

Title (en)

Zinc phosphate coating for varistor and method

Title (de)

Zink-Phosphatbeschichtung für Varistor und Verfahren zur Herstellung

Title (fr)

Revêtement en phosphate de zinc pour varistor et méthode de fabrication

Publication

**EP 0806780 A1 19971112 (EN)**

Application

**EP 96400993 A 19960509**

Priority

EP 96400993 A 19960509

Abstract (en)

A method of providing a semiconductor device (20) with an inorganic electrically insulative layer (34) the device having exposed semiconductor surfaces (34) and electrically conductive metal end terminations (30) in which the device is reacted with phosphoric acid to form a phosphate on the exposed surfaces (34) of the semiconductor but not on the metal end terminations (30), and in which the device is thereafter barrel plated in a conventional electrical barrel plating process and the plating is provided only on the end terminations (30) because the phosphate is not electrically conductive. <IMAGE>

IPC 1-7

**H01C 1/034; H01C 7/10**

IPC 8 full level

**H01C 1/034** (2006.01); **H01C 7/102** (2006.01)

CPC (source: EP)

**H01C 1/034** (2013.01); **H01C 7/102** (2013.01)

Citation (search report)

- [A] GB 2100246 A 19821222 - ARMSTRONG WORLD IND INC
- [AD] US 5115221 A 19920519 - COWMAN STEPHEN P [IE]
- [A] GB 2044531 A 19801015 - TDK ELECTRONICS CO LTD & US 4316171 A 19820216 - MIYABAYASHI SUSUMU, et al
- [E] EP 0716429 A2 19960612 - HARRIS CORP [US]
- [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 303 (E - 1228) 3 July 1992 (1992-07-03)
- [A] PATENT ABSTRACTS OF JAPAN vol. 015, no. 343 (E - 1106) 30 August 1991 (1991-08-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 016 (E - 872) 12 January 1989 (1989-01-12)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 514 (E - 1433) 16 September 1993 (1993-09-16)

Cited by

US5757263A; EP0969481A1; GB2326976A; US6841191B2; CN113363029A; US11037710B2

Designated contracting state (EPC)

AT BE NL

DOCDB simple family (publication)

**EP 0806780 A1 19971112; EP 0806780 B1 20000802; AT E195198 T1 20000815**

DOCDB simple family (application)

**EP 96400993 A 19960509; AT 96400993 T 19960509**