

Title (en)
HEATING ELEMENT AND METHOD FOR PRODUCING THE SAME

Title (de)
HEIZELEMENT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
ELEMENT CHAUFFANT ET SON PROCEDE DE FABRICATION

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Application
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• AT 167797 A 19971003

Abstract (en)
[origin: WO9918586A1] The invention relates to a heating element which has a high heating-up rate and which has a predetermined resistance value, for triggering airbag systems. According to the inventive method for producing said heating element, a base consisting of an aluminium oxide ceramic is provided with a glass or glass ceramic coating. The surface of said coating can be lapped and polished if necessary. An extensive layer of AuPd-resinate is applied to the surface of the coating using the silk screen process and then structured into a resistance strip using etching technology. Said resistance strip is constricted in some areas and the ends of the resistance strip are brought into contact with an AgPd-thick-film conductor paste during the silk screen process, the Pd content of said paste being definitive for the desired resistance value. After the thick-film conductor paste has been dried and baked, the coated base is heated at temperatures of between 850 DEG C and 950 DEG C until the palladium in the resistance layer is evenly distributed and a stable resistance value has been established. Solder stop dams in the form of glass stops are arranged on the edges of the AgPd contacts facing the resistance strip in order to reduce the risk of unwanted alloys being formed on the resistance strip during a subsequent soldering process.

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