

Title (en)

ELECTRIC MACHINE FOR SUPPLYING ENERGY TO A VEHICLE ON-BOARD NETWORK

Title (de)

ELEKTRISCHE MASCHINE ZUR ENERGIEVERSORGUNG EINES KRAFTFAHRZEUGBORDNETZES

Title (fr)

MOTEUR ÉLECTRIQUE PERMETTANT L'ALIMENTATION EN ÉNERGIE D'UN RÉSEAU DE BORD DE VÉHICULE AUTOMOBILE

Publication

EP 3172828 A1 20170531 (DE)

Application

EP 15739547 A 20150714

Priority

- DE 102014214717 A 20140725
- DE 102014222163 A 20141030
- EP 2015066020 W 20150714

Abstract (en)

[origin: WO2016012300A1] The invention relates to a method of operating an electric machine (100) having a first group (110) of stator windings (111, 112, 113) and a second group (210) of stator windings (211, 212, 213). In a first circuit configuration, equiphasic stator windings (111, 211; 112, 212; 113, 213) of the first and second groups (110, 210) of stator windings (111, 112, 113, 211, 212, 213) are switched in series between a first pair (410) of subnet terminals (411, 412); in a second circuit configuration, the equiphasic stator windings (111, 211; 112, 212; 113, 313) of the first and second groups (110, 210) of stator windings (111, 112, 113, 211, 212, 213) are switched in parallel between a second pair (420) of subnet terminals (421, 422); and, in a third circuit configuration, the stator windings (111, 112, 113) of the first group (110) of stator windings are switched between the first pair (410) of subnet terminals (411, 412) and the stator windings (211, 212, 213) of the second group (220) of stator windings are switched between the second pair (420) of subnet terminals (421, 422). The invention also relates to a correspondingly arranged electric machine (100).

IPC 8 full level

B60L 11/18 (2006.01); **B60R 16/03** (2006.01); **H02P 9/48** (2006.01); **H02P 25/22** (2006.01); **H02M 1/00** (2006.01)

CPC (source: EP US)

B60L 7/10 (2013.01 - EP US); **B60L 15/007** (2013.01 - EP US); **B60L 58/20** (2019.01 - EP US); **F02N 11/0814** (2013.01 - US);
H02M 3/33584 (2013.01 - US); **H02P 9/48** (2013.01 - EP US); **H02P 25/22** (2013.01 - EP US); **B60L 2220/58** (2013.01 - EP US);
B60R 16/03 (2013.01 - EP US); **H02M 1/008** (2021.05 - EP US); **Y02T 10/64** (2013.01 - EP US); **Y02T 10/70** (2013.01 - EP US)

Citation (search report)

See references of WO 2016012300A1

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 102014222163 A1 20160128; EP 3172828 A1 20170531; US 2017207738 A1 20170720; WO 2016012300 A1 20160128

DOCDB simple family (application)

DE 102014222163 A 20141030; EP 15739547 A 20150714; EP 2015066020 W 20150714; US 201515328301 A 20150714