (12, 22), movable spring tabs (13, 23), and stationary contacts (14, 24). Each of both movable leafs (11, 21) is disposed with a first bending portion (111, 211) having one surface raised and the other surface recessed in a thickness direction. Both of the first bending portions (111, 211) are raised in the same direction, and the curve of the first bending portion (211) of one movable leaf (21) is smaller than the curve of the first bending portion (111) of the other movable leaf (11), such that the raised portion of the first bending portion (211) of one movable leaf (21) can fit in the recessed portion of the first bending portion (111) of the other movable leaf (11), such that the effective length of each movable leaf is increased while the distance between two movable leafs (11, 21) is reduced. The magnetic latching relay of the present disclosure can increase electromagnetic attraction between two sets of movable spring portions, so as to effectively increase a contact pressure between contacts, thereby resisting a short-circuit current.

IPC 8 full level

H01H 51/22 (2006.01); **H01H 1/26** (2006.01); **H01H 1/28** (2006.01); **H01H 50/56** (2006.01); **H01H 50/58** (2006.01)

CPC (source: CN EP)

H01H 50/58 (2013.01 - CN); **H01H 51/2272** (2013.01 - EP); **H01H 1/26** (2013.01 - EP); **H01H 1/28** (2013.01 - EP); **H01H 50/56** (2013.01 - EP); **H01H 50/58** (2013.01 - EP)

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 3608938 A1 20200212; **EP 3608938 A4 20201223**; **EP 3608938 B1 20220302**; BR 112019020619 A2 20200422; CN 106971913 A 20170721; CN 106971913 B 20180921; ES 2909873 T3 20220510; PL 3608938 T3 20220530; WO 2018177428 A1 20181004

DOCDB simple family (application)

EP 18777975 A 20180330; BR 112019020619 A 20180330; CN 201710213323 A 20170401; CN 2018081417 W 20180330; ES 18777975 T 20180330; PL 18777975 T 20180330