

Title (en)

Polymer compound with non linear current-voltage characteristic and method of making a polymer compound

Title (de)

Polymercompound mit nichtlinearer Strom-Spannungs-Kennlinie und Verfahren zur Herstellung eines Polymercompounds

Title (fr)

Composé polymère avec une caractéristique courant-tension non linéaire et procédé de fabrication d'un composé polymère

Publication

EP 1274102 A1 20030108 (DE)

Application

EP 01810645 A 20010702

Priority

EP 01810645 A 20010702

Abstract (en)

A polymer compound (I) with a nonlinear current-voltage response comprises a polymer matrix and an embedded filler having a nonlinear current-voltage response. The filler comprises at least two filler components with differing nonlinear current-voltage responses. An Independent claim is included for a process for the production of the polymer compound (I) by mixing a polymer and filler components in a mix ratio to produce a polymer compound (I) with the desired nonlinear current-voltage response.

Abstract (de)

Das Polymercompound enthält eine Polymermatrix und einen in die Matrix eingebetten Füllstoff. Der Füllstoff umfasst zwei Füllstoffkomponenten mit voneinander abweichenden nichtlinearen Strom-Spannungs-Kennlinien. Durch Auswahl geeignet bemessener Mengen dieser Füllstoffkomponenten kann so ein Polymercompound mit einer vorbestimmten, von diesen beiden Kennlinien abweichenden nichtlinearen Strom-Spannungs-Kennlinie gebildet werden. <IMAGE>

IPC 1-7

H01C 7/112

IPC 8 full level

C08L 101/00 (2006.01); **C08K 3/00** (2006.01); **H01C 7/112** (2006.01)

CPC (source: EP US)

H01C 7/112 (2013.01 - EP US)

Citation (applicant)

- EP 0875087 B1 20001129 - RAYCHEM GMBH [DE]
- WO 9956290 A1 19991104 - ABB RESEARCH LTD [CH], et al
- EP 0576836 A2 19940105 - ABB RESEARCH LTD [CH]
- DE 2363172 A1 19750619 - SIEMENS AG
- R STRÜMLER ET AL.: "Smart Varistor Composites", PROC OF THE 8TH CIMTEC CERAMIC CONGRESS, June 1994 (1994-06-01)

Citation (search report)

- [XA] DE 2363172 A1 19750619 - SIEMENS AG
- [A] CH 664231 A5 19880215 - BRUGG AG KABELWERKE
- [DA] WO 9956290 A1 19991104 - ABB RESEARCH LTD [CH], et al
- [A] US 5669381 A 19970923 - HYATT HUGH M [US]
- [A] DE 19821239 A1 19991125 - SIEMENS MATSUSHITA COMPONENTS [DE]
- [A] US 4981624 A 19910101 - TSUDA KOICHI [JP], et al
- [DA] STRÜMLER R ET AL.: "Smart varistor composites", INTELLIGENT MATERIALS AND SYSTEMS. PROCEEDINGS OF TOPICAL SYMPOSIUM VI ON INTELLIGENT MATERIALS AND SYSTEMS OF THE 8TH CIMTEC-WORLD CERAMICS CONGRESS AND FORUM ON NEW MATERIALS, PROCEEDINGS OF TOPICAL SYMPOSIUM IV ON INTELLIGENT MATERIALS AND SYSTEMS, 1995, Faenza, Italy, TECHNICA, Italy, pages 15 - 22, XP001051331, ISBN: 88-86538-09-X

Cited by

EP1603140A1; US4654457A; US7651636B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1274102 A1 20030108; EP 1274102 B1 20110223; AT E499691 T1 20110315; AU 5068402 A 20030109; CA 2390195 A1 20030102; CN 1277888 C 20061004; CN 1394914 A 20030205; DE 50115800 D1 20110407; JP 2003049084 A 20030221; PL 206222 B1 20100730; PL 354829 A1 20030113; RU 2002117582 A 20040120; RU 2282263 C2 20060820; US 2003010960 A1 20030116; US 2008023678 A1 20080131; US 7320762 B2 20080122; US 7618550 B2 20091117

DOCDB simple family (application)

EP 01810645 A 20010702; AT 01810645 T 20010702; AU 5068402 A 20020627; CA 2390195 A 20020628; CN 02140255 A 20020702; DE 50115800 T 20010702; JP 2002192413 A 20020701; PL 35482902 A 20020702; RU 2002117582 A 20020701; US 18007802 A 20020627; US 89214807 A 20070820