

Title (en)  
Resistance with PTC-behaviour

Title (de)  
Widerstand mit PTC - Verhalten

Title (fr)  
Résistance à comportement PTC

Publication  
**EP 0548606 B1 19960228 (DE)**

Application  
**EP 92120542 A 19921202**

Priority  
DE 4142523 A 19911221

Abstract (en)  
[origin: EP0548606A2] The electrical resistor has a resistor body (3) which is arranged between two contact connections (1, 2). This resistor body contains an element (5) having a PTC behaviour which, below a material-specific temperature, forms an electrically conductive path running between the two contact connections (1, 2). <??>The resistor is intended to be simple and cost-effective, but nevertheless to be distinguished by a high rated-current carrying capacity and to be protected against local and general overvoltages. <??>This is achieved in that the resistor body (3) additionally contains a material having a varistor behaviour. The varistor material is connected in parallel with at least one subsection of the electrically conductive path, forming at least one varistor (disc 40), and is brought into internal electrical contact with the part of the PTC material forming the at least one subsection. The parallel connection of the element having the PTC behaviour and the varistor can be implemented both by a microscopic construction and by a macroscopic arrangement. <IMAGE>

IPC 1-7  
**H01C 7/02**; **H01C 7/10**; **H01B 1/24**

IPC 8 full level  
**H01B 1/24** (2006.01); **H01C 7/02** (2006.01); **H01C 7/10** (2006.01)

CPC (source: EP US)  
**H01C 7/02** (2013.01 - EP US); **H01C 7/10** (2013.01 - EP US)

Cited by  
EP0642199A1; DE19542162C2; US6166619A; EP0649150A1; US5858533A; EP0640995A1; US5602520A; DE19702094A1; US6038117A; DE19702094B4

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

DOCDB simple family (publication)  
**EP 0548606 A2 19930630**; **EP 0548606 A3 19940406**; **EP 0548606 B1 19960228**; DE 4142523 A1 19930624; DE 59205492 D1 19960404; JP 3342064 B2 20021105; JP H05267006 A 19931015; US 5313184 A 19940517

DOCDB simple family (application)  
**EP 92120542 A 19921202**; DE 4142523 A 19911221; DE 59205492 T 19921202; JP 33329092 A 19921214; US 98955592 A 19921211