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TRAN et al.(10) **Pub. No.: US 2023/0231207 A1**(43) **Pub. Date: Jul. 20, 2023**(54) **DYNAMIC ENERGY STORAGE SYSTEMS
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ABSTRACT

Embodiments of the present disclosure provide systems and methods for a dynamic energy storage system. An exemplary aspect of this disclosure relates to an energy storage system comprising a control unit; a bus; a first electrical storage unit; a second electrical storage unit; a first connection circuit configured to move between a first open position, a first closed position, and/or a first bypass position, wherein the first electrical storage unit is electrically connected to the bus when the first connection circuit is in the first closed position, and a second connection circuit configured to move between a second closed position, a second open position, and/or a second bypass position, wherein the second electrical storage unit is electrically connected to the bus when the second connection circuit is in the second closed position, wherein the first control unit is configured to operate to change positions of the first connection circuit and the second connection circuit.

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