

Title (en)

DRIVE CIRCUIT, AND RELATED CIRCUIT AND DEVICE

Title (de)

ANTRIEBSSCHALTUNG, ZUGEHÖRIGE SCHALTUNG UND VORRICHTUNG

Title (fr)

CIRCUIT D'ATTAQUE, ET CIRCUIT ET DISPOSITIF ASSOCIÉS

Publication

EP 4033863 A4 20221109 (EN)

Application

EP 20901972 A 20200402

Priority

- CN 201911330642 A 20191220
- CN 2020082968 W 20200402

Abstract (en)

[origin: EP4033863A1] The invention discloses a drive circuit, a related circuit and a device. The drive circuit comprises: a load current control circuit, a rectifier module, an energy storage component and a charge-discharge generating circuit, wherein: the charge-discharge generating circuit is connected to the energy storage component and the load current control circuit; the energy storage component and the charge-discharge generating circuit are connected at both ends of the rectifier module; the charge-discharge generating circuit is configured to: form a charging loop with the energy storage component during a charging process of the energy storage component, and control a charging current of the energy storage component; and form a discharging loop with the energy storage component during a discharging process of the energy storage component. The above-mentioned drive circuit provided by the embodiment of the present disclosure can eliminate the current ripple in the circuit, ensure the stability of the controlled load, and the AC input current and the AC input voltage have a common axis of symmetry, thereby improving the PF.

IPC 8 full level

H05B 45/355 (2020.01)

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Citation (search report)

- [X] US 9295117 B2 20160322 - ACATRINEI BENIAMIN [US]
- [X] CN 102263492 A 20111130
- [X] CN 109348587 A 20190215 - POWER MICRO ELECTRONICS CO LTD
- [X] US 2019191506 A1 20190620 - HUANG QIUKAI [CN], et al
- See also references of WO 2021120445A1

Cited by

CN115021554A; US11984797B2

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

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