



US 20230231448A1

(19) **United States**(12) **Patent Application Publication**  
**Christiansen et al.**(10) **Pub. No.: US 2023/0231448 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **ELECTRIC CIRCUIT AND WIND TURBINE****Publication Classification**(71) Applicant: **Siemens Gamesa Renewable Energy A/S, Brande (DK)**(72) Inventors: **Poul Christiansen, Them (DK); Anders Erbo R. Jensen, Vejle (DK); Aaron Jones, Billund (DK); Haritha Subramanian Kalyanaraman, Horsens (DK)**(51) **Int. Cl.****H02K 11/40** (2006.01)**H02K 7/18** (2006.01)**H01R 39/18** (2006.01)**H01R 39/64** (2006.01)**F03D 80/30** (2006.01)(52) **U.S. Cl.**CPC ..... **H02K 11/40** (2016.01); **H02K 7/1838** (2013.01); **H01R 39/18** (2013.01); **H01R 39/64** (2013.01); **F03D 80/30** (2016.05)(21) Appl. No.: **18/007,613**(22) PCT Filed: **Jun. 1, 2021**(86) PCT No.: **PCT/EP2021/064595**

§ 371 (c)(1),

(2) Date: **Dec. 1, 2022**(30) **Foreign Application Priority Data**

Jun. 9, 2020 (EP) ..... 20178878.3

(57)

**ABSTRACT**

An electric circuit providing a ground connection includes at least two brushes and a contact member, wherein each brush and the contact member form a sliding contact, wherein the contact member is connected to a ground potential by at least one of the sliding contacts, wherein at least two of the sliding contacts are connected to a current source adapted to provide a current through the sliding contacts.

