

Title (en)

Low-ohmic electric resistance, particularly for protection of an electric consumer against electric surcharge.

Title (de)

Elektrischer Widerstand, der niederohmig ist und insbesondere zum Schutz eines elektrischen Verbrauchers gegen elektrische Überlastung dient.

Title (fr)

Résistance électrique de valeur ohmique basse, en particulier pour la protection contre la surcharge électrique d'un consommateur d'électricité.

Publication

**EP 0085980 A1 19830817 (DE)**

Application

**EP 83101156 A 19830207**

Priority

DE 3204207 A 19820208

Abstract (en)

[origin: US4486737A] Electric resistor, including a PTC body being formed of ceramic material and having opposite poles, two opposite outer side surfaces being parallel to the longitudinal axis of the PTC body and two opposite end faces perpendicular to the outer side surfaces, the PTC body having rows of mutually parallel depressions formed in the end faces defining inner surfaces and leaving partitions therebetween, metal coatings disposed on the inner surfaces at the opposite poles and partitions, metal layers disposed on the outer side surfaces, and metal strips being disposed on the end faces interleaved in comb-fashion and being connected to the metal layers, defining current flow paths from the metal layers and metal strips through the partitions being perpendicular to the longitudinal axes of the depressions and electrically connecting the pole coatings of a respective row of depressions to each other, and a method for the manufacture thereof.

Abstract (de)

Der niederohmige ( $\leq 50$  mOhm) elektrische Widerstand besteht aus einem keramischen PTC-Körper (1), der von parallelen Vertiefungen (2, 3) durchsetzt ist, deren innere Oberflächen gegenpolig mit Metallbelegungen (4, 5) abwechselnd versehen sind, die mittels Metallstreifen (13, 14) auf gegenüberliegenden Stirnflächen (7, 8) zur Stromzuführung elektrisch leitend verbunden sind.

IPC 1-7

**H01C 1/14**; **H01C 7/02**

IPC 8 full level

**H01C 1/14** (2006.01); **H01C 7/02** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)

**H01C 1/1406** (2013.01 - EP US); **H01C 7/025** (2013.01 - EP US)

Citation (search report)

- [A] US 4189700 A 19800219 - HILL DAVID C [US]
- [A] DE 2625515 A1 19770518 - MURATA MANUFACTURING CO
- [A] US 4180901 A 19800101 - KULWICKI BERNARD M [US]
- [A] US 4198669 A 19800415 - KULWICKI BERNARD M [US]
- [AD] DE 3016725 A1 19801113 - TEXAS INSTRUMENTS INC

Designated contracting state (EPC)

AT FR GB IT

DOCDB simple family (publication)

**EP 0085980 A1 19830817**; DE 3204207 A1 19830818; DE 3204207 C2 19850523; JP S58145088 A 19830829; US 4486737 A 19841204

DOCDB simple family (application)

**EP 83101156 A 19830207**; DE 3204207 A 19820208; JP 1873583 A 19830207; US 46391283 A 19830204