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(57) Abstract :

Embodiments of the present disclosure relates to a system (100) and method (300) for monitoring the state of the battery cells of a battery pack. In an aspect, the present disclosure discloses a system (102) for monitoring the state of the battery cells of a battery pack embedded with fiber optic cables for real-time control of performance of the battery cells. The system (102) comprises a processor (202) coupled to a memory (204). The memory (204) stores processor-executable instructions. The processor (202) is configured to transmit battery cell data to a microcontroller via fiber optic cables. Next, the processor (202) is configured to process the battery cell data to extract battery cell parameters. Thereafter, the processor (202) is configured to compare the extracted battery cell parameters with reference values to detect anomalies. In the end, the processor (202) is configured to trigger an alarm based on the detected anomalies

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