



US 20220360070A1

(19) **United States**(12) **Patent Application Publication**
Bruckhaus(10) **Pub. No.: US 2022/0360070 A1**(43) **Pub. Date: Nov. 10, 2022**(54) **PROTECTION APPARATUS FOR A DRIVER
CIRCUIT, AND METHOD FOR
PROTECTING A DRIVER CIRCUIT****Publication Classification**(51) **Int. Cl.**
H02H 3/24

(2006.01)

(52) **U.S. Cl.**CPC **H02H 3/24** (2013.01)(71) Applicant: **Robert Bosch GmbH**, Stuttgart (DE)(72) Inventor: **Tim Bruckhaus**, Asperg (DE)(21) Appl. No.: **17/599,124**(22) PCT Filed: **Mar. 18, 2020**(86) PCT No.: **PCT/EP2020/057374**

§ 371 (c)(1),

(2) Date: **Sep. 28, 2021**(30) **Foreign Application Priority Data**

Mar. 29, 2019 (DE) 10 2019 204 429.8

(57) **ABSTRACT**

The present invention relates to the protection of a driver circuit for actuating a semiconductor switch. A voltage drop in a series resistor between the driver circuit and a control connection of the semiconductor switch is evaluated for this purpose. If the voltage drop across the series resistor exceeds a prespecified threshold value and this threshold value is exceeded for at least a predetermined period of time, the driver circuit for the semiconductor switch is then deactivated.

