

Title (en)

SURGE ARRESTER FOR THE PROTECTION OF ELECTRIC PLANTS FROM TRANSIENT SURGES

Title (de)

ÜBERSpannungSSchutz ELEKTRISCHER ANLAGEN VOR TRANSIENTEN ÜBERSpannungen

Title (fr)

COUPE-CIRCUIT DE SURTENSION POUR LA PROTECTION DES INSTALLATIONS ELECTRIQUES CONTRE LES SURTENSIONS TRANSITOIRES

Publication

EP 3041004 A1 20160706 (EN)

Application

EP 15197440 A 20140320

Priority

- IT MI20130538 A 20130408
- EP 14160969 A 20140320

Abstract (en)

A surge arrester is disclosed comprising a first and a second electric terminal (1, 2) for connecting to the active leads of an electric plant, between which a protection element (3) is inserted provided with a pair of electrodes (4) electrically wired to said electric terminals, between said first electric terminal (1) and an electrode (4) of the protection element (3) a disconnecter being provided comprising a conductive, resilient, flexible lamina (5) having a base end (5a) electrically wired to said first electric terminal (1) and a distal end (5d) maintained electrically connected to said electrode (4), in a state of elastic preload, by a welding with low-melt material. Lamina (5) is mounted elastically biased according to a direction so as to push said distal end (5d) away from said electrode (4) and it is made with a thickness below 0.5 mm and of a conductive material with a conductivity much lower than that of copper ($\text{IACS} < 60$) such as to melt/sublimate following heating by Joule effect upon the passing of a short-circuit current. Between said base end (5a) of the lamina (5) and said electrode (4) of the protection element (3) a sliding guide (6) for an intercepting cursor (7) is provided, biased in a longitudinal direction of said sliding guide (6) by preloaded elastic means (8), and at least an inclined portion (5c) of said lamina (5) runs through said sliding guide (6) at a certain angle to the longitudinal sliding axis thereof, said inclined portion (5c) of the lamina acting as abutment and holding element for a head end (7b) of said cursor (7).

IPC 8 full level

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Citation (applicant)

- US 2012014028 A1 20120119 - DAUM RICHARD [DE]
- EP 2541577 A1 20130102 - EPCOS AG [DE]
- "IEC 61643-11", March 2011
- CEI EN 50539-11, February 2013 (2013-02-01)

Citation (search report)

- [A] EP 2541577 A1 20130102 - EPCOS AG [DE]
- [A] US 2011170217 A1 20110714 - MAO XIAOMAO [CN], et al
- [A] US 2012014028 A1 20120119 - DAUM RICHARD [DE]
- [A] DATABASE WPI Week 200872, Derwent World Patents Index; AN 2008-M16699, XP002719434

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