

Title (en)

BULK CAPACITOR HEATING CIRCUITS IN ELECTRICAL POWER CONVERTERS

Title (de)

MASSENKONDENSATORERWÄRMUNGSSCHALTUNGEN IN ELEKTRISCHEN STROMWANDLERN

Title (fr)

CIRCUITS DE CHAUFFE DE CONDENSATEUR DE MASSE DE CONVERTISSEURS DE COURANT ÉLECTRIQUE

Publication

**EP 4205272 A1 20230705 (EN)**

Application

**EP 20950583 A 20200825**

Priority

CN 2020111051 W 20200825

Abstract (en)

[origin: WO2022040908A1] An electrical power converter includes a power circuit having a bulk capacitor, an auxiliary circuit coupled to the power circuit for heating the bulk capacitor, and a control circuit coupled to the auxiliary circuit. The auxiliary circuit includes a switching device. The control circuit is configured to generate a control signal for controlling the switching device to allow the bulk capacitor to discharge and charge causing a temperature associated with the bulk capacitor to increase and a value of an equivalent series resistance associated with the bulk capacitor to decrease. Other example auxiliary circuits and electrical power converters are also disclosed.

IPC 8 full level

**H02M 1/32** (2007.01)

CPC (source: EP)

**H02M 1/14** (2013.01); **H02M 1/327** (2021.05); **H02M 1/36** (2013.01); **H02M 1/4225** (2013.01); **H02M 3/33538** (2013.01); **Y02B 70/10** (2013.01)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**WO 2022040908 A1 20220303**; EP 4205272 A1 20230705; EP 4205272 A4 20240529; JP 2023539843 A 20230920; TW 202209798 A 20220301; TW I765774 B 20220521

DOCDB simple family (application)

**CN 2020111051 W 20200825**; EP 20950583 A 20200825; JP 2023512660 A 20200825; TW 110125471 A 20210712