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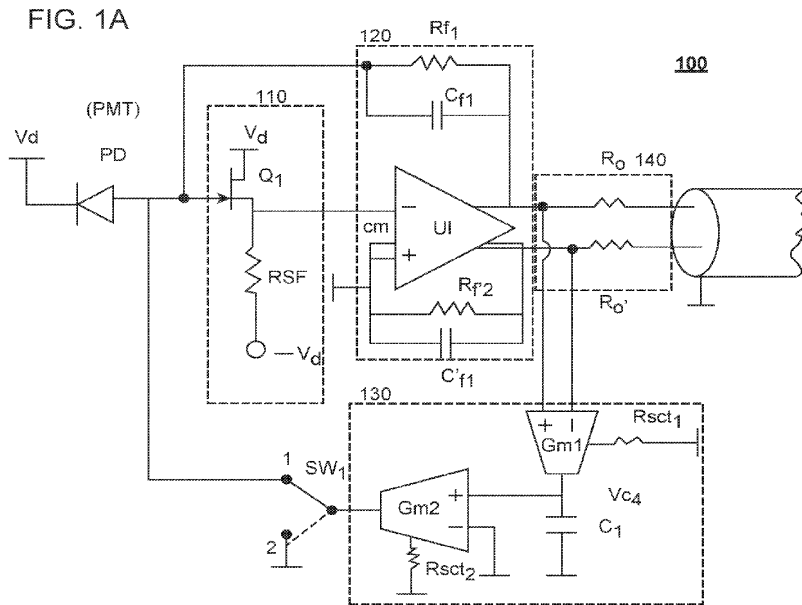
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(54) Title: BASELINE RESTORATION CIRCUIT



(57) Abstract: Aspects of the present disclosure include circuits, systems and methods for baseline signal restoration over differential outputs. Circuits according to certain embodiments include an input module for receiving a signal from a sensor, an amplifier module, operably connected to the input module, for modifying the input signal, a baseline restoration module, operably connected to the amplifier module, for extracting a direct current component of the input signal, and an output module, operably connected to the amplifier module, for transmitting a baseline restored signal, wherein the output module comprises differential outputs. Baseline restoration systems according to certain embodiments include a baseline restoration circuit for generating a baseline restored signal on differential outputs, a downstream receiver circuit for receiving a baseline restored signal on differential inputs transmitted by the baseline restoration circuit, and cable core wires configured to connect the differential outputs of the baseline restoration circuit with

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the differential inputs of the downstream receiver circuit. Flow cytometry systems with baseline restoration using the subject circuits are described. Methods for baseline restoration are also provided.