

Title (en)

ELECTRICAL MACHINE HAVING A BRUSH ARRANGEMENT

Title (de)

ELEKTRISCHE MASCHINE MIT EINER BÜRSTENANORDNUNG

Title (fr)

MACHINE ÉLECTRIQUE POURVUE D'UN SYSTÈME DE BALAIS

Publication

EP 2430734 A1 20120321 (DE)

Application

EP 10710294 A 20100319

Priority

- EP 2010053589 W 20100319
- DE 102009003159 A 20090515

Abstract (en)

[origin: WO2010130488A1] An electrical machine, in particular an electric motor, has a first number (k) of commutator laminates (10, 12, 14) and brushes (16, 18), wherein the commutator laminates (10, 12, 14) are arranged distributed uniformly in the circumferential direction of a circumference of a laminate support (24). The brushes (16, 18) are arranged such that commutation times are distributed as uniformly as possible in order to reduce current ripple when using a wave winding and a number of brushes (16, 18) which is less than a number of poles (2p) in the electrical machine.

IPC 8 full level

H02K 23/32 (2006.01)

CPC (source: EP US)

H02K 13/10 (2013.01 - EP US); **H02K 23/32** (2013.01 - EP US)

Citation (search report)

See references of WO 2010130488A1

Citation (examination)

- US 4532449 A 19850730 - AOKI KANEMASA [JP]
- JP S55125069 A 19800926 - SEKOH GIKEN KK
- JP S62181651 A 19870810 - IGARASHI DENKI SEISAKUSHO KK
- FR 2837328 A1 20030919 - FAURECIA IND [FR]
- US 4437029 A 19840313 - BAN ITSUKI [JP], et al

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

DE 102009003159 A1 20101118; CN 102422513 A 20120418; CN 102422513 B 20150408; EP 2430734 A1 20120321;
JP 2012527207 A 20121101; JP 5535312 B2 20140702; US 2012133240 A1 20120531; US 8686612 B2 20140401;
WO 2010130488 A1 20101118

DOCDB simple family (application)

DE 102009003159 A 20090515; CN 201080021071 A 20100319; EP 10710294 A 20100319; EP 2010053589 W 20100319;
JP 2012510180 A 20100319; US 201013320592 A 20100319