

Title (en)

AXIAL FLUX MACHINE COMPRISING MECHANICALLY FIXED STATOR CORES HAVING RADIALLY EXTENDING SHEET METAL SEGMENTS

Title (de)

AXIALFLUSSMASCHINE MIT MECHANISCH FIXIERTEN STATORKERNEN MIT RADIAL VERLAUFENDEN BLECHSEGMENTEN

Title (fr)

MACHINE À FLUX AXIAL COMPRENANT DES NOYAUX DE STATOR MÉCANIQUEMENT FIXES AYANT DES SEGMENTS DE FEUILLE MÉTALLIQUE S'ÉTENDANT RADIALEMENT

Publication

**EP 4070435 A1 20221012 (DE)**

Application

**EP 20807654 A 20201103**

Priority

- DE 102019133038 A 20191204
- DE 102020101149 A 20200120
- DE 2020100935 W 20201103

Abstract (en)

[origin: WO2021110197A1] The invention relates to an axial flux machine (1) comprising an annular stator (2) and two rotor elements (4a, 4b) mounted rotatably relative to the stator (2) about an axis of rotation (3), wherein a first rotor element (4a) is arranged axially adjacent to a first end face (5a) of the stator (2) and a second rotor element (4b) is arranged axially adjacent to a second end face (5b) of the stator (2), and wherein the stator (2) has a plurality of stator cores (6) distributed in a circumferential direction of a circular line extending about the axis of rotation (3), wherein at least one stator core (6) has a plurality of radially extending guide segments (7) that are stacked on top of one another in the circumferential direction and are of plate-like design, wherein at least a partial quantity of the guide segments (7) have, on the radial outer side (8) thereof and/or the radial inner side (9) thereof, a retaining contour (10a, 10b) accommodated in an interlocking manner on at least one supporting region (11, 12) fixed to the housing.

IPC 8 full level

**H02K 1/14** (2006.01); **H02K 1/18** (2006.01); **H02K 16/02** (2006.01); **H02K 21/24** (2006.01)

CPC (source: EP US)

**H02K 1/14** (2013.01 - EP); **H02K 1/182** (2013.01 - US); **H02K 16/02** (2013.01 - EP); **H02K 21/24** (2013.01 - EP US)

Citation (search report)

See references of WO 2021110197A1

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 102020101149 A1 20210610**; CN 114731068 A 20220708; EP 4070435 A1 20221012; US 2023006485 A1 20230105; WO 2021110197 A1 20210610

DOCDB simple family (application)

**DE 102020101149 A 20200120**; CN 202080081401 A 20201103; DE 2020100935 W 20201103; EP 20807654 A 20201103; US 202017782183 A 20201103