

Title (en)

HEATING DEVICE, HEATER STATE ESTIMATING DEVICE, AND HEATER STATE ESTIMATING METHOD

Title (de)

HEIZVORRICHTUNG, HEIZZUSTANDSSCHÄTZVORRICHTUNG UND HEIZZUSTANDSSCHÄTZVERFAHREN

Title (fr)

DISPOSITIF DE CHAUFFAGE, DISPOSITIF D'ESTIMATION DE L'ÉTAT D'UN DISPOSITIF DE CHAUFFAGE ET PROCÉDÉ D'ESTIMATION DE L'ÉTAT D'UN DISPOSITIF DE CHAUFFAGE

Publication

EP 3096000 A3 20161221 (EN)

Application

EP 16164940 A 20160412

Priority

JP 2015100775 A 20150518

Abstract (en)

[origin: EP3096000A2] To improve accuracy of detecting the state of a heater, such as abnormality of a heating unit, wear of a base, and the like. A heating device includes: a heater including an electric conductor, a heating unit that generates heat by energization, and a ceramic base that holds the electric conductor and the heating unit so that the electric conductor and the heating unit are buried in the ceramic base so as to be isolated from each other; and an energization unit that causes the heater to generate heat by energizing the heating unit. The heating device includes: a detection unit that detects an electric resistance of the base between the electric conductor and the heating unit; and an estimation unit that estimates a state of the heater on the basis of the electric resistance detected by the detection unit when the heating unit is energized under a predetermined condition.

IPC 8 full level

F02P 19/02 (2006.01); **F23Q 7/00** (2006.01)

CPC (source: EP)

F02P 19/02 (2013.01); **F23Q 7/001** (2013.01)

Citation (search report)

- [X] DE 3742102 A1 19890622 - BERU WERK RUPRECHT GMBH CO A [DE]
- [X] DE 102013200277 A1 20140130 - EGO ELEKTRO GERAETEBAU GMBH [DE]
- [XI] DE 19737396 A1 19980319 - DENSO CORP [JP]
- [A] EP 1136697 A2 20010926 - NGK SPARK PLUG CO [JP]

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)

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