

Title (en)
EFFICIENCY-OPTIMISED SYNCHRONOUS MACHINE

Title (de)
WIRKUNGSGRADOPTIMIERTE SYNCHRONMASCHINE

Title (fr)
MACHINE SYNCHRONE À RENDEMENT OPTIMISÉ

Publication
EP 2636125 A1 20130911 (DE)

Application
EP 11749450 A 20110902

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Abstract (en)
[origin: WO2012059258A1] The invention relates to an electric synchronous machine (1), which comprises a rotor (3) having a plurality of poles (7). The pole width corresponds to an angle of 360° divided by the plurality of poles (7). Each pole (7) comprises a first magnet (11) and a second magnet (13) having a common magnet width (15). The magnet width (15) corresponds here to an angle that is formed between a first secant (16) and a second secant (17). The first secant (16) runs through the midpoint (19) of the rotor (3) and through a point (23) of the first magnet (11) lying closest to the rotor edge (21). The second secant (17) runs through the midpoint (19) of the rotor (3) and through a point (25) of the second magnet (13) lying closest to the rotor edge (21). The magnet width (15) amounts here to less than 75% of the pole width (9).

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