

Title (en)

NON-LINEAR RESISTANCE WITH VARISTOR BEHAVIOUR AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

NICHTLINEARER WIDERSTAND MIT VARISTORVERHALTEN UND VERFAHREN ZUR HERSTELLUNG DIESES WIDERSTANDS

Title (fr)

RESISTANCE NON LINEAIRE A COMPORTEMENT DE VARISTOR ET PROCEDE PERMETTANT DE PRODUIRE CETTE RESISTANCE

Publication

EP 0992042 B1 20050831 (DE)

Application

EP 99915429 A 19990423

Priority

- CH 9900165 W 19990423
- DE 19824104 A 19980427

Abstract (en)

[origin: US6469611B1] The nonlinear resistor has varistor behaviour and has a matrix and a filler in powder form which is embedded in the matrix. The filler contains sintered varistor granules with predominantly spherical particles of doped metal oxide. These particles are made up of crystalline grains separated from one another by grain boundaries. The filler also contains electrically conductive particles, which cover at most a part of the surfaces of the spherical particles, and/or the varistor granules contain two fractions of particles with different sizes, of which the particles in the first fraction have larger diameters than the particles in the second fraction and are arranged essentially in the form of close sphere packing and the particles in the second fraction fill the interstices formed by the sphere packing. The resistor can be produced straightforwardly and cost-effectively and is distinguished by a high nonlinearity coefficient, which is desired for a good protection characteristic, and by a high power acceptance.

IPC 1-7

H01C 7/112; **H01C 7/12**

IPC 8 full level

H01C 7/10 (2006.01); **H01C 7/112** (2006.01); **H01C 7/12** (2006.01)

CPC (source: EP US)

H01C 7/112 (2013.01 - EP US); **H01C 7/12** (2013.01 - EP US)

Cited by

EP1736998A1; US8097186B2; US7651636B2; WO2006136040A1; WO2008040130A1

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