

Title (en)

BRUSH-COMMUTATED DIRECT-CURRENT MOTOR

Title (de)

BÜRSTENKOMMUTIERTER GLEICHSTROMMOTOR

Title (fr)

MOTEUR À COURANT CONTINU À COMMUTATION À BALAIS

Publication

EP 3180841 A1 20170621 (DE)

Application

EP 15748253 A 20150812

Priority

- DE 102014215974 A 20140812
- EP 2015068509 W 20150812

Abstract (en)

[origin: WO2016023930A1] A brush-commutated direct-current motor comprises a stator having a plurality of exciter poles, a rotor which can be rotated relative to the stator about an axis of rotation, a plurality of pole teeth which are arranged on the rotor, and grooves arranged between the pole teeth, the pole teeth being separated from each other by the grooves along a circumferential direction about the axis of rotation. Coil windings are arranged on the pole teeth. A commutator is arranged on the rotor and has a plurality of lamellae, each coil winding being connected to one of the lamellae via a first connecting arm and to one of the other lamellae via a second connecting arm. Every pole tooth (Z1-Z9) carries a first coil winding (Z1I-Z9I) which is wound about the pole tooth (Z1-Z9) in a first direction of winding and a second coil winding (Z1r-Z9r) which is wound about the pole tooth (Z1-Z9) in a second direction of winding, which is opposite the first direction of winding, the first connecting arm (Z1I) and/or the second connecting arm (Z12) of the first coil winding (Z1I-Z9I) being guided to a respective lamella (L1-L18) about at least one other pole tooth (Z1-Z9). In this manner, a brush-commutated direct-current motor is devised which can be produced in a simple manner utilizing the available space and which has a good operating behavior.

IPC 8 full level

H02K 23/36 (2006.01); **H02K 15/095** (2006.01)

CPC (source: EP US)

H02K 1/265 (2013.01 - US); **H02K 3/28** (2013.01 - US); **H02K 13/04** (2013.01 - US); **H02K 23/28** (2013.01 - EP US);
H02K 23/34 (2013.01 - EP US)

Citation (search report)

See references of WO 2016023930A1

Citation (examination)

- EP 1489724 A1 20041222 - MORIC KK [JP]
- DE 10361811 A1 20050728 - BOSCH GMBH ROBERT [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

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US 10148146 B2 20181204; US 2017222509 A1 20170803; WO 2016023930 A1 20160218

DOCDB simple family (application)

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