

Title (en)

ELECTRIC HEATING DEVICE AND EXHAUST PURIFICATION SYSTEM FOR AN INTERNAL COMBUSTION ENGINE

Title (de)

ELEKTRISCHE HEIZVORRICHTUNG UND ABGASREINIGUNGSSYSTEM FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)

DISPOSITIF DE CHAUFFAGE ÉLECTRIQUE ET SYSTÈME DE PURIFICATION D'ÉCHAPPEMENT POUR UN MOTEUR À COMBUSTION INTERNE

Publication

EP 2947288 A1 20151125 (EN)

Application

EP 15169010 A 20150522

Priority

JP 2014107054 A 20140523

Abstract (en)

Inside a casing (10), a support member (20) is fastened, at the upstream side of the support member, a first electric type heat generating member (30a) is arranged, and at a downstream side of the support member, a second electric type heat generating member (30b) is arranged. Each heat generating member is provided with an outer tube and a strip-shaped heat generating element. Each outer tube is arranged in the casing so that its center axial line is parallel to a longitudinal axial line of the casing. Each heat generating element has two end parts which are fastened to an inner circumferential surface of the corresponding outer tube and an intermediate part which extends between the two end parts without being fastened to the corresponding outer tube. Each intermediate part is wound about a winding axial line which is parallel to the center axial line of the corresponding outer tube. Supporters are provided which run from the first heat generating member through the support member to the second heat generating member. The supporters are fastened to the intermediate part of the first heat generating member and the intermediate part of the second heat generating member, whereby the first heat generating member and the second heat generating member are supported by the support member via the supporters.

IPC 8 full level

F01N 3/027 (2006.01)

CPC (source: EP)

F01N 3/027 (2013.01); **F01N 2240/16** (2013.01)

Citation (applicant)

JP H11500205 A 19990106

Citation (search report)

- [IA] DE 102007025417 A1 20081204 - EMITEC EMISSIONSTECHNOLOGIE [DE]
- [IA] GB 2313559 A 19971203 - EMITEC EMISSIONSTECHNOLOGIE [DE] & JP H11500205 A 19990106
- [A] WO 2008062916 A1 20080529 - IL JIN ELECTRIC CO LTD [KR], et al

Cited by

FR3108678A1; US11352925B2; WO2023046631A1

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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