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(54) **AMPLIFIER WITH IMPROVED POWER SUPPLY REJECTION IN FEEDBACK CIRCUITS**

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(57) **ABSTRACT**

Frequency-selective feedback circuits and methods for an amplifier (particularly LNAs) that improve power supply rejection in feedback circuits, reduce non-linearities caused by low-frequency noise coupled to the input of the LNA, and improve settling times of the quiescent bias-point of the LNA. Some embodiments allow multiple modes of operation to allow selection of gain versus linearity characteristics. One aspect of the present invention includes an input matching feedback circuit configured to be coupled between an input terminal of an amplification core and a feedback node in the output signal path of the amplification core, the input matching feedback circuit including a power supply rejection resistor configured to provide a low-impedance path to a reference potential for low-frequency noise.