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#### (54) ENVELOPE FOLLOWING BOOST **CONVERTER**

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#### (57)ABSTRACT

In some embodiments, a power supply system for a power amplifier can include a voltage converter implemented generate a first voltage at an output node, and an envelope following circuit implemented to generate and combine a second voltage with the first voltage to provide a combined output voltage for the power amplifier. The combined output voltage can have a waveform that follows one or more peaks of an envelope of a radio-frequency signal above the first

