

Title (en)

Lightning arrester device allowing an external short-circuiting and corresponding protection assembly.

Title (de)

Blitzableitervorrichtung, welche ein äusserliches Kurzschliessen erlaubt, und entsprechende Schutzseinheit.

Title (fr)

Dispositif parafoudre permettant une mise en court-circuit extérieure et ensemble de protection correspondant.

Publication

EP 0027061 A1 19810415 (FR)

Application

EP 80400986 A 19800630

Priority

- FR 7924916 A 19791005
- FR 8012962 A 19800611

Abstract (en)

1. An overvoltage protection device intended to protect a circuit against the effects of an excess voltage, the said overvoltage protection device being constituted by an external casing defining an enclosure containing an inert gas and forming a first electrode of the overvoltage protection device, the said external casing enclosing at least one metal pin forming another electrode and carrying externally at least one elastic metal device having, parallel to the external casing at least one elastic strip a first zone of which is bearing on a fusible element disposed near one end of the external casing and carried by it, the said first zone of the said device being capable of coming into electric contact by its elasticity when the said fusible element has fused with the (or one of the) above mentioned metal pin (or pins) and a second zone of which, on the opposite side from the first is connected to a metal fixing ring tightly fitted on the external casing, characterised in that, [in the known way], the external casing (1, 21) is a cylinder entirely made of metal, one part of the pins forming another electrode (5, 251, 252) projecting outside from the said casing (1, 21) and being joined thereto by an insulator (6, 26) disposed annularly between casing (1, 21) and the pin (5, 251, 252) and in that, to obtain a good accuracy in the excess voltage producing the short circuit, the fusible element (8, 18, 28) is, on the one hand, constituted of a metal alloy which is an electric and thermal conductor with proper fusion and on the other hand, the end of the strip of the elastic device (7, 27) [comprises at least one elastic strip which has a portion (7b, 271b-272b) substantially parallel to the external casing (2, 21) and whose end (7c, 271c, 272c)] is folded at right angles towards the pin forming the corresponding electrode (5, 251-252).

Abstract (fr)

L'invention a trait à un dispositif parafoudre destiné à protéger un circuit électronique contre les effets d'une surtension. Ce dispositif comporte un parafoudre dont l'enveloppe extérieure (1) renferme au moins une électrode (5) et il est caractérisé par le fait qu'à chaque électrode correspond un organe conducteur (7) élastiquement déplaçable par rapport à l'enveloppe extérieure (1), ledit organe (7) s'appuyant sur un élément fusible (8) et pouvant venir élastiquement, quand l'élément fusible (8) est fondu, en contact électrique avec l'électrode (5) correspondante. L'invention a également trait à un ensemble de protection mettant en oeuvre le dispositif parafoudre sus-mentionné.

IPC 1-7

H01T 1/14

IPC 8 full level

H01T 1/14 (2006.01); **H01T 4/12** (2006.01)

CPC (source: EP)

H01T 1/14 (2013.01); **H01T 4/12** (2013.01)

Citation (search report)

- DE 2617901 A1 19771103 - SCHIEDERWERK SCHIEDER KG K
- US 3564473 A 19710216 - KAWIECKI CHESTER J
- US 4034326 A 19770705 - HILL JOHN, et al
- EP 0016242 A1 19801001 - SIEMENS AG [DE]
- FR 2303371 A1 19761001 - CLAUDE [FR]
- US 3993933 A 19761123 - MENNINGA GYSBERT L
- DE 2911110 A1 19800925 - SIEMENS AG
- FR 2351520 A1 19771209 - RELIABLE ELECTRIC CO [US]

Cited by

GB2230900A; EP0366439A3; FR2545644A1; FR2659504A1; EP0308553A1; GB2222023A; US4984125A; GB2222023B; WO2014118404A1; KR100372975B1

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