

Title (en)

ELECTRIC RESISTANCE WITH AT LEAST TWO CONTACT FIELDS ON A CERAMIC SUBSTRATE AND PROCESS FOR MANUFACTURING THE SAME

Title (de)

ELEKTRISCHER WIDERSTAND MIT WENIGSTENS ZWEI ANSCHLUSSKONTAKTFELDERN AUF EINEM KERAMIK-SUBSTRAT SOWIE VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

RESISTANCE ELECTRIQUE AVEC AU MOINS DEUX CHAMPS DE CONTACT SUR UN SUBSTRAT EN CERAMIQUE ET SON PROCEDE DE FABRICATION

Publication

**EP 0944816 A1 19990929 (DE)**

Application

**EP 97952032 A 19971203**

Priority

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Abstract (en)

[origin: WO9826260A1] A temperature-dependent measurement resistance with a fast reaction time is at least partially arranged on the electrically insulating surface of a ceramic substrate. Part of the printed circuit bridges a recess in the substrate and the remaining part of the printed circuit is fitted with contact fields in the marginal area of the substrate adjacent to the recess. The printed circuit is made of a platinum or Au layer and is partially provided with a covering layer made of glass which leaves free the contact fields. In another embodiment, the printed circuit is arranged together with the contact fields either on a screen-printed glass membrane or on a thin film membrane applied by a PVD process which covers the surface of the ceramic substrate, bridging the recess. When the substrate surface is covered by a glass membrane, the printed circuit covering layer is also selectively applied by screen printing. When the substrate surface is covered by a thin film membrane, the printed circuit covering layer is also selectively applied by a PVD process and may be made of the same material as the thin film membrane. The ceramic substrate preferably consists of aluminium oxide.

IPC 1-7

**G01K 7/18; H01C 7/02; H01C 7/22; H01C 17/00**

IPC 8 full level

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CPC (source: EP US)

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