

Title (en)

ASSEMBLY COMPRISING A BRUSH CAGE AND A SPIRAL SPRING AND CORRESPONDING BRUSH HOLDER, ELECTRIC MOTOR AND MOTOR VEHICLE STARTER

Title (de)

ANORDNUNG MIT EINEM BÜRSTENKÄFIG UND EINER SPIRALFEDER UND ENTSPRECHENDER BÜRSTENHALTER, ELEKTROMOTOR UND KRAFTFAHRZEUGANLASSER

Title (fr)

ENSEMBLE COMPORTANT UNE CAGE À BALAI ET UN RESSORT À SPIRALES, PORTE-BALAIS, MOTEUR ÉLECTRIQUE, ET DÉMARREUR DE VÉHICULE AUTOMOBILE CORRESPONDANTS

Publication

EP 3231046 A1 20171018 (FR)

Application

EP 15818000 A 20151210

Priority

- FR 1462293 A 20141212
- FR 2015053425 W 20151210

Abstract (en)

[origin: WO2016092223A1] The invention relates mainly to an assembly comprising a brush cage and a spiral spring (36), said spiral spring (36) comprising an axis (Y), a wound part (37) wound about said axis (Y) and an arm (39) extending from one end of said wound part (37), - said brush cage comprising at least one lateral wall provided with an opening for the passage of said arm (39) through said lateral wall so that one end of said arm (39) can press against at least part of an end face of a brush, characterized in that said arm (39) comprises a first portion (391) of which the width (L5) measured along said axis (Y) is different from the width (L6) of said wound part (37) measured along said axis (Y) of said spiral spring (36).

IPC 8 full level

H01R 39/59 (2006.01); **H01R 39/38** (2006.01); **H01R 39/415** (2006.01); **H02K 5/14** (2006.01)

CPC (source: CN EP US)

H01R 39/381 (2013.01 - EP US); **H01R 39/415** (2013.01 - CN EP US); **H01R 39/59** (2013.01 - CN EP US); **H02K 5/143** (2013.01 - CN EP US); **H02K 5/145** (2013.01 - US); **H02K 5/148** (2013.01 - EP US); **H01R 2201/10** (2013.01 - US); **H01R 2201/26** (2013.01 - US)

Citation (search report)

See references of WO 2016092223A1

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)

WO 2016092223 A1 20160616; CN 107005011 A 20170801; CN 107005011 B 20201023; EP 3231046 A1 20171018; FR 3030145 A1 20160617; FR 3030145 B1 20161209; JP 2018503019 A 20180201; US 10700485 B2 20200630; US 2017331242 A1 20171116

DOCDB simple family (application)

FR 2015053425 W 20151210; CN 201580067221 A 20151210; EP 15818000 A 20151210; FR 1462293 A 20141212; JP 2017531330 A 20151210; US 201515533861 A 20151210