



US 20240235495A1

(19) **United States**(12) **Patent Application Publication**
PYO(10) **Pub. No.: US 2024/0235495 A1**(43) **Pub. Date: Jul. 11, 2024**(54) **POWER AMPLIFIER AND OPERATING METHOD THEREOF**(71) Applicant: **Samsung Electro-Mechanics Co., Ltd.**,
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Suwon-si (KR)(21) Appl. No.: **18/335,574**(22) Filed: **Jun. 15, 2023**(30) **Foreign Application Priority Data**

Jan. 11, 2023 (KR) 10-2023-0003965

Publication Classification(51) **Int. Cl.****H03F 1/52** (2006.01)**H03F 3/21** (2006.01)(52) **U.S. Cl.**CPC **H03F 1/52** (2013.01); **H03F 3/21**
(2013.01); **H03F 2200/426** (2013.01); **H03F**
2200/451 (2013.01)

(57)

ABSTRACT

A power amplifier is provided. The power amplifier may include a power transistor configured to amplify an input Radio Frequency (RF) signal and output the amplified signal, an overvoltage protection circuit configured to detect the magnitude of the input RF signal, and detect the magnitude of an output RF signal of the power transistor, and generate an overvoltage output signal based on the magnitude of the input RF signal and the magnitude of the output RF signal, and a bias circuit configured to generate a bias current to bias the power transistor, and adjust the bias current based on the overvoltage output signal.

