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(54) **SYSTEMS AND METHODS FOR MANAGING BATTERY ARRAYS**

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**ABSTRACT**

The invention relates to system and method for managing a battery array. The system comprises: a bus; a connecting unit coupled between the battery array and the bus; an active balancing unit for performing constant current charging of each battery unit connected to the bus through a DC-DC converter to achieve active balancing of said battery unit; a passive balancing unit for performing constant current discharging of each battery unit connected to the bus to perform passive balancing of said battery unit; a sensing unit for sensing battery parameters of each battery unit connected to the bus; and a control unit for controlling the connection unit to connect the plurality of battery units to the bus in turn, and the active balancing unit and the passive balancing unit, based on the sensed battery parameters of said battery unit connected to the bus, to perform balancing operations of said battery unit.

Battery array management system 100

