

Title (en)

METHOD FOR CONTROLLING THE INPUT VOLTAGE FREQUENCY OF A DC-DC CONVERTOR

Title (de)

VERFAHREN ZUR STEUERUNG DER EINGANGSSPANNUNGSFREQUENZ EINES GLEICHSPANNUNGSWANDLERS

Title (fr)

PROCÉDÉ DE COMMANDE EN FRÉQUENCE DE LA TENSION D'ENTRÉE D'UN CONVERTISSEUR COURANT CONTINU-COURANT CONTINU

Publication

EP 3807986 A1 20210421 (FR)

Application

EP 19726693 A 20190527

Priority

- FR 1855259 A 20180615
- EP 2019063690 W 20190527

Abstract (en)

[origin: WO2019238405A1] The invention concerns a method (30) for controlling the input voltage frequency of a DC-DC converter (12) comprising a step (65) of calculating a control frequency value (F) of said DC-DC converter (12), wherein: - if the measured voltage (VDCM) is greater than said upper voltage limit (VDCR+eps), the control frequency (F) corresponds to said minimum control frequency (FRMIN); - if the measured voltage (VDCM) is less than said lower voltage limit (VDCR-eps), the control frequency corresponds to said maximum control frequency (FRMAX); and - if the measured voltage (VDCM) is between said upper voltage limit (VDCR+eps) and said lower voltage limit (VDCR-eps), the control frequency (F) corresponds to an average frequency (FMOY) calculated as a function of the difference between the setpoint voltage value (VDCR) and the measured voltage (VDCM), upper error values (eps) and lower error values (-eps) and maximum (FRMAX) and minimum (FRMIN) control frequency values.

IPC 8 full level

B60L 53/00 (2019.01); **H02M 3/337** (2006.01); **H02M 1/00** (2006.01)

CPC (source: EP US)

B60L 53/22 (2019.02 - EP US); **H02J 7/007** (2013.01 - US); **H02M 1/0003** (2021.05 - US); **H02M 1/0022** (2021.05 - US); **H02M 1/4208** (2013.01 - US); **H02M 3/01** (2021.05 - EP US); **H02M 3/33573** (2021.05 - EP US); **H02M 3/33576** (2013.01 - US); **B60L 2210/10** (2013.01 - EP US); **H02J 2207/20** (2020.01 - US); **H02M 1/0058** (2021.05 - EP); **H02M 1/4241** (2013.01 - US); **Y02T 10/70** (2013.01 - EP); **Y02T 10/7072** (2013.01 - EP); **Y02T 10/72** (2013.01 - EP); **Y02T 10/92** (2013.01 - EP); **Y02T 90/14** (2013.01 - EP)

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 2019238405 A1 20191219; CN 112449741 A 20210305; EP 3807986 A1 20210421; FR 3082680 A1 20191220; FR 3082680 B1 20200529; JP 2021527386 A 20211011; JP 7258054 B2 20230414; US 11518257 B2 20221206; US 2021257921 A1 20210819

DOCDB simple family (application)

EP 2019063690 W 20190527; CN 201980040056 A 20190527; EP 19726693 A 20190527; FR 1855259 A 20180615; JP 2020569994 A 20190527; US 201917252114 A 20190527