

Title (en)

ELECTRIC MACHINE HAVING A SENSOR DEVICE FOR DETECTING THE ROTOR POSITION

Title (de)

ELEKTRISCHE MASCHINE MIT EINER SENSOREINRICHTUNG ZUR ROTORLAGEERKENNUNG

Title (fr)

MACHINE ÉLECTRIQUE COMPORTANT UN DISPOSITIF DE DÉTECTION DE LA POSITION D'UN ROTOR

Publication

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Application

**EP 14801971 A 20141111**

Priority

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Abstract (en)

[origin: WO2015074914A2] The invention relates to an electric machine, in particular an electric motor, comprising a stator (6) and a rotor (5) and a stationary sensor device (1-4) for sensing the relative position between the stator and the rotor, wherein the sensor device comprises a flux-conducting element (3) and a magnetic sensor element (2) and the magnetic flux of a magnet revolving with the rotor (5) can be conducted to the sensor element (2) by means of the flux-conducting element, wherein the sensor element (2) is arranged at a distance from the rotor (5) and an air gap located between the sensor element (2) and the rotor (5) is bridged by the flux-conducting element, and wherein the sensor element (2) is arranged directly on a circuit board (1). According to the invention, the flux-conducting element is as simple to produce as possible, in that the flux-conducting element has a single ferromagnetic pin (3), which is arranged parallel to the axis of rotation of the rotor (5), wherein an end of the pin (3) is located in close proximity to the sensor element (2).

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