

Title (en)

ELECTRICAL DEVICE HAVING PTC CONDUCTIVE POLYMER

Title (de)

ELEKTRISCHES BAUELEMENT MIT EINEM LEITFÄHIGEN PTC-POLYMER

Title (fr)

DISPOSITIF ELECTRIQUE PRESENTANT UN POLYMERE CONDUCTEUR CTP

Publication

EP 1275273 A4 20071128 (EN)

Application

EP 01917935 A 20010330

Priority

- KR 0100523 W 20010330
- KR 20000018453 A 20000408

Abstract (en)

[origin: WO0178453A1] An electrical device having PTC conductive polymer is made by combining electrodes, in which electroless nickel plating is formed on an electrolytic copper foil, with PTC conductive polymer. The electrodes have electroless-plated nickel layers at both sides of an electrolytic copper foil and the PTC conductive polymer is welded between the electrodes in a sandwich type. Because the electroless-plated nickel of the electrical device has even thickness, the electrical device gives improved PTC characteristics and good chemical and mechanical binding capacity between the electrodes and the PTC conductive polymer.

IPC 1-7

H05B 3/03; **H01C 7/02**

IPC 8 full level

H05B 3/14 (2006.01); **C23C 18/31** (2006.01); **C23C 18/32** (2006.01); **H01C 1/14** (2006.01); **H01C 7/02** (2006.01); **H05B 3/10** (2006.01)

CPC (source: EP KR)

H01C 1/1406 (2013.01 - EP); **H01C 7/027** (2013.01 - EP); **H05B 3/146** (2013.01 - KR); **H05B 2203/02** (2013.01 - KR)

Citation (search report)

- [XY] EP 0952591 A1 19991027 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [XY] EP 0955643 A1 19991110 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- See references of WO 0178453A1

Designated contracting state (EPC)

AT BE CH DE FR GB LI

DOCDB simple family (publication)

WO 0178453 A1 20011018; AU 4481001 A 20011023; CN 1210994 C 20050713; CN 1418451 A 20030514; EP 1275273 A1 20030115; EP 1275273 A4 20071128; JP 2003530718 A 20031014; JP 3833538 B2 20061011; KR 100330919 B1 20020403; KR 20010090933 A 20011022; TW 480496 B 20020321

DOCDB simple family (application)

KR 0100523 W 20010330; AU 4481001 A 20010330; CN 01806684 A 20010330; EP 01917935 A 20010330; JP 2001575773 A 20010330; KR 20000018453 A 20000408; TW 90107842 A 20010402