

Title (en)
METHOD FOR PRODUCING A HEATING DEVICE AND HEATING DEVICE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER HEIZEINRICHTUNG UND HEIZEINRICHTUNG

Title (fr)
PROCÉDÉ DE FABRICATION D'UN DISPOSITIF DE CHAUFFAGE ET DISPOSITIF DE CHAUFFAGE

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Application
EP 23179310 A 20230614

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Abstract (en)
[origin: CN117295192A] The invention relates to a method for producing a heating device having a carrier and at least one heating conductor applied thereto, comprising the following steps: providing a carrier having a heating conductor side, on which an anodized layer is produced, wherein the anodized layer is applied directly to the carrier/heating conductor side thereof, and the at least one heating conductor is applied over the anodized layer in a thick film process. Advantageously, the anodized layer may be fabricated as a hard anodized layer. Additional insulating and/or thickening layers may also be applied to the anodized layer.

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Citation (applicant)
• EP 3197241 A1 20170726 - EGO ELEKTRO GERAETEBAU GMBH [DE]
• DE 102008008998 A1 20080821 - FISCHER OBERFLAECHENTECHNIK GM [DE]
• DE 102008026101 A1 20091203 - FRAUNHOFER GES FORSCHUNG [DE]

Citation (search report)
• [X] EP 3962234 A1 20220302 - HERAEUS NEXENSOS GMBH [DE]
• [X] US 2002155303 A1 20021024 - WIELSTRA YTSSEN [NL], et al
• [XY] KR 101257643 B1 20130429 - YOUN SUK SAM [KR]
• [XY] GB 2391153 A 20040128 - OTTER CONTROLS LTD [GB]
• [YDA] DE 102008008998 A1 20080821 - FISCHER OBERFLAECHENTECHNIK GM [DE]

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