

Title (en)

STATOR HOUSING FOR AN ELECTRICAL MACHINE, ELECTRICAL MACHINE FOR A VEHICLE, AND VEHICLE

Title (de)

STATORGEHÄUSE FÜR EINE ELEKTRISCHE MASCHINE, ELEKTRISCHE MASCHINE FÜR EIN FAHRZEUG UND FAHRZEUG

Title (fr)

CARTER DE STATOR DESTINÉ À UNE MACHINE ÉLECTRIQUE, MACHINE ÉLECTRIQUE DESTINÉE À UN VÉHICULE ET VÉHICULE

Publication

EP 4073910 A1 20221019 (DE)

Application

EP 20820359 A 20201203

Priority

- DE 102019133548 A 20191209
- EP 2020084361 W 20201203

Abstract (en)

[origin: WO2021115895A1] Stator housing (2) for an electrical machine (1), comprising an inlet (9) for a cooling fluid, an outlet (10) for the cooling fluid, a cooling duct (11) which is formed between the inlet (9) and the outlet (10) and through which the cooling fluid can flow in a direction of flow directed from the inlet (9) to the outlet (10), wherein the cooling duct (11) has a first heat transfer arrangement (12) and a second heat transfer arrangement (13) which each extend along the direction of flow and are designed to transfer heat from the cooling fluid to the stator housing (2), wherein the first heat transfer arrangement (12) is arranged in a first section (16) of the cooling duct (11) and the second heat transfer arrangement (13) is arranged in a second section (17) of the cooling duct (11) that is on the inlet side with respect to the first section (16), wherein the first heat transfer arrangement (12) in the first section (16) creates a larger heat transfer area for the cooling fluid per unit of length based on the direction of flow than the second heat transfer arrangement (13) in the second section (17).

IPC 8 full level

H02K 5/20 (2006.01)

CPC (source: EP KR US)

H02K 1/20 (2013.01 - KR US); **H02K 5/203** (2021.01 - EP KR); **H02K 9/19** (2013.01 - US); **H02K 9/193** (2013.01 - KR); **B60K 2001/006** (2013.01 - KR); **H02K 2205/09** (2013.01 - KR)

Citation (search report)

See references of WO 2021115895A1

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 102019133548 A1 20210610; CN 114788144 A 20220722; EP 4073910 A1 20221019; JP 2023505809 A 20230213; KR 20220109412 A 20220804; US 2023013463 A1 20230119; WO 2021115895 A1 20210617

DOCDB simple family (application)

DE 102019133548 A 20191209; CN 202080084804 A 20201203; EP 2020084361 W 20201203; EP 20820359 A 20201203; JP 2022534863 A 20201203; KR 20227019383 A 20201203; US 202017783371 A 20201203