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(54) **CIRCUIT-BREAKER, CIRCUIT-BREAKER ABNORMALITY DIAGNOSIS METHOD, AND LITHIUM BATTERY SYSTEM**

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(57) **ABSTRACT**

A circuit-breaker includes a battery module terminal, a battery pack system terminal, and a plurality of switching channels connected in parallel and coupled between the battery module terminal and the battery pack system terminal. Each of the switching channels includes one or more semiconductor switching devices and is configured to turn on/off a circuit between the battery module terminal and the battery pack system terminal. During abnormality diagnosis, at least one of the switching channels is set to be in a turned-on state.