

Title (en)

Platinum electrical resistance or a platinum composition and sensor arrangement

Title (de)

Elektrischer Widerstand mit Platinmetall oder einer Platinmetallverbindung sowie Sensoranordnung

Title (fr)

Résistance électrique de platine ou une composition de platine et arrangement sensorique

Publication

**EP 1217635 A3 20040915 (DE)**

Application

**EP 01126269 A 20011106**

Priority

DE 10064461 A 20001222

Abstract (en)

[origin: EP1217635A2] Electrical resistor (6) has a resistance layer applied to an electrically insulated surface of a substrate (4). The resistance layer is formed as a thin layer element having a thickness of 0.1-2  $\mu\text{m}$  and consists of a mixture of finely dispersed ceramic and metal in a weight ratio of 5-50: 95-50. Preferred Features: The resistance layer contains iridium or an alloy base on iridium. The dispersed ceramic is made from  $\text{SiO}$ ,  $\text{SiO}_2$ ,  $\text{Ta}_2\text{O}_5$ ,  $\text{MgO}$  and/or  $\text{Al}_2\text{O}_3$ , preferably  $\text{Al}_2\text{O}_3$ . The resistance layer has a resistance temperature coefficient of -500 to +1000 ppm/K.

IPC 1-7

**H01C 7/00**; **G01K 7/18**

IPC 8 full level

**H01C 3/00** (2006.01); **H01C 3/04** (2006.01); **H01C 7/06** (2006.01); **H05B 3/12** (2006.01); **H05B 3/14** (2006.01)

CPC (source: EP US)

**H01C 3/005** (2013.01 - EP US); **H01C 3/04** (2013.01 - EP US); **H01C 7/06** (2013.01 - EP US); **H05B 3/12** (2013.01 - EP US); **H05B 3/141** (2013.01 - EP US)

Citation (search report)

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- [PY] DE 19934109 C1 20010405 - BOSCH GMBH ROBERT [DE]
- [YA] DE 3322484 A1 19850110 - NITTO ELECTRIC IND CO [JP]
- [A] AT 405688 B 19991025 - HERAEUS ELECTRO NITE INT [BE]

Cited by

EP2719604A1

Designated contracting state (EPC)

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**EP 1217635 A2 20020626**; **EP 1217635 A3 20040915**; US 2002109577 A1 20020815

DOCDB simple family (application)

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