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(54) **SYSTEMS AND METHODS FOR PROVIDING AN ENVELOPE TRACKING SUPPLY VOLTAGE**

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ABSTRACT

Envelope tracking power supply circuitry includes a look up table (LUT) configured to provide a target supply voltage based on a power envelope measurement. The target supply voltage is dynamically adjusted based on a delay between the power envelope of an RF signal and a provided envelope tracking supply voltage. The envelope tracking supply voltage is generated from the adjusted target supply voltage in order to synchronize the envelope tracking supply voltage with the power envelope of the RF signal.

