

Title (en)

STATOR FOR AN ELECTRIC MACHINE WITH A STRIP-LIKE WINDING UNIT FOR A STATOR WINDING, AND METHOD FOR PRODUCING SAME

Title (de)

STATOR FÜR EINE ELEKTRISCHE MASCHINE MIT BANDFÖRMIGER WICKLUNGSEINHEIT FÜR EINE STATORWICKLUNG UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

STATOR POUR UNE MACHINE ÉLECTRIQUE AYANT UNE UNITÉ D'ENROULEMENT SOUS FORME DE RUBAN POUR UN ENROULEMENT DE STATOR ET SON PROCÉDÉ DE FABRICATION

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Application

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Abstract (en)

[origin: WO2020228890A1] 1. The invention relates to a stator (10) for an electric machine, comprising a stator core (11) and a stator winding (20), wherein the stator core (11) has a plurality of slots, which are spaced apart in a circumferential direction and have a depth running in the radial direction, and allows the arrangement of slot sections (3) of the stator winding (20) in a plurality of radially spaced-apart radial positions (RR), wherein the stator (10) has a strip-like winding unit (1, 1', 1'', 1''', 1'''') (20) comprising a first and a second winding conductor (2, 2'), wherein the two winding conductors run in a first and a second layer (L1, L2) of the winding unit (1, 1', 1'', 1''', 1'''') and each comprise: a. a plurality of straight slot sections (3) which run in a transverse direction (Q) of the winding unit (1, 1', 1'', 1''', 1'''') and are arranged in parallel, b. a plurality of first bent end sections (5) which each interconnect two slot sections (3) of the associated winding conductor and are arranged on a first longitudinal side of the winding unit (1, 1', 1'', 1''', 1''''), c. a plurality of second bent end sections (6) which each interconnect two slot sections (3) of the associated winding conductor and are arranged on a second longitudinal side of the winding unit (1, 1', 1'', 1''', 1''''), which second longitudinal side is situated opposite the first longitudinal side, wherein d. the first and the second bent end sections (5, 6) each interconnect a slot section (3) of the associated winding conductor (2, 2') in the first layer (L1) and a slot section (3) of the associated winding conductor in the second layer (L2), e. wherein a first slot section (3) is arranged in a first slot in a first radial position, and a second slot section (3), which is directly connected to the first slot section (3) by a first end section (5), is arranged in a second slot in a second radial position which is offset by two radial positions in relation to the first radial position.

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