

Title (en)
PTC element

Title (de)
PTC-Element

Title (fr)
Élément PCT

Publication
EP 0790625 A3 19980729 (EN)

Application
EP 97300947 A 19970213

Priority
JP 2570296 A 19960213

Abstract (en)
[origin: EP0790625A2] A PTC element (1) comprises an essentially plate-shaped PTC substrate (2), composed of a crystalline polymer having conductive particles dispersed therein. The PTC element includes a pair of electrode films (3) provided on the front and back surfaces of the PTC substrate; a pair of insulating layers (7a,7b), each of which covers one of two opposing side faces of the PTC substrate and a portion of one of the electrode films (3); and a pair of film-like electrodes (9) provided on the surfaces of the insulating layers in such a manner as to be in electrical contact with the portions of the electrode films that are not covered by the insulating layers. The electrodes are in the form of films and disposed at the side faces of the element, so the element may be surface mounted despite its small size. The electrodes extending from the front surface to the back surface of the PTC substrate permit the element to be mounted on the surface of a printed board at the point where the electrodes face the printed board and also at the points where the electrodes extend perpendicularly to the printed board. Such a PTC element can be convenient to mount with improved reliability in the attachment of electrodes and may be easier to manufacture. <IMAGE>

IPC 1-7
H01C 1/14

IPC 8 full level
H01B 1/24 (2006.01); **H01C 1/14** (2006.01); **H01C 7/02** (2006.01)

CPC (source: EP)
H01C 1/1406 (2013.01); **H01C 7/028** (2013.01)

Citation (search report)

- [YA] WO 9534084 A1 19951214 - RAYCHEM CORP [US]
- [YA] EP 0336497 A1 19891011 - PHILIPS NV [NL]
- [A] EP 0229286 A1 19870722 - SIEMENS AG [DE], et al
- [A] US 4959632 A 19900925 - UCHIDA KATSUYUKI [JP]
- [A] US 4787135 A 19881129 - NAGAHORI ATSUSHI [JP]

Cited by
EP0901133A3; EP1701391A4; EP1073068A4; WO9745845A1; WO9953505A1; US8286338B2; US10668275B2; WO0232497A1; US6522237B1; US6558616B2; US6606023B2; US7053748B2; US7625617B1; US7629015B2; US8075969B2

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0790625 A2 19970820; EP 0790625 A3 19980729; JP H09219302 A 19970819

DOCDB simple family (application)
EP 97300947 A 19970213; JP 2570296 A 19960213