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Summary

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The patent of invention for "SUB-SYNCHRONOUS RELUCTANCE ELECTRICAL MACHINE" is defined by a stator 10 provided with a core comprised of an assembly of magnetically uncoupled or weakly coupled sectors 11 of ferromagnetic plates having longitudinal teeth 1 arranged on the face thereof turned towards the rotor 20 and provided with grooves 2 to house a winding 6. This winding 6 is comprised of a plurality of coils surrounding each sector 11 of the ferromagnetic material of stator 10 in a properly distributed manner, so as to generate a magnetic field whenever this winding is energized.

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The sub-synchronous reluctance electrical machine possesses as an integral part thereof said rotor 20 which in turn is provided with a core of magnetic plates having longitudinal teeth 21 uniformly arranged along the face thereof turned towards the stator 10, said teeth 21 being in a number different from the number of teeth 1 of stator 10. The machine is further provided with a monitoring device 4, for relative identification of the teeth of rotor 20 and stator 10, in order to allow the achievement of a maximum torque.

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