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(54) **ULTRA COMPACT MULTI-BAND TRANSMITTER WITH ROBUST AM-PM DISTORTION SELF-SUPPRESSION TECHNIQUES**

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(57) **ABSTRACT**

A communication device includes a power amplifier that generates power signals according to one or more operating bands of communication data, with the amplitude being driven and generated in output stages of the power amplifier. The final stage can include an output passive network that suppresses suppress an amplitude modulation-to-phase modulation (AM-PM) distortion. During a back-off power mode a bias of a capacitive unit of the output power network component can be adjusted to minimize an overall capacitance variation. An output passive network can further generate a flat-phase response between dual resonances of operation.