

Title (en)

Overvoltage protection devices including a varistor member and an electrical conductive fusing member

Title (de)

Überspannungsschutzvorrichtungen mit Varistorteil und elektrisch leitfähigem Schmelzteil

Title (fr)

Dispositifs de protection contre les surtensions comprenant une varistance et un élément fusible conducteur électrique

Publication

EP 2677524 A1 20131225 (EN)

Application

EP 12177955 A 20120726

Priority

- GR 20120100325 A 20120619
- US 201213552240 A 20120718

Abstract (en)

An overvoltage protection device includes first and second electrically conductive electrode members (130, 120) and a varistor member (110) formed of a varistor material (172) and electrically connected with each of the first and second electrode members. The overvoltage protection device has an integral fail-safe mechanism operative to electrically short circuit the first and second electrode members about the varistor member by fusing the meltable member (140) in the overvoltage protection device (134) by using an electric arc. The overvoltage protection device further includes an electrically insulating spacer member (144) electrically isolating the fusing metal member (140) from the electrodes; the electric arc disintegrates the spacer member and extends across the gap (G1, G3 and G2) to fuse the meltable/fusing member (140).

IPC 8 full level

H01C 7/12 (2006.01); **H01T 1/16** (2006.01)

CPC (source: EP)

H01C 7/126 (2013.01); **H01C 7/12** (2013.01); **H01T 1/14** (2013.01)

Citation (search report)

- [X] EP 1798742 A1 20070620 - RAYCAP CORP [GR]
- [Y] US 2004150937 A1 20040805 - BOBERT PETER [DE], et al
- [Y] EP 1458072 A1 20040915 - DEHN & SOEHNE [DE]
- [Y] WO 2012026888 A1 20120301 - ETI ELEKTROELEMENT DD [SI], et al

Cited by

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2677524 A1 20131225; EP 2677524 B1 20180905; DK 3358577 T3 20200427; EP 3358577 A1 20180808; EP 3358577 B1 20200122; EP 3640958 A1 20200422; EP 3640958 B1 20230329; PL 2677524 T3 20190228; PL 3358577 T3 20210125; SI 2677524 T1 20181231; SI 3358577 T1 20200731

DOCDB simple family (application)

EP 12177955 A 20120726; DK 18163022 T 20120726; EP 18163022 A 20120726; EP 19214780 A 20120726; PL 12177955 T 20120726; PL 18163022 T 20120726; SI 201231429 T 20120726; SI 201231769 T 20120726