

Title (en)

VOLTAGE CONVERTER, ELECTRICAL SYSTEM, MOTOR VEHICLE AND MANUFACTURING METHOD ASSOCIATED THEREWITH

Title (de)

SPANNUNGSWANDLER, ELEKTRISCHES SYSTEM, KRAFTFAHRZEUG UND HERSTELLUNGSVERFAHREN IM ZUSAMMENHANG DAMIT

Title (fr)

CONVERTISSEUR DE TENSION, SYSTÈME ÉLECTRIQUE, VÉHICULE AUTOMOBILE ET PROCÉDÉ DE FABRICATION ASSOCIÉS

Publication

EP 3646454 A1 20200506 (FR)

Application

EP 18734276 A 20180529

Priority

- FR 1755945 A 20170628
- FR 2018051243 W 20180529

Abstract (en)

[origin: WO2019002709A1] The voltage converter (104) includes first and second busbars (106, 108), at least one power module (110) including at least one pair of first and second controllable switches (112, 14). One capacitor is provided for each power module (110), this capacitor having a value of at least 500 microfarads, preferably at least 560 microfarads, and being located close enough to the controllable switches (112, 114) for the busbars (106, 108, 22) to define, for each pair of controllable switches (112, 114), a conduction pathway (408) starting at the first terminal of the capacitor, passing through each of these two controllable switches (112, 114) in succession and ending at the second terminal of the capacitor, this conduction pathway (408) having an inductance of at most 40 nanohenries, preferably at most 30 nanohenries.

IPC 8 full level

H02M 1/14 (2006.01); **H02M 5/458** (2006.01); **H02M 7/5387** (2007.01)

CPC (source: EP KR)

H02M 1/14 (2013.01 - EP KR); **H02M 5/4585** (2013.01 - EP KR); **H02M 7/003** (2013.01 - EP); **H02M 7/53871** (2013.01 - EP KR); **H02M 7/53875** (2013.01 - EP KR)

Citation (search report)

See references of WO 2019002709A1

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 2019002709 A1 20190103; CN 110832760 A 20200221; CN 110832760 B 20220607; EP 3646454 A1 20200506; FR 3068545 A1 20190104; FR 3068545 B1 20190719; JP 2020526171 A 20200827; JP 6926249 B2 20210825; KR 102329085 B1 20211119; KR 20200009075 A 20200129

DOCDB simple family (application)

FR 2018051243 W 20180529; CN 201880042769 A 20180529; EP 18734276 A 20180529; FR 1755945 A 20170628; JP 2019572597 A 20180529; KR 20197037624 A 20180529