

Title (en)

OVERVOLTAGE PROTECTION DEVICE INCLUDING A VARISTOR A FUSE AND TWO FAIL SAFE MECHANISMS

Title (de)

ÜBERSpannungsschutzvorrichtung mit Wafer aus Varistormaterial, ein thermisches Element, und mit zwei Sicherheitsmechanismus

Title (fr)

DISPOSITIFS DE PROTECTION CONTRE LES SURTENSIONS COMPRENANT UNE VARISTANCE, UN ÉLÉMENT FUSIBLE ET DEUX MÉCANISMES DE DÉCLANCHEMENT DE SÉCURITÉ

Publication

EP 3358577 A1 20180808 (EN)

Application

EP 18163022 A 20120726

Priority

- GR 20120100325 A 20120619
- US 201213552240 A 20120718
- EP 12177955 A 20120726

Abstract (en)

An overvoltage protection device includes first (120) and second (130) electrically conductive electrode members and a varistor member (110) formed of a varistor material and electrically connected with each of the first and second electrode members. The overvoltage protection device includes both: an integral first fail-safe mechanism (161) configured to electrically short circuit the first and second electrode members about the varistor member when triggered by a first set of operating conditions; and an integral second fail-safe mechanism (141) configured to electrically short circuit the first and second electrode members about the varistor member when triggered by a second set of operating conditions different from the first set of operating conditions.

IPC 8 full level

H01C 7/12 (2006.01); **H01C 8/04** (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 (applicant)

- US 6038119 A 20000314 - ATKINS IAN PAUL [US], et al
- US 6430020 B1 20020806 - ATKINS IAN PAUL [US], et al
- US 7433169 B2 20081007 - KAMEL SHERIF I [US], et al

Citation (search report)

- [XYI] DE 102009004704 A1 20100325 - DEHN & SOEHNE [DE]
- [XAYI] FR 2574589 A1 19860613 - TUBES LAMPES ELECTRIQ CIE INDL [FR]
- [YA] US 4305109 A 19811208 - SCHILLING GUENTER, et al
- [YA] US 2007139850 A1 20070621 - KAMEL SHERIF I [US], et al
- [YA] AU 620579 B2 19920220 - RAYCHEM CORP
- [A] EP 0312729 A1 19890426 - KRONE AG [DE]

Designated contracting state (EPC)

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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