US 20220360227A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2022/0360227 A1**

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

(54) **WIDE BANDWIDTH ENVELOPE TRACKING INTEGRATED CIRCUIT**

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(21) Appl. No.: **17/523,999**

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

Related U.S. Application Data

(60) Provisional application No. 63/185,923, filed on May 7, 2021.

Publication Classification

(51) **Int. Cl.**

H03F 1/02 (2006.01)

H03F 3/19 (2006.01)

(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)

(57) **ABSTRACT**

An envelope tracking (ET) integrated circuit (ETIC) is provided. The ETIC is configured to generate an ET 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 an ET target voltage based on a power envelope of the RF signal and to generate the ET voltage based on the ET target voltage. Given that the RF signal may be modulated at a very high modulation bandwidth, the ETIC can be configured to modify the ET target voltage in each of the time intervals to thereby cause the ET voltage to be adapted on a per time interval basis. As a result, the ET voltage can better track the power envelope of the RF signal in each of the time intervals to help improve operating efficiency of a power amplifier apparatus that employs the ETIC.