

Title (en)

Electromagnetic relay with combined return and contact spring

Title (de)

Elektromagnetisches Relais mit kombinierter Kontakt-und Rückstellfeder

Title (fr)

Relais électromagnétique avec ressort de contact et de rappel combiné

Publication

**EP 0791945 A3 19981118 (DE)**

Application

**EP 97102089 A 19970210**

Priority

DE 19606883 A 19960223

Abstract (en)

[origin: US5801608A] The relay has a magnet system with an armature that operates on a switching spring via an actuating element. This switching spring has a frame-shaped contact spring as well as a fork-shaped reset spring, intermeshed in one plane and mutually decoupled, whereby the reset spring guides the actuating element via at least two linkage points lying in a line parallel to the pivot axis. The relay of the present invention provides a compact construction with few individual parts and a very low-friction operation.

IPC 1-7

**H01H 50/02**; **H01H 50/24**; **H01H 50/56**

IPC 8 full level

**H01H 50/56** (2006.01); **H01H 50/02** (2006.01); **H01H 50/24** (2006.01); **H01H 50/54** (2006.01); **H01H 50/64** (2006.01); **H01H 51/06** (2006.01); **H01H 50/26** (2006.01)

CPC (source: EP US)

**H01H 50/54** (2013.01 - EP US); **H01H 50/26** (2013.01 - EP US); **H01H 51/06** (2013.01 - EP US)

Citation (search report)

- [A] DE 2250909 A1 19731031 - RAUSCH & PAUSCH
- [DA] EP 0375398 A2 19900627 - MATSUSHITA ELECTRIC WORKS LTD [JP]
- [A] DE 9303437 U1 19930826 - KOSOWSKI DIMITER DR ING [DE], et al
- [DA] DE 2627168 A1 19771222 - SIEMENS AG

Designated contracting state (EPC)

AT CH DE ES FR GB IT LI

DOCDB simple family (publication)

**US 5801608 A 19980901**; AT E211851 T1 20020115; DE 19606883 C1 19970430; DE 59705943 D1 20020214; EP 0791945 A2 19970827; EP 0791945 A3 19981118; EP 0791945 B1 20020109; ES 2167627 T3 20020516; JP 3902688 B2 20070411; JP H09320438 A 19971212

DOCDB simple family (application)

**US 80460897 A 19970224**; AT 97102089 T 19970210; DE 19606883 A 19960223; DE 59705943 T 19970210; EP 97102089 A 19970210; ES 97102089 T 19970210; JP 3872197 A 19970224