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(54) Title: METHOD AND APPARATUS FOR TIME MULTIPLEXING OF THERMAL SENSOR

(57) Abstract: An apparatus for time-multiplexing a thermal sensor includes a digital-to-analog converter. The digital-to-analog converter provides an output to a comparator. A sequencer selects one of several input values to be applied to the digital-to-analog converter input. The sequencer further selects one of several latching devices to latch the output of the comparator. Once the result of the compare operation between the output of the thermal diode and the output of the digital-to-analog converter is latched, then the sequencer selects another one of the several input values and also selects another one of the several latching devices and another comparison is made between the output of the digital-to-analog converter and the output of the thermal sensor. The sequencer continues to select from among the several input values and corresponding latching devices in a rotating fashion.