

Title (en)

SYSTEM COMPRISING DRIVE MOTORS FOR HAND-HELD POWER TOOLS

Title (de)

SYSTEM UMFASSEND ANTRIEBSMOTOREN FÜR HAND-WERKZEUGMASCHINEN

Title (fr)

SYSTÈME COMPRENANT DES MOTEURS D'ENTRAÎNEMENT POUR DES MACHINES-OUTILS PORTATIVES

Publication

EP 3963690 A1 20220309 (DE)

Application

EP 20724032 A 20200430

Priority

- DE 102019111332 A 20190502
- EP 2020062049 W 20200430

Abstract (en)

[origin: WO202221866A1] The invention relates to a system comprising a first drive motor (120) and a second drive motor (20). The drive motors (20, 120) are provided for a suction device (400) or a machine tool in the form of a hand-held power tool (200, 300) or a semi-stationary machine tool or form components of the suction device (400) or the machine tool. Each of the drive motors (20, 120) has a stator (80) with an excitation coil assembly (86) and a rotor (40, 140) with a motor shaft (30, 130) which is rotatably mounted about a rotational axis on the stator or relative to the stator (80) using a bearing assembly (24A) and which passes through a shaft through-opening (42, 142) of a laminated core (41, 141) held on a holding portion (33) of the respective motor shaft (30, 130). The holding portions (33) of the motor shafts (30, 130) of the drive motors (20, 120) have identical outer circumferential geometries in the region of the laminated cores (41, 141), wherein the laminated core (141) of the first drive motor (120) is supported directly on the outer circumference of the holding portion (33) of the motor shaft (30, 130) supporting the laminated core (141), and the laminated core (41) of the second drive motor (20) is supported on the holding portion (33) of the motor shaft (30, 130) supporting the laminated core (41) via an electrically insulating insulation element (60A).

IPC 8 full level

H02K 1/30 (2006.01); **H02K 1/02** (2006.01); **H02K 1/27** (2022.01); **H02K 5/15** (2006.01); **H02K 7/14** (2006.01)

CPC (source: EP US)

H02K 1/30 (2013.01 - EP US); **H02K 3/522** (2013.01 - EP US); **H02K 7/083** (2013.01 - US); **H02K 7/145** (2013.01 - EP US); **H02K 15/0062** (2013.01 - EP); **H02K 21/16** (2013.01 - US); **B25F 5/00** (2013.01 - US); **H02K 1/02** (2013.01 - EP); **H02K 1/276** (2013.01 - EP); **H02K 2213/03** (2013.01 - EP); **H02K 2213/12** (2013.01 - EP)

Citation (search report)

See references of WO 202221866A1

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)

DE 102019111332 A1 20201105; CN 114072990 A 20220218; EP 3963690 A1 20220309; JP 2022531520 A 20220707; US 2022209602 A1 20220630; WO 202221866 A1 20201105

DOCDB simple family (application)

DE 102019111332 A 20190502; CN 202080032686 A 20200430; EP 2020062049 W 20200430; EP 20724032 A 20200430; JP 2021529463 A 20200430; US 202017606895 A 20200430