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(54) **THERMAL RUNAWAY PROGNOSIS BY DETECTING ABNORMAL CELL VOLTAGE AND SOC DEGENERATION**

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(57) **ABSTRACT**

A vehicle, system and method for monitoring an occurrence of thermal runaway in a battery pack of the vehicle. The system includes a plurality of voltage sensors and a processor. The plurality of voltage sensors obtains a plurality of voltage measurements at each of a plurality of battery cells of the battery pack. The processor is configured to determine a mean value based on the plurality of voltage measurements, compare a voltage measurement obtained from a selected battery cell to the mean value, and generate a notification signal when a difference between the voltage measurement from the selected battery cell and the mean value is greater than or equal to a prognostic threshold.