

Title (en)
ELECTROMAGNETIC RELAY

Publication
EP 0110162 A3 19861001 (DE)

Application
EP 83110830 A 19831028

Priority
DE 3240800 A 19821104

Abstract (en)
[origin: US4571566A] An electromagnetic relay includes at least one permanent magnet provided with pole pieces and a soft magnetic armature the ends of which cooperate with the pole pieces. The pole shoes are electrically insulated from each other and serve as fixed contacts. In the rest position of the armature, contact forces are obtained from the attraction force exerted by the permanent magnet. In order to exploit the total available permanent magnet force as contact force while, at the same time, achieving high responsiveness and resistance to mechanical stresses and shocks, the armature ends or the ends of the pole pieces facing away from the magnet poles are provided with contact springs which cooperate with the respective opposite pole pieces or armature ends to form contact couples so that, when the armature is switched-over, contact is made first through the contact spring or springs and then, upon bending of the actuated contact spring or springs, the respective armature end engages the pole pieces.

IPC 1-7
H01H 51/22

IPC 8 full level
H01H 51/24 (2006.01); **H01H 50/54** (2006.01); **H01H 50/56** (2006.01); **H01H 51/22** (2006.01)

CPC (source: EP US)
H01H 51/2281 (2013.01 - EP US)

Citation (search report)

- [X] US 4342016 A 19820727 - YOKOO KIYOTAKA, et al
- [X] DE 2607669 A1 19770908 - SIEMENS AG
- [A] GB 1121916 A 19680731 - SIEMENS AG
- [A] US 3921107 A 19751118 - REUTING HANS-WERNER, et al
- [AD] US 3987383 A 19761019 - ANTONITSCH SEPP
- [A] US 3327262 A 19670620 - BONGARD JAMES A, et al

Designated contracting state (EPC)
AT CH DE FR GB IT LI

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EP 0110162 A2 19840613; EP 0110162 A3 19861001; EP 0110162 B1 19890531; AT E43750 T1 19890615; CA 1203275 A 19860415; DE 3240800 A1 19840510; DE 3379999 D1 19890706; JP S607029 A 19850114; US 4571566 A 19860218

DOCDB simple family (application)
EP 83110830 A 19831028; AT 83110830 T 19831028; CA 440353 A 19831103; DE 3240800 A 19821104; DE 3379999 T 19831028; JP 20818483 A 19831104; US 54605783 A 19831027