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(54) **OSCILLATOR WITH SCHMITT TRIGGER**

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(57) **ABSTRACT**

A programmable ring oscillator for a wireless device is disclosed. The programmable ring oscillator includes a Schmitt trigger, first and second CMOS inverters, first and second resistors, and a capacitor. The Schmitt trigger includes an input coupled to a first node, a control terminal coupled to a configuration signal, and an output. The first CMOS inverter includes an input coupled to the output of the Schmitt trigger and an output coupled to a second node. The second CMOS inverter includes an input coupled to the second node and an output coupled to an output terminal configured to provide an output signal having a oscillating frequency. The first resistor is coupled between the output terminal and a third node, and the second resistor is coupled between the third node and the first node. The capacitor is coupled between the second node and the third node.