

Title (en)

DEVICE AND METHOD OF CONTROLLING CHARGE PUMP

Title (de)

VORRICHTUNG UND VERFAHREN ZUR STEUERUNG EINER LADUNGSPUMPE

Title (fr)

DISPOSITIF ET PROCÉDÉ DE COMMANDE DE POMPE DE CHARGE

Publication

EP 4133585 A4 20230531 (EN)

Application

EP 20937569 A 20200529

Priority

CN 2020093202 W 20200529

Abstract (en)

[origin: WO2021237658A1] A device and method of controlling charge pump are provided. The device of controlling charge pump includes: a charge pump circuit connected to an input circuit; a first capacitor coupled to the charge pump circuit and provided as an element of a resonant circuit; a first switching element connected to the first capacitor; and a controller configured to read an input current and/or an input voltage from the input circuit, generate a pulse width modulation signal according to the input current and/or the input voltage, and output the pulse width modulation signal to control the first switching element. Therefore, THD and harmonic can be improved while the cost of the circuit is decreased.

IPC 8 full level

H02M 1/12 (2006.01); **H02M 1/42** (2007.01); **H02M 3/07** (2006.01); **H02M 3/00** (2006.01); **H02M 7/06** (2006.01); **H05B 45/355** (2020.01)

CPC (source: EP)

H02M 1/12 (2013.01); **H02M 1/4266** (2013.01); **H02M 3/01** (2021.05); **H02M 3/07** (2013.01); **H02M 3/33571** (2021.05); **H02M 7/06** (2013.01); **H05B 45/3725** (2020.01); **Y02B 70/10** (2013.01)

Citation (search report)

- [X] WO 2018137240 A1 20180802 - REDISEM LTD [CN]
- [A] CN 110808681 A 20200218 - HANGZHOU UPOWERTEK CO LTD
- [A] JP 3726611 B2 20051214
- See references of WO 2021237658A1

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 2021237658 A1 20211202; CN 115461974 A 20221209; EP 4133585 A1 20230215; EP 4133585 A4 20230531

DOCDB simple family (application)

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