

Title (en)
Current limiting element

Title (de)
Strombegrenzendes Element

Title (fr)
Dispositif limitant le courant

Publication
EP 0576836 B1 19970806 (DE)

Application
EP 93108622 A 19930528

Priority
DE 4221309 A 19920629

Abstract (en)
[origin: EP0576836A2] The current limiting element consists of an electrical resistance body (3) which is arranged between two contact connections (1, 2). This resistance body (3) contains a first resistance material which has a PTC characteristic. Below a limiting temperature, the first resistance material has a low cold resistivity (specific resistance) and at least one current-carrying path running between the two contact connections (1, 2). Above the limiting temperature, the first resistance material has a hot resistivity which is high in comparison with its cold resistivity. Such a current limiting element is intended to be distinguished by a homogeneous switching capability and a high rated current-carrying capability, despite simple and cost-effective construction. This is achieved in that the resistance body (3) additionally contains a second resistance material having a resistivity which is between the cold resistivity and the hot resistivity of the first resistance material, and by the second resistance material being fitted with intimate electrical contact with the first resistance material and forming at least one resistor which is connected in parallel with at least one subsection of the at least one current-carrying path. <IMAGE>

IPC 1-7
H01C 7/02

IPC 8 full level
H02H 9/02 (2006.01); **H01C 7/02** (2006.01); **H01C 7/13** (2006.01)

CPC (source: EP US)
H01C 7/027 (2013.01 - EP US); **H01C 7/13** (2013.01 - EP US)

Cited by
US6323751B1; DE19800470A1; US6157290A; EP1274102A1; US7880582B2; WO9910898A1; WO2008043187A1; US6711807B2; EP1274102B1

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

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