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(54) **ENVELOPE TRACKING VOLTAGE CORRECTION IN A TRANSMISSION CIRCUIT**

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(57) **ABSTRACT**

Envelope tracking (ET) voltage correction in a transmission circuit is provided. The transmission circuit includes a transceiver circuit and a power amplifier circuit(s). The transceiver circuit generates a radio frequency (RF) signal(s) from a time-variant modulation vector and the power amplifier circuit(s) amplifies the RF signal(s) based on a modulated voltage and provides the amplified RF signal(s) to a coupled RF front-end circuit. Herein, the transceiver circuit is configured to apply a complex filter(s) to the time-variant modulation vector and/or the RF signal(s) to compensate for a voltage distortion filter created across a modulation bandwidth of the RF signal(s) by coupling the power amplifier circuit with the RF front-end circuit. As a result, it is possible to reduce undesired instantaneous excessive compression and/or spectrum regrowth resulting from the voltage distortion filter to thereby improve efficiency and linearity of the power amplifier circuit(s) across the modulation bandwidth of the RF signal(s).