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(54) **RECONFIGURABLE AND TUNABLE POWER AMPLIFIER**

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ABSTRACT

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Apparatuses, systems and methods for operating a power amplifier are described. A controller can drive a power amplifier chain with first input bias voltages to operate the power amplifier chain in a first operation mode that implements a Doherty amplifier. The controller can drive the power amplifier chain with second input bias voltages to operate the power amplifier chain in a second operation mode that implements a balanced amplifier. The controller can tune the termination circuit in accordance with an operation mode of the power amplifier chain.

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