

Title (en)  
OVERVOLTAGE PROTECTION CIRCUITRY

Title (de)  
ÜBERSpannungSSchutzSCHALTUNG

Title (fr)  
CIRCUIT DE PROTECTION CONTRE LA SURTENSION

Publication  
**EP 1224794 A1 20020724 (EN)**

Application  
**EP 99950987 A 19991026**

Priority  
GB 9903535 W 19991026

Abstract (en)  
[origin: WO0131901A1] An overvoltage protector suitable for protecting conductors comprises first, second and third at least bipolar protection elements (132, 134, 136). A first electrode of each protection element is connected to a common node (138). A second electrode of the first protection element (132) and a second electrode of the second or third protection elements (134, 136) are suitable for connection to a conductor to be protected. The first and third elements (132, 136) have breakdown conduction characteristic in one direction and diode conduction characteristic in the other, and the second element (134) has breakdown conduction characteristic in both directions, wherein the respective first electrodes of the first and third elements (132, 136) are of the same polarity.

IPC 1-7  
**H04M 3/18**; H02H 9/04

IPC 8 full level  
**H04Q 3/42** (2006.01); **H02H 9/04** (2006.01); **H04M 3/18** (2006.01)

CPC (source: EP)  
**H02H 9/041** (2013.01); **H04M 3/18** (2013.01); **H04M 2201/06** (2013.01)

Citation (search report)  
See references of WO 0131901A1

Designated contracting state (EPC)  
BE DE FR IT NL

DOCDB simple family (publication)  
**WO 0131901 A1 20010503**; AU 6357099 A 20010508; CN 1375157 A 20021016; EP 1224794 A1 20020724; JP 2003513527 A 20030408

DOCDB simple family (application)  
**GB 9903535 W 19991026**; AU 6357099 A 19991026; CN 99816972 A 19991026; EP 99950987 A 19991026; JP 2001533732 A 19991026