

COMPOSITE CASCODE POWER AMPLIFIERS FOR ENVELOPE TRACKING APPLICATIONS

ABSTRACT OF THE DISCLOSURE

5 Composite cascode power amplifiers for envelope tracking applications are provided herein. In certain embodiments, an envelope tracking system includes a composite cascode power amplifier that amplifies a radio frequency (RF) signal and that receives power from a power amplifier supply voltage, and an envelope tracker that generates the power amplifier supply voltage based on an envelope of the RF signal. The composite cascode power amplifier
10 includes an enhancement mode (E-MODE) field-effect transistor (FET) for amplifying the RF signal and a depletion mode (D-MODE) FET in cascode with the E-MODE FET.

FIG. 3