



US 20220360163A1

(19) **United States**

(12) **Patent Application Publication**

Weinmann et al.

(10) **Pub. No.: US 2022/0360163 A1**

(43) **Pub. Date: Nov. 10, 2022**

(54) **RIPPLE DETECTOR FOR MONITORING A
SUPPLY TO GALVANICALLY ISOLATED
GATE DRIVER**

(52) **U.S. Cl.**
CPC **H02M 1/14** (2013.01); **H02M 3/33523**
(2013.01)

(71) Applicant: **Infineon Technologies AG**, Neubiberg
(DE)

(57) **ABSTRACT**

(72) Inventors: **Matthias Weinmann**, Munich (DE);
Michael Krug, Munich (DE)

(21) Appl. No.: **17/307,860**

(22) Filed: **May 4, 2021**

Publication Classification

(51) **Int. Cl.**
H02M 1/14 (2006.01)
H02M 3/335 (2006.01)

A driver circuit is configured to control a power transistor. The driver circuit comprises a signal generator configured to generate a control signal for the power transistor based on a supply signal and an input signal from a control unit. In addition, the driver circuit includes a ripple detector configured to receive the supply signal and determine whether the supply signal includes a ripple error. In some examples, the ripple detector may be configured to send a warning signal to the control unit in response to detecting the ripple error.

