

Title (en)  
Resistance with PTC-behaviour

Title (de)  
Widerstand mit PTC-Verhalten

Title (fr)  
Résistance à comportement PTC

Publication  
**EP 0590347 B1 19960619 (DE)**

Application  
**EP 93114118 A 19930903**

Priority  
DE 4232969 A 19921001

Abstract (en)  
[origin: EP0590347A1] The electrical resistance element contains a resistance body (3) which is situated between two contact terminals (1, 2) and has PTC behaviour and which is composed of a polymer matrix (4) and a filler component made of electrically conducting particles (5) embedded in the polymer matrix (4). Despite a simple and inexpensive construction, this resistance element is claimed to be notable for good electrical conductivity in the low-resistance state and for a low response time for the PTC transition from the low- to the high-resistance state. This is achieved as a result of the fact that the electrically conducting particles (5) are at least partially formed in each case as composite bodies having electrically conducting surface and/or as hollow or porous bodies made of electrically conducting material and, compared with particles of solid construction made of conductive material, they have a lower specific density and/or a lower specific heat capacity in all cases. <IMAGE>

IPC 1-7  
**H01C 7/02**

IPC 8 full level  
**H01C 7/02** (2006.01)

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