



US 20240235503A9

(19) **United States**  
(12) **Patent Application Publication**  
**MATSUNAMI**

(10) **Pub. No.: US 2024/0235503 A9**  
(48) **Pub. Date: Jul. 11, 2024**  
**CORRECTED PUBLICATION**

(54) **PHYSICAL QUANTITY OUTPUTTING CIRCUIT**

(71) Applicant: **FUJI ELECTRIC CO., LTD.**,  
Kanagawa (JP)

(72) Inventor: **Kazuhiro MATSUNAMI**,  
Matsumoto-city (JP)

(21) Appl. No.: **18/453,316**

(22) Filed: **Aug. 22, 2023**

**Prior Publication Data**

(15) Correction of US 2024/0136988 A1 Apr. 25, 2024  
See (22) Filed  
See (30) Foreign Application Data

(65) US 2024/0136988 A1 Apr. 25, 2024

**Foreign Application Priority Data**

Oct. 19, 2022 (JP) ..... 2022-167922

**Publication Classification**

(51) **Int. Cl.**  
**H03F 3/45** (2006.01)  
**H03F 1/30** (2006.01)  
(52) **U.S. Cl.**  
CPC ..... **H03F 3/45475** (2013.01); **H03F 1/303**  
(2013.01); **H03F 2200/261** (2013.01)

(57) **ABSTRACT**

Provided is a physical quantity outputting circuit including a first output terminal, a power supply terminal to which an external power supply voltage is input, a reference terminal to which a reference voltage is input, a power supply voltage circuit which generates an internal power supply voltage from the external power supply voltage, a first output amplifier to which a first input signal corresponding to the physical quantity sensing result is input and which outputs the first output voltage corresponding to the first input signal to the first output terminal, a first resistor connected between the power supply terminal and the first output terminal, and a second resistor connected between the first output terminal and the reference terminal. In the physical quantity outputting circuit, current that flows from the power supply voltage circuit to the first output amplifier has a constant value.

