

Title (en)

CONTROL METHOD FOR POWER CONVERTERS WITH INVERTER BLOCKS WITH SILICON CARBIDE MOSFETS

Title (de)

STEUERVERFAHREN FÜR STROMRICHTER MIT UMRICHTERBLÖCKEN MIT SILICIUMCARBID-MOSFETS

Title (fr)

PROCÉDÉ DE COMMANDE POUR CONVERTISSEURS DE PUISSANCE AVEC BLOCS D'ONDULEUR AVEC DES MOSFET EN CARBURE DE SILICIUM

Publication

EP 3788703 A1 20210310 (EN)

Application

EP 18917130 A 20180430

Priority

US 2018030083 W 20180430

Abstract (en)

[origin: WO2019212453A1] Systems and methods for operating a power converter with a plurality of inverter blocks with silicon carbide MOSFETs are provided. A converter can include a plurality of inverter blocks. Each inverter block can include a plurality of switching devices. The plurality of switching devices can include one or more silicon carbide MOSFETs. A control method can include providing, by a control system, one or more gating commands to a first inverter block in the plurality of inverter blocks. The control method can further include implementing, by the control system, a gating command delay to generate a first delayed gating command based at least in part on the one or more gating commands. The control method can further include providing, by the control system, the first delayed gating command to a second inverter block in the plurality of inverter blocks.

IPC 8 full level

H02M 1/08 (2006.01); **H02M 7/493** (2007.01)

CPC (source: EP)

H02M 1/44 (2013.01); **H02M 7/4807** (2013.01); **H02M 7/49** (2013.01); **H02P 9/007** (2013.01); **H02M 1/0043** (2021.05); **H02M 5/4585** (2013.01); **H02P 2101/15** (2015.01); **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

DOCDB simple family (publication)

WO 2019212453 A1 20191107; BR 112020021955 A2 20210126; CA 3097955 A1 20191107; CN 112292804 A 20210129; EP 3788703 A1 20210310; EP 3788703 A4 20211124

DOCDB simple family (application)

US 2018030083 W 20180430; BR 112020021955 A 20180430; CA 3097955 A 20180430; CN 201880095250 A 20180430; EP 18917130 A 20180430