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)

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DOCDB simple family (publication)

EP 0576836 A2 19940105; **EP 0576836 A3 19940713**; **EP 0576836 B1 19970806**; AT E156627 T1 19970815; DE 4221309 A1 19940105; DE 59307055 D1 19970911; ES 2107580 T3 19971201; JP 3433974 B2 20030804; JP H06178444 A 19940624; NO 306229 B1 19991004; NO 932339 D0 19930625; NO 932339 L 19931230; US 5414403 A 19950509

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