

Title (en)  
ROTATING ELECTRIC MACHINE FOR FULL-WAVE CONTROL AND WITH PULSE-WIDTH MODULATION AND ELECTRICAL ASSEMBLY

Title (de)  
ROTIERENDE ELEKTRISCHE MASCHINE ZUR VOLLWELLENSTEUERUNG UND MIT PULSWEITENMODULATION SOWIE ELEKTRISCHE ANORDNUNG

Title (fr)  
MACHINE ÉLECTRIQUE TOURNANTE POUR CONTRÔLE PLEINE ONDE ET À MODULATION DE LARGEUR D'IMPULSION ET ENSEMBLE ÉLECTRIQUE

Publication  
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Application  
**EP 21830657 A 20211206**

Priority  
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Abstract (en)  
[origin: WO2022122653A1] The invention relates to a rotating electrical machine comprising: - a stator (2) comprising a rotor body (9) and a winding (8), the winding (8) passing in the notches (21) of the rotor body (9), the notches having an isthmus, - a rotor (3) comprising a rotor body (24) with cavities (33, 34, 35, 36, 38, 39) and permanent magnets (14, 15, 27, 28, 29, 30, 31, 32), disposed in the cavities, forming magnetic poles (25, 26) having a central axis (d), a quadrature axis (q) being equidistant from two successive central axes (d), the ratio (C1) between the width of the isthmus and the width of the notch (21) being greater than or equal to 0.40 and less than or equal to 0.7, the ratio (C2) between an air gap at the central axis and an air gap at the quadrature axis being greater than or equal to 0.8 and less than or equal to 1.5. The invention also relates to an electrical assembly comprising such a rotating electrical machine and an inverter.

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