

(19) **United States**

(12) **Patent Application Publication**
Zhu et al.

(10) **Pub. No.: US 2022/0393655 A1**

(43) **Pub. Date: Dec. 8, 2022**

(54) **LINEARIZATION USING
COMPLEMENTARY DEVICES**

(71) Applicant: **SKYWORKS SOLUTIONS, INC.**,
Irvine, CA (US)

(72) Inventors: **Yu Zhu**, Wellesley, MA (US); **Oleksiy
Klimashov**, Burlington, MA (US);
Dylan Charles Bartle, Arlington, MA
(US); **Paul T. DiCarlo**, Marlborough,
MA (US)

(21) Appl. No.: **17/805,717**

(22) Filed: **Jun. 7, 2022**

Related U.S. Application Data

(60) Provisional application No. 63/197,598, filed on Jun.
7, 2021.

Publication Classification

(51) **Int. Cl.**

H03F 3/24 (2006.01)

H03F 1/02 (2006.01)

(52) **U.S. Cl.**

CPC **H03F 3/245** (2013.01); **H03F 1/0222**
(2013.01); **H03F 2200/451** (2013.01)

(57)

ABSTRACT

According to at least one example of the disclosure, a power amplifier is provided comprising a first power switch of a first type being configured to receive an input signal and provide an amplified output signal to an output connection configured to be coupled to a load, and a second power switch of a second type different than the first type, the second power switch being configured to improve a linearity of the power amplifier and being coupled to the output connection.

