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(54) **ADAPTIVE VOLTAGE SCALING SYSTEM FOR OUT OF CONTEXT FUNCTIONAL SAFETY SOC**

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(57) **ABSTRACT**

Systems and methods are provided for voltage monitoring and reset sequencing. One such system includes a voltage detector including multiple voltage level detectors to output multiple power OK signals, respectively; a trim adjustment circuit to output multiple trim values to the multiple voltage level detectors, respectively; and a sequencer circuit coupled to the trim adjustment circuit and the voltage detector. In response to receiving the power OK signals from the multiple voltage level detectors, the sequencer circuit controls output of a reset signal to a target voltage domain.