

Energy Storage System and Method of Boosting an Electrical Power for Outputting to a Load

ABSTRACT

An energy storage system includes an electrical input adapted to connect to an external power source; an electrical output adapted to connect to a load; a power bus connected between the electrical input and the electrical output; and a battery module connected to the power bus. The energy storage system is adapted to be switched between a first mode in which the battery module is recharged by electrical power received from the electrical input via the power bus, and a second mode in which the battery module discharges to boost the electrical power received from the electrical input via the power bus for outputting to the electrical output. The disclosed system and method are especially useful in scenarios where an electrical source may not be suitable for powering a high-demand electrically operated loads or equipment.

FIG. 2