

Title (en)
HYBRID POWER RELAY

Title (de)
HYBRIDES LEISTUNGSRELAIS

Title (fr)
RELAIS HYBRIDE DE PUISSANCE

Publication
EP 1042773 B1 20020320 (FR)

Application
EP 98963611 A 19981223

Priority
• FR 9802851 W 19981223
• FR 9716344 A 19971223

Abstract (en)
[origin: US6347024B1] Hybrid power relay used for opening or closing electrical circuits, including an electrical contact having a mechanical movement, a semiconductor component in parallel with the electrical contact, and a control unit which in response to a logic input level causes the electrical contact to close (open) and the semiconductor component to be turned on. The control unit generates a contact-make signal for closing the contact, and a control signal that turn on the semiconductor component for a predetermined period of time. The control signal prevents the semiconductor component from being turned on after the predetermined period if the electrical contact fails to close so that the semiconductor component is undamaged. Also, the control unit generates a contact-break signal for opening the electrical contact, and turning on the semiconductor component before the electrical contact has opened by means of a control signal which terminates at the end of a second predetermined period after the electrical contact has opened.

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H01H 9/54

IPC 8 full level
H01H 9/54 (2006.01); **H01H 9/56** (2006.01)

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H01H 9/542 (2013.01 - EP US); **H01H 9/56** (2013.01 - EP US); **H01H 2009/544** (2013.01 - EP US); **H01H 2009/545** (2013.01 - EP US)

Designated contracting state (EPC)
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US 58122500 A 20000623; AT 98963611 T 19981223; CA 2316285 A 19981223; DE 69804353 T 19981223; EP 98963611 A 19981223; FR 9716344 A 19971223; FR 9802851 W 19981223