



US 20220360225A1

(19) **United States**

(12) **Patent Application Publication**  
**Khlat**

(10) **Pub. No.: US 2022/0360225 A1**

(43) **Pub. Date: Nov. 10, 2022**

(54) **TARGET VOLTAGE GENERATION IN AN ENVELOPE TRACKING INTEGRATED CIRCUIT**

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

CPC ..... *H03F 1/0216* (2013.01); *H03F 3/19* (2013.01); *H03F 2200/105* (2013.01); *H03F 2200/451* (2013.01); *H03F 2200/375* (2013.01)

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(21) Appl. No.: **17/523,966**

(22) Filed: **Nov. 11, 2021**

**Related U.S. Application Data**

(60) Provisional application No. 63/185,948, filed on May 7, 2021.

**Publication Classification**

(51) **Int. Cl.**

*H03F 1/02* (2006.01)

*H03F 3/19* (2006.01)

(57)

**ABSTRACT**

Target voltage generation in an envelope tracking (ET) integrated circuit (ETIC) is provided. The ETIC is configured to generate a time-variant ET voltage based on a time-variant target voltage for amplifying a radio frequency (RF) signal modulated for communication in multiple time intervals. In embodiments disclosed herein, the ETIC is self-contained to generate the time-variant target voltage based on a sensed signal having a time-variant sensed envelope that tracks a time-variant power envelope of the RF signal. Since the time-variant target voltage is generated to track the time-variant sensed envelope, which further tracks the time-variant power envelope, the time-variant ET voltage can better track the time-variant power envelope of the RF signal when the time-variant ET voltage is provided to a power amplifier(s) that amplifies the RF signal.

