Title (en)

Electromagnetic relay.

Title (de)

Elektromagnetisches Relais.

Title (fr)

Relais électromagnétique.

Publication

EP 0192928 A1 19860903 (DE)

Application

EP 86100160 A 19860108

Priority

DE 3504745 A 19850212

Abstract (en)

[origin: US4665375A] An electromagnetic relay has a flat base, a coil body with flanges at opposite ends disposed on said base, a coil wound about the coil body between the flanges, a carrier element of insulating material pivotally seated in one of the flanges with an armature attached thereto and extending therefrom through said coil, contact springs disposed parallel to said armature outside of said coil body, and cooperating contact elements anchored in said base body for making electrical contact with the contact springs. A magnet system is provided for actuating the armature, and upon actuation of the armature the carrier is rotated thereby moving the contact springs for simultaneously contacting the contact elements. The contact springs are electrically connected inside the carrier forming a contact bridge electrically connecting the cooperating contact elements upon actuation of the springs, dependent upon the switch position of the armature. By simultaneously making electrical connection with two contact elements, the bridged contact springs are suitable for switching high currents without the use of additional power leads connected to the springs.

Abstract (de)

Das Relais besitzt einen flachen Grundkörper (1), eine auf dem Grundkörper sitzende Spule (2) und einen stabförmigen, axial in der Spule angeordneten Anker (5). Der Anker ist an einem Spulenflansch (13) über einen isolierenden Ankerträger (6) gelagert. Außerdem sind in dem Ankerträger zwei beiderseits der Spule angeordnete Kontaktfedern (7, 8) befestigt. Diese Kontaktfedern (7, 8) sind im Inneren des Ankerträgers über ein einstückig angeformtes Verbindungselement elektrisch verbunden und bilden so eine Kontaktbrücke, welche je nach Schaltstellung des Ankers ein Paar von im Grundkörper verankerten Gegenkontaktelementen (9, 27; 10, 26) verbindet. Das Relais ist zum Schalten hoher Ströme geeignet und benötigt keine Stromzuführungen zu den beweglichen Kontaktfedern (7, 8).

IPC 1-7

H01H 50/54

IPC 8 full level

H01H 50/54 (2006.01); H01H 50/02 (2006.01)

CPC (source: EP US)

H01H 50/548 (2013.01 - EP US); H01H 50/026 (2013.01 - EP US)

Citation (search report)

- [Y] EP 0046148 A1 19820224 - RAUSCH & PAUSCH [DE]
- [Y] EP 0072975 A1 19830302 - SIEMENS AG [DE]
- [A] EP 0089670 A2 19830928 - SIEMENS AG [DE]
- [A] US 2825783 A 19580304 - HANS SAUER

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DE102012022792A1; EP0863529A1; US6107903A; EP2736063A1; US9543100B2

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0192928 A1 19860903; **EP 0192928 B1 19900613**; AT E53703 T1 19900615; DE 3672019 D1 19900719; US 4665375 A 19870512

DOCDB simple family (application)

EP 86100160 A 19860108; AT 86100160 T 19860108; DE 3672019 T 19860108; US 82410686 A 19860130