

Title (en)

ELECTROMAGNETIC RELAY WITH A RETURN SPRING

Publication

EP 0433633 A3 19920603 (DE)

Application

EP 90121245 A 19901107

Priority

DE 3942340 A 19891221

Abstract (en)

[origin: US5053756A] An electromagnetic relay with a return spring is described, where the relay consists of a solenoid coil with a movable armature as the drive and a contact spring assembly, and there is an actuating rod that starts from one end of the armature and engages with spiral springs by means of catches for actuation of the contact, whereby the return spring at the other end of the actuating rod returns the contact spring assembly to home position. In order to achieve a significant reduction in force with the contact spring assembly in actuating the relay, the reset spring here is designed as a top dead center spring such that when the relay is driven against the return spring, the force needed to bend the spring is reduced.

IPC 1-7

H01H 51/06; H01H 50/58

IPC 8 full level

H01H 50/58 (2006.01); **H01H 51/06** (2006.01)

CPC (source: EP US)

H01H 50/58 (2013.01 - EP US); **H01H 51/06** (2013.01 - EP US)

Citation (search report)

- [Y] FR 2423855 A1 19791116 - HALLER & CO E [DE]
- [Y] FR 2150952 A1 19730413 - MATSUSHITA ELECTRIC WORKS LTD
- [A] GB 1576377 A 19801008 - PLESSEY CO LTD

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0433633 A2 19910626; **EP 0433633 A3 19920603**; **EP 0433633 B1 19940727**; AT E109306 T1 19940815; DE 3942340 A1 19910627; DE 3942340 C2 19911121; DE 59006601 D1 19940901; DK 0433633 T3 19941121; ES 2062262 T3 19941216; US 5053756 A 19911001

DOCDB simple family (application)

EP 90121245 A 19901107; AT 90121245 T 19901107; DE 3942340 A 19891221; DE 59006601 T 19901107; DK 90121245 T 19901107; ES 90121245 T 19901107; US 63021490 A 19901218