

Title (en)  
STATOR FOR AN ELECTRIC MACHINE, AND ELECTRIC MACHINE

Title (de)  
STATOR FÜR EINE ELEKTRISCHE MASCHINE UND ELEKTRISCHE MASCHINE

Title (fr)  
STATOR POUR UNE MACHINE ÉLECTRIQUE ET MACHINE ÉLECTRIQUE

Publication  
**EP 4264797 A1 20231025 (DE)**

Application  
**EP 21840901 A 20211217**

Priority

- DE 102020216149 A 20201217
- EP 2021086637 W 20211217

Abstract (en)  
[origin: WO2022129601A1] The invention relates to a stator (1) which has  $N \geq 3$  phases (U, V, W),  $P \geq 2$  pole pairs and a number of holes  $q = 2$  and comprises a stator core (2) with a large number of grooves (3) and a large number of shaped conductors (4), wherein: – the shaped conductors (4), per phase (U, V, W), form a first and a second path (15a, 15b) and are located in 2-P winding regions (30) which are each divided into a first and a second winding sub-region (31a, 31b); – the shaped conductors (4) of a particular path (15a, 15b) are connected by connectors (8, 10), which connect shaped conductors (4) in adjacent winding regions (30) of the same phase (U, V, W) alternately at two axial end faces (8, 10), to form a series connection with a first end shaped conductor (28a, 28b) and a second end shaped conductor (29a, 29b); – the shaped conductors (4) of a particular path (15a, 15b) form a first to third portion (16a-c, 17a-c) of shaped conductors (4) which are successive in each case with respect to the series connection; – the first portion (16a, 17a) comprises the first end shaped conductor (28a, 28b) and the third portion (16c, 17c) comprises the second end shaped conductor (29a, 29b), and – the shaped conductors (4) of the first portion (16a, 17a) and the third portion (16c, 17c) are located in one of the winding sub-regions (31a, 31b), and shaped conductors (4) of the second portion (16b, 17b), which are on the outside at least with respect to the series connection, are located in the other of the winding sub-regions (31a, 31b).

IPC 8 full level  
**H02K 3/28** (2006.01); **H02K 15/00** (2006.01)

CPC (source: EP US)  
**H02K 1/165** (2013.01 - US); **H02K 3/12** (2013.01 - US); **H02K 3/28** (2013.01 - EP US); **H02K 15/0087** (2013.01 - EP);  
**H02K 2213/03** (2013.01 - US)

Citation (search report)  
See references of WO 2022129601A1

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)  
**WO 2022129601 A1 20220623**; CN 116670982 A 20230829; DE 102020216149 A1 20220623; EP 4264797 A1 20231025;  
US 2024030769 A1 20240125

DOCDB simple family (application)  
**EP 2021086637 W 20211217**; CN 202180085542 A 20211217; DE 102020216149 A 20201217; EP 21840901 A 20211217;  
US 202118257472 A 20211217