

Title (en)
MACHINE WITH TOROIDAL WINDING

Title (de)
MASCHINE MIT TOROIDWICKLUNG

Title (fr)
MACHINE À BOBINAGE TOROÏDAL

Publication
EP 4022742 A1 20220706 (FR)

Application
EP 20775041 A 20200826

Priority
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Abstract (en)
[origin: WO2021038168A1] The invention discloses an electric machine comprising a yoke supporting N toroidal coils and a central rotor comprising a permanent magnet. The yoke consists of a plurality of stator modules comprising at least one stator core made from a soft ferromagnetic material supporting at least one coil. The stator cores have, at their front ends, complementary coupling surfaces providing magnetic and mechanical continuity. This machine further comprises - a cylindrical outer casing made from a thermally conductive material, - a plurality of continuous and solid longitudinal ribs extending radially and positioned between the cylindrical outer casing and the stator modules, in order to ensure the mechanical positioning of the yoke relative to the outer casing and promote the thermal conduction of heat from the yoke towards the outer casing.

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See references of WO 2021038168A1

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