

Title (en)
METHOD FOR PRODUCING A BLDC MOTOR

Title (de)
VERFAHREN ZUM HERSTELLEN EINES BLDC-MOTORS

Title (fr)
PROCÉDÉ POUR FABRIQUER UN MOTEUR SANS BALAIS À COURANT CONTINU

Publication
EP 2769460 A2 20140827 (DE)

Application
EP 12784498 A 20121015

Priority
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• EP 2012070371 W 20121015

Abstract (en)
[origin: WO2013057064A2] A stator with coils (3) associated with at least two different phases is provided. A rotor comprising a shaft (5) and rotor magnets (7) arranged on the latter is provided. The rotor is arranged in a cavity of the stator. The shaft (5) is mounted using a first bearing (23) which is arranged between the shaft (5) and the stator. A carrier element (13) is provided, the latter having a recess which is penetrated by the shaft (5) and has a surface which is formed orthogonally with respect to the shaft (5) and on which a plurality of Hall sensors (15) are arranged with an angular offset to one another with respect to the centre point of the shaft (5). The carrier element (13) is arranged such that it is fixed with respect to the stator. A permanent magnet wheel (9) with transducer magnets (11) arranged with an angular offset is prefixed on the shaft (5). The shaft (5) is caused to rotate. Measurement signal profiles of the Hall sensors (15) are recorded and measurement signal profiles which are representative of voltages induced in the coils (3) on the basis of the rotor magnets (7) are recorded. An adjustment angle for the permanent magnet wheel (9) is determined on the basis of the measurement signal profiles of the Hall sensors (15) and the temporally correlating measurement signal profiles which are representative of voltages induced in the coils (3). The permanent magnet wheel (9) is rotated with respect to the shaft (5) according to the adjustment angle determined. The permanent magnet wheel (9) is then fixed on the shaft (5).

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