

Title (en)  
Overvoltage protection element

Title (de)  
Überspannungsschutzelement

Title (fr)  
Dispositif de protection contre les surtensions

Publication  
**EP 0920098 A3 19990721 (DE)**

Application  
**EP 99102644 A 19950921**

Priority  

- DE 4435968 A 19941007
- DE 4437094 A 19941017
- DE 4439730 A 19941109
- EP 95114840 A 19950921

Abstract (en)  
[origin: EP0920098A2] The overvoltage protection element (1) has a housing (5) enclosing a pair of spaced electrodes (2,3) defining a spark path (4). Each electrode has a termination arm (6,7) and a relatively angled spark horn (8,9). The first part of each spark horn extends at right angles to the termination arm, with its outer end curved for providing a curved or angled spark path.

IPC 1-7  
**H01T 4/14**; **H01T 4/10**

IPC 8 full level  
**H01T 4/10** (2006.01); **H01T 4/14** (2006.01)

CPC (source: EP)  
**H01T 4/10** (2013.01); **H01T 4/14** (2013.01)

Citation (search report)  

- [A] US 3688155 A 19720829 - JOHANSSON BENGT, et al
- [PAD] DE 4402615 A1 19941208 - PHOENIX CONTACT GMBH & CO [DE]
- [AD] US 3309575 A 19670314 - LEE THOMAS H, et al

Cited by  
CN103069673A; FR2873865A1; WO2012016804A1; WO2006018529A1; US9083153B2; DE102011051738B4

Designated contracting state (EPC)  
AT CH ES FR GB IT LI NL SE

DOCDB simple family (publication)  
**EP 0920098 A2 19990602**; **EP 0920098 A3 19990721**; **EP 0920098 B1 20030917**

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