

Title (en)
STATOR FOR AN ELECTRIC MOTOR

Title (de)
STATOR FÜR ELEKTROMOTOR

Title (fr)
STATOR POUR MOTEUR ÉLECTRIQUE

Publication
EP 4078770 A1 20221026 (FR)

Application
EP 20828544 A 20201202

Priority
• FR 1914705 A 20191218
• FR 2020052244 W 20201202

Abstract (en)
[origin: WO2021123536A1] The invention relates to a stator (10) for an electric motor, comprising: • - a stator (10) body (12) forming a ring, the inner face of which is provided with teeth delimiting in pairs a plurality of notches open towards the interior of the stator (10) body (12); • - a plurality of U-shaped conductor segments (14) partially inserted into the notches of the stator (10) body (12); • - electrical connection means for electrically connecting the conductor segments (14) to one another; characterized in that the stator (10) additionally comprises a housing (16) for the circulation of a cooling fluid, said housing (16) comprising a first fluid-circulation channel (162), termed inlet channel, and a second fluid-circulation channel (164), termed outlet channel, said inlet and outlet channels (162, 164) being fluidically connected by a plurality of connection channels, each connection channel being formed by a central cavity passing through each conductor segment (14) over the entire length thereof, said central cavity extending from an inlet end to an outlet end, the inlet end opening into said inlet channel (162), and the outlet end opening into said outlet channel (164).

IPC 8 full level
H02K 1/16 (2006.01); **H02K 3/14** (2006.01); **H02K 3/22** (2006.01); **H02K 3/24** (2006.01); **H02K 3/50** (2006.01); **H02K 9/19** (2006.01)

CPC (source: EP US)
H02K 1/16 (2013.01 - EP US); **H02K 3/14** (2013.01 - EP US); **H02K 3/22** (2013.01 - EP US); **H02K 3/24** (2013.01 - EP US); **H02K 3/50** (2013.01 - EP US); **H02K 5/203** (2021.01 - US); **H02K 2203/09** (2013.01 - EP US)

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

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
FR 3105631 A1 20210625; FR 3105631 B1 20230526; EP 4078770 A1 20221026; US 2023072181 A1 20230309; WO 2021123536 A1 20210624

DOCDB simple family (application)
FR 1914705 A 20191218; EP 20828544 A 20201202; FR 2020052244 W 20201202; US 202017787750 A 20201202