

Title (en)

BRUSH-COMMUTATED DC ELECTRIC MOTOR WITH IMPROVED VIBRATION BEHAVIOUR

Title (de)

BÜRSTENKOMMUTIERTER DC-ELEKTROMOTOR MIT VERBESSERTEM SCHWINGUNGSVERHALTEN

Title (fr)

MOTEUR ÉLECTRIQUE À COURANT CONTINU À COMMUTATION PAR BALAIS DOTÉ D'UN COMPORTEMENT VIBRATOIRE AMÉLIORÉ

Publication

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Application

EP 20830268 A 20201223

Priority

- EP 19219406 A 20191223
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Abstract (en)

[origin: WO2021130312A1] The present invention relates to a brush-commutated DC electric motor, having a stator, which comprises a permanent magnet with a number p of pole pairs, and having a rotor, which can rotate in relation to the stator and has a hollow-cylindrical iron-free winding with a geometric axis and a number Q of sub-coils, and also has a collector with a number K of collector laminations, wherein the sub-coils are arranged distributed over the periphery of the rotor, and wherein the brush-commutated DC electric motor further has at least one pair of brushes which are in contact with the collector and by means of which the sub-coils are energized. According to the invention, provision is made for the arrangement of the brushes and the interconnection of the sub-coils to be selected in such a way that in each case a number $n \geq 2$ of sub-coils, which each are arranged offset by $360^\circ/n$ in a rotationally symmetrical manner with respect to the axis of the rotor, are always supplied with the same current at the same time.

IPC 8 full level

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Citation (search report)

See references of WO 2021130312A1

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