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(54) OVERCURRENT PROTECTION CIRCUIT AND POWER AMPLIFIER INCLUDING THE

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ABSTRACT (57)

A power amplifier overcurrent protection circuit is provided. The overcurrent protection circuit protects a power amplifier that receives a bias current from a bias circuit and amplifies an input radio frequency (RF) signal. The current protection circuit includes an envelope detector configured to detect an envelope for a first voltage corresponding to an input radio frequency (RF) signal, a first transistor configured to receive a value of the envelope through a control terminal of the first transistor and turn on based on the value of the envelope to sink a current from a first node of a bias circuit, and a second transistor connected between a power source and the first transistor and including a control terminal connected to the first node of the bias circuit.

