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(54) **WIRELESS RECEIVER**

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(57) **ABSTRACT**

A low noise amplifier (LNA) includes a pair of n-type transistors, each configured to provide a first transconductance; a pair of p-type transistors, each configured to provide a second transconductance; a first pair of coupling capacitors, cross-coupled between the pair of n-type transistors, and configured to provide a first boosting coefficient to the first transconductance; and a second pair of coupling capacitors, cross-coupled between the pair of p-type transistors, and configured to provide a second boosting coefficient to the second transconductance, wherein the LNA is configured to use a boosted effective transconductance based on the first and second boosting coefficients, and the first and second transconductances to amplify an input signal.