

Title (en)  
HEATER AND IGNITION DEVICE

Title (de)  
HEIZER UND ZÜNDUNGSVORRICHTUNG

Title (fr)  
DISPOSITIF DE CHAUFFAGE ET DISPOSITIF D'ALLUMAGE

Publication  
**EP 3136819 B1 20200506 (EN)**

Application  
**EP 15782910 A 20150427**

Priority  

- JP 2014090911 A 20140425
- JP 2015062651 W 20150427

Abstract (en)  
[origin: EP3136819A1] A heater includes a ceramic multilayer body including a plurality of ceramic layers that are stacked together; a heat-generating resistor having a belt shape, the heat-generating resistor being disposed between the ceramic layers and arranged, and including both ends that are at a side surface of the ceramic multilayer body; and conductive layers having a belt shape, disposed between the ceramic layers and stacked on both end portions of the heat-generating resistor in such a manner that one end of each conductive layer is at the side surface. Each conductive layer includes a first conductive layer that extends to the side surface and a second conductive layer that is adjacent to the first conductive layer, each of the first conductive layer and the second conductive layer being formed of a plurality of grains, the grains of the first conductive layer having an average grain diameter smaller than an average grain diameter of the grains of the second conductive layer.

IPC 8 full level  
**H05B 3/02** (2006.01); **H05B 3/06** (2006.01); **H05B 3/12** (2006.01); **H05B 3/14** (2006.01); **H05B 3/18** (2006.01); **H05B 3/48** (2006.01)

CPC (source: EP)  
**F23Q 7/001** (2013.01); **H05B 3/02** (2013.01); **H05B 3/06** (2013.01); **H05B 3/12** (2013.01); **H05B 3/14** (2013.01); **H05B 3/18** (2013.01);  
**H05B 3/48** (2013.01); **H05B 2203/027** (2013.01)

Cited by  
EP4018127A4; WO2021034748A1

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

DOCDB simple family (publication)  
**EP 3136819 A1 20170301**; **EP 3136819 A4 20171227**; **EP 3136819 B1 20200506**; CN 106105384 A 20161109; CN 106105384 B 20190802;  
JP 6027289 B2 20161116; JP WO2015163483 A1 20170420; WO 2015163483 A1 20151029

DOCDB simple family (application)  
**EP 15782910 A 20150427**; CN 201580012328 A 20150427; JP 2015062651 W 20150427; JP 2016515248 A 20150427