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(54) **COOLING FOR AN ELECTRIC DRIVE OF AN AIRCRAFT**

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(57) **ABSTRACT**

An electric drive with a fan for an aircraft, wherein the electric drive comprises an electric machine, in particular a permanently excited electric machine, with a stator and a rotor, and the propeller comprises a shaft and rotor blades, wherein the rotor blades are attached to the shaft, the rotor comprises a laminated core and magnets, wherein the laminated core forms an annular arrangement around the shaft, and the rotor blades, the shaft, the laminated core and the magnets are connected in a thermally conductive manner so that the rotor blades form a heat sink for the magnets.

