

(19)



(11)

EP 3 485 561 B8

(12)

CORRECTED EUROPEAN PATENT SPECIFICATION

(15) Correction information:

Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 73

(51) Int Cl.:

H02M 3/07 ^(2006.01) **H02M 1/08** ^(2006.01)
H02M 7/483 ^(2007.01) **H03K 17/687** ^(2006.01)

(48) Corrigendum issued on:

08.12.2021 Bulletin 2021/49

(86) International application number:

PCT/US2017/023469

(45) Date of publication and mention of the grant of the patent:

03.11.2021 Bulletin 2021/44

(87) International publication number:

WO 2018/013185 (18.01.2018 Gazette 2018/03)

(21) Application number: **17828093.9**

(22) Date of filing: **21.03.2017**

(54) DRIVING CHARGE PUMP CIRCUITS

ANSTEUERUNG VON LADUNGSPUMPENSCHALTKREISEN

COMMANDE DE CIRCUITS DE POMPE DE CHARGE

(84) Designated Contracting States:

**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**

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(30) Priority: **15.07.2016 US 201662363025 P**

(43) Date of publication of application:

22.05.2019 Bulletin 2019/21

(56) References cited:

JP-A- 2014 033 614 US-A- 5 581 454
US-A- 5 598 118 US-A- 5 900 722
US-A1- 2004 004 851 US-A1- 2006 087 297
US-A1- 2009 322 384 US-A1- 2014 306 674
US-A1- 2014 327 479 US-B2- 6 788 039

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- **JEONG IN WHA ET AL: "1200V cascaded HVIC gate driver for three-level neutral-point-clamped inverter IPM", 2014 IEEE APPLIED POWER ELECTRONICS CONFERENCE AND EXPOSITION - APEC 2014, IEEE, 16 March 2014 (2014-03-16), pages 617-620, XP032590834, DOI: 10.1109/APEC.2014.6803372 [retrieved on 2014-04-21]**

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