

Title (en)

ROTOR, ELECTRIC MOTOR, METHOD FOR PRODUCING A ROTOR AND USE OF A ROTOR AND ELECTRIC MOTOR

Title (de)

ROTOR, ELEKTROMOTOR, VERFAHREN ZUR HERSTELLUNG EINES ROTORS SOWIE VERWENDUNG EINES ROTORS BZW. ELEKTROMOTORS

Title (fr)

ROTOR, MOTEUR ÉLECTRIQUE, PROCÉDÉ DE FABRICATION D'UN ROTOR ET UTILISATION D'UN ROTOR ET/OU D'UN MOTEUR ÉLECTRIQUE

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Application

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Abstract (en)

[origin: WO2020020787A1] The present invention relates to a rotor (R), comprising a shaft (1) having a longitudinal axis (L) and a rotor stack (2) connected at least in a rotationally secure manner to the shaft (1), wherein the rotor stack (2) is composed of individual sheet-metal laminates (21), wherein the rotor stack (2) is provided with an opening (22) for receiving the shaft (1), wherein the shaft (1) is a hollow shaft with a wall (11), wherein the wall (11) of the shaft (1) is provided on its side facing the opening (22) with recesses (12) running in the longitudinal direction, to an electric motor, in particular a synchronous or hybrid synchronous machine, comprising a rotor (R) and a stator (S), characterized by a rotor (R) according to at least one of the preceding claims, to a method for producing a rotor (R) according to at least one of the preceding claims, wherein the recess (12) is produced by machining processes, in particular milling, or forming processes, in particular pressing, and to a use of a rotor (R), in particular an electric motor having a rotor, according to at least one of the preceding claims, wherein the circumferential stiffness is reduced by way of the recesses (12), and/or wherein the recesses (12) are used as flux barriers for directing a magnetic field, and/or wherein the recesses (12) are supplied with a cooling medium.

IPC 8 full level

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