

Title (en)
ELECTRIC MACHINE COMPRISING A SINGLE-TOOTH WINDING WITH GROUPED PHASES

Title (de)
ELEKTRISCHE MASCHINE MIT EINER EINZELZAHNWICKLUNG MIT GRUPPIERTEN PHASEN

Title (fr)
MACHINE ELECTRIQUE A BOBINAGE DENTAIRE A PHASES REGROUPEES

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Application
EP 11794542 A 20111110

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Abstract (en)
[origin: WO2012063002A2] The invention relates to an electrodynamic machine operating a generator, comprising (i) a stator and a rotor, the stator comprising a number N_s of slots surrounding teeth facing the air gap, and the rotor comprising a number N_r of magnets, and (ii) a stator winding with a number p of winding pole pairs arranged in the slots of the stator, and comprising N groups of m phases, according to which (i) the stator winding comprises a plurality of single-tooth windings arranged in the slots of the stator in such a way that they surround the teeth, (ii) the machine satisfies all of the following relations: $N_s = Q.m.N.p$; $N_r = k.p$, and (iii) the groups of phases are arranged on the stator in such a way that any two phases pertaining to two consecutive groups of phases on said stator are separated by an electrical angle substantially equal to $\alpha = \pm (180 / (N.m) + c.360 / m)$, where c is a whole number.

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