Title (en)

STATOR FOR A ROTARY ELECTRIC MACHINE, METHOD FOR PRODUCING THE STATOR, AND ROTARY ELECTRIC MACHINE

Title (de)

STATOR FÜR EINE ELEKTRISCHE ROTATIONSMASCHINE, VERFAHREN ZUR HERSTELLUNG DES STATORS UND ELEKTRISCHE ROTATIONSMASCHINE

Title (fr)

STATOR POUR MACHINE TOURNANTE ÉLECTRIQUE, PROCÉDÉ DE FABRICATION DU STATOR ET MACHINE TOURNANTE ÉLECTRIQUE

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Application

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Abstract (en)

[origin: WO2022073544A1] The invention relates to a stator for a rotary electric machine, a method for producing the stator, and the rotary electric machine itself. The stator (10) comprises: a stator body (11), which has a plurality of stator teeth (12) arranged in a circumferential direction (14); grooves (15) formed between the stator teeth (12); and conductor sections, arranged in the grooves (15), of at least one conductor pair (30) which forms at least a portion of windings (20) of the stator (10), wherein, in each groove (15), conductor sections of the conductor pair (30) are arranged along the depth (16) of the groove (15) so as to be parallel to and offset from one another and the sequence of the arrangement of the parallel conductor sections in each groove (15), through which the conductors run, alternates in the circumferential direction (14), and wherein the conductors of the conductor pair (30), deviating from a winding direction (21) extending basically in the circumferential direction, meander in a radial direction in a direction extending substantially perpendicular to the circumferential direction (14) and, by means of an enlacement formed thereby in each case, enlace around one group (13) of stator teeth (12). The stator according to the invention, the method for the production thereof, and the rotary electric machine equipped therewith enable a high power density and a high degree of efficiency to be combined with low installation space requirements for the winding heads.

IPC 8 full level

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