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Salk et al.(10) **Pub. No.: US 2022/0360129 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **SLOTLESS ELECTRIC MOTOR HAVING
IMPROVED COOLING****Publication Classification**(51) **Int. Cl.****H02K 3/47** (2006.01)**H02K 9/22** (2006.01)**H02K 15/06** (2006.01)(52) **U.S. Cl.****CPC** **H02K 3/47** (2013.01); **H02K 9/227**
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ABSTRACT

A slotless electric motor provides a ferromagnetic yoke that includes laminations of a ferromagnetic material interspersed with a high thermal conductivity nonferromagnetic material to greatly reduce the thermal resistance of this yoke. A thermally conductive coil form provides heat conduction paths on three sides of the coils to this yoke which may in turn attach to a heatsink providing fins that vary angularly along the axis and radius of the heatsink.

