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(54) **ROTATING ELECTRICAL MACHINE**

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(57) **ABSTRACT**

A rotating electrical machine includes a stator and a rotor, the rotor includes a rotor core and a plurality of magnetic poles, the plurality of magnetic poles includes a plurality of magnet poles formed by permanent magnets, and a plurality of dummy poles, the magnet poles and the dummy poles are alternately disposed in both an axial direction and a circumferential direction, non-magnetic holes are provided between the magnet poles and the dummy poles that are adjacent in the axial direction, and when a length of each magnet pole in the axial direction is tm, a length of each dummy pole in the axial direction is tc, a length of each non-magnetic hole in the axial direction is ta, and a length of the rotor core in the axial direction is lc, the rotating electrical machine satisfies tm>tc and lc<(2×tm)+ta.