

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 (Z11-Z9l) 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 (Zl1) and/or the second connecting arm (Zl2) of the first coil winding (Z11-Z9l) 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  
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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]

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

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