

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2022/0376666 A1 Gammie

Nov. 24, 2022 (43) **Pub. Date:**

(54) AMPLIFYING A DIFFERENTIAL VOLTAGE SIGNAL COMPONENT OF A VOLTAGE ACROSS A RESISTOR

(71) Applicant: Microchip Technology Incorporated, Chandler, AZ (US)

(72) Inventor: David Gammie, Chandler, AZ (US)

Appl. No.: 17/664,813

(22) Filed: May 24, 2022

Related U.S. Application Data

(60) Provisional application No. 63/202,034, filed on May 24, 2021.

Publication Classification

(51) Int. Cl. H03F 3/45 (2006.01)G01R 19/10 (2006.01)

U.S. Cl.

CPC H03F 3/45475 (2013.01); G01R 19/10 (2013.01)

ABSTRACT (57)

One or more examples relate to an apparatus to amplify differential voltage signal components of voltage across a resistor. Such an apparatus may include a resistor; a differential amplification circuit operatively coupled with the resistor to amplify a differential voltage signal component of a voltage across the resistor; and an operative coupling between the resistor and the differential amplification circuit to pass the differential voltage signal component and isolate a common mode voltage signal component of the voltage across the resistor.

