Title (en)

CIRCUITRY AND METHOD FOR DETERMINING A MAINS VOLTAGE IN AN ISOLATED SWITCHED DRIVER DEVICE

Title (de)

SCHALTUNG UND VERFAHREN ZUR BESTIMMUNG EINER NETZSPANNUNG IN EINER ISOLIERTEN GESCHALTETEN TREIBERVORRICHTUNG

Title (fr)

CIRCUIT ET PROCÉDÉ POUR DÉTERMINER UNE TENSION SECTEUR DANS UN DISPOSITIF DE COMMANDE DE COMMUTATION ISOLÉ

Publication

EP 4084583 A1 20221102 (EN)

Application

EP 21171328 A 20210429

Priority

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Abstract (en)

A driver device, for example a flyback converter device, comprises a primary circuit including a controlled switch. The primary circuit is supplied by a mains supply voltage. The driver device further comprises a secondary circuit for providing a load current to a load, for example to a light emitting device. An isolation stage of the driver device includes a transformer with a primary winding and a secondary winding. The isolation stage is configured to isolate the primary circuit on a primary side and the secondary circuit on a secondary side by an isolation barrier. The driver device further comprises a control circuit arranged on the secondary side. The transformer comprises an additional secondary winding arranged in phase with the primary winding on the secondary side. The control circuit is configured to determine presence and/or a value of the mains supply voltage for a time in which the controlled switch is conducting based on a voltage signal provided by the additional secondary winding.

IPC 8 full level

H05B 45/385 (2020.01); H02J 9/00 (2006.01)

CPC (source: EP)

H05B 45/385 (2020.01); **H05B 47/183** (2024.01); H05B 47/105 (2020.01)

Citation (search report)

- [XY] US 2021006168 A1 20210107 - SAES MARC [NL], et al
- [Y] DE 202019104171 U1 20201104 - TRIDONIC GMBH & CO KG [AT]

Designated contracting state (EPC)

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BA ME

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