

Title (en)

COOLING DEVICE FOR A STATOR OF AN ELECTRIC MACHINE OF A MOTOR VEHICLE, STATOR, AND MOTOR VEHICLE

Title (de)

KÜHLVORRICHTUNG FÜR EINEN STATOR EINER ELEKTRISCHEN MASCHINE EINES KRAFTFAHRZEUGS, STATOR SOWIE KRAFTFAHRZEUG

Title (fr)

DISPOSITIF DE REFROIDISSEMENT D'UN STATOR D'UNE MACHINE ÉLECTRIQUE D'UN VÉHICULE AUTOMOBILE, STATOR ET VÉHICULE AUTOMOBILE

Publication

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Application

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Abstract (en)

[origin: WO2019081112A1] The invention relates to a cooling device (9) for cooling a stator (1) for an electric machine of a motor vehicle, having a coolant-conducting unit (10) and at least one winding groove cooling channel (11). The coolant-conducting unit (10) and the at least one winding groove cooling channel (11) are designed as a structural unit and are designed to be connectable to a hollow-cylindrical lamination stack (2) of the stator (1) having, in a circumferential direction (U), a plurality of winding grooves (6) which extend axially and are designed to receive windings of the stator (1). The coolant-conducting unit (6) is designed for arrangement on an end face (7) of the lamination stack (2) and for conducting coolant along the end face (7), and has an inlet (12) for supplying the coolant and an outlet (14) for discharging the coolant, and the at least one winding groove cooling channel (11) extending axially from the coolant unit (11) is designed for arrangement in at least one winding groove (6) and for conducting the coolant in the at least one winding groove (6), and is fluid-coupled to the inlet (12) and the outlet (13). The invention also relates to a stator (1) for an electric machine and to a motor vehicle.

IPC 8 full level

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