

Title (en)
HEATING DEVICE WITH A CARRIER AND METHOD OF MAKING IT

Title (de)
HEIZEINRICHTUNG MIT EINEM TRÄGER UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)
DISPOSITIF DE CHAUFFAGE COMPRENANT UN SUPPORT ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3182794 B1 20201209 (DE)

Application
EP 16203541 A 20161212

Priority
DE 102015226053 A 20151218

Abstract (en)
[origin: JP2017112114A] PROBLEM TO BE SOLVED: To provide a heating device capable of presenting heating output of different superficial areas or different temperatures.SOLUTION: A heating device 211 comprises a carrier 212 and at least one sheet-like electric heating conductor 220 that is disposed on the carrier. The heating conductors extend between a first terminal and a second terminal, and at least one heating conductor contains a carbon based material as a heating conductor material. Thickness of the heating conductors between electric terminals can be made at least partially different and may not be fixed for local heating output adaptation. In addition, the heating conductor can be formed rectangular and short or formed in a circular ring shape.SELECTED DRAWING: Figure 3A

IPC 8 full level
H05B 3/14 (2006.01); **H05B 3/26** (2006.01)

CPC (source: CN EP KR US)
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Citation (examination)
• JP 2002184558 A 20020628 - IBIDEN CO LTD
• EP 1667489 A2 20060607 - HERAEUS NOBLELIGHT GMBH [DE]
• WO 2008088907 A2 20080724 - MOMENTIVE PERFORMANCE MAT INC [US], et al
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EP3331318A1; EP3557144A1; US11382181B2; WO2019202100A1; US11745879B2

Designated contracting state (EPC)
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EP 3182794 A1 20170621; **EP 3182794 B1 20201209**; CN 107205288 A 20170926; CN 107205288 B 20221028; CN 107426835 A 20171201; CN 114679802 A 20220628; DE 102016209012 A1 20170622; EP 3250003 A1 20171129; JP 2017112114 A 20170622; JP 2017212206 A 20171130; JP 6800731 B2 20201216; KR 20170132695 A 20171204; PL 3182794 T3 20210517; US 2017181226 A1 20170622

DOCDB simple family (application)
EP 16203541 A 20161212; CN 201611273137 A 20161216; CN 201710373078 A 20170524; CN 202210149836 A 20170524; DE 102016209012 A 20160524; EP 17167149 A 20170419; JP 2016244979 A 20161219; JP 2017093689 A 20170510; KR 20170064374 A 20170524; PL 16203541 T 20161212; US 201615381763 A 20161216