

Title (en)
ELECTRICAL HEATING MEANS FOR MOBILE APPLICATION

Title (de)
ELEKTRISCHE HEIZEINRICHTUNG FÜR MOBILE ANWENDUNGEN

Title (fr)
DISPOSITIF DE CHAUFFAGE POUR APPLICATIONS MOBILES

Publication
EP 3305016 A1 20180411 (DE)

Application
EP 16732221 A 20160529

Priority
• DE 102015108580 A 20150530
• DE 2016100247 W 20160529

Abstract (en)
[origin: WO2016192714A1] The invention relates to an electric heating device (1) for mobile applications, comprising the following: a substrate (2) and a heat conductor layer formed on the substrate (2). The heat conductor layer has at least one heat conductor track (5) which extends on a main plane on the substrate (2). The heat conductor track (5) is structured such that a plurality of track sections (6) are formed which run adjacently to one another and which are separated from one another by insulating interruptions (7). At least one reversal point (8) is provided at which the heat conductor track (5) is deflected such that inner track sections (6a) with opposite flow directions run adjacently and parallel to one another. The spacing between the adjacent inner track sections (6a) with opposite flow directions is formed in a locally expanded manner in the region of the reversal point (8) on the inner face. In the region of the reversal point (8), the inner track sections (6a) protrude outwards to outer track sections (6b) which are separated from the inner track sections (6a) by insulating interruptions (7), and the width of the track sections is locally reduced in front of and in the outer track sections (6b) in order to compensate for the local expansion on the inner face between the inner track sections (6a) and for the protrusion of the inner track sections (6a).

IPC 8 full level
H05B 3/26 (2006.01); **H05B 3/46** (2006.01)

CPC (source: CN EP KR US)
H05B 3/262 (2013.01 - CN EP KR US); **H05B 3/265** (2013.01 - CN EP KR US); **H05B 3/46** (2013.01 - US);
H05B 2203/003 (2013.01 - CN EP KR US); **H05B 2203/013** (2013.01 - CN EP KR US); **H05B 2203/021** (2013.01 - CN EP KR US);
H05B 2203/023 (2013.01 - CN EP KR US)

Citation (search report)
See references of WO 2016192714A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
DE 102015108580 A1 20161201; CN 107771411 A 20180306; CN 107771411 B 20190419; EP 3305016 A1 20180411;
EP 3305016 B1 20181121; JP 2018516198 A 20180621; JP 6451870 B2 20190116; KR 101916621 B1 20181107; KR 20180005264 A 20180115;
US 10314114 B2 20190604; US 2018152990 A1 20180531; WO 2016192714 A1 20161208

DOCDB simple family (application)
DE 102015108580 A 20150530; CN 201680031804 A 20160529; DE 2016100247 W 20160529; EP 16732221 A 20160529;
JP 2017560183 A 20160529; KR 20177037408 A 20160529; US 201615577452 A 20160529