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Chang et al.(10) **Pub. No.: US 2024/0223161 A1**(43) **Pub. Date: Jul. 4, 2024**(54) **PSEUDO RESISTOR WITH AUTOTUNE FUNCTION**(71) Applicant: **Novatek Microelectronics Corp.**,
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ABSTRACT

Pseudo resistor having an auto-tune function automatically calibrates resistance of the pseudo resistor and compensates for DC drift based on an output signal of an electrical circuit to which the pseudo resistor is coupled, as to mitigate signal phenomenon in the output signal caused by PVT variation. The pseudo resistor includes first transistor, second transistor, and adder. The first terminal of the second transistor is coupled to the first terminal of the first transistor and forms a first common node. The control terminal of the first transistor is coupled to the control terminal of the second transistor and forms second common node. The adder is coupled between the first and second common nodes and configured to receive adjustment voltage for generating a bias voltage for controlling the first and second transistors, where the adjustment voltage corresponds to the output signal coupled to the second terminal of the second transistor.

