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YOON(10) **Pub. No.: US 2024/0178677 A1**(43) **Pub. Date: May 30, 2024**(54) **BATTERY SYSTEM**(52) **U.S. Cl.**(71) Applicant: **LG ENERGY SOLUTION, LTD.,**
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Discussed is a battery system including: a battery pack including a plurality of battery cells; a battery monitoring integrated circuit (BMIC) configured to monitor each of a plurality of cell voltages of the plurality of battery cells; a plurality of balancing batteries each charged by a target battery cell requiring a cell balancing among the plurality of battery cells; a power conversion unit including a direct-current to direct-current (DC-DC) converter receiving voltages from the plurality of balancing batteries and configured to convert the voltages into output voltages; and a power supply unit configured to supply the output voltages to the BMIC when the output voltages have a voltage equal to or greater than a predetermined level for driving the BMIC.

