BATTERY ENERGY STORAGE SYSTEM PATENT

What is a battery energy storage system (BESS)? Embodiments disclosed herein relate to a battery energy storage system (BESS) that can be used to store energy that is produced by conventional sources (e.g., coal, gas, nuclear) as well as renewable sources (e.g., wind, solar), and provide the stored energy on-demand.

What is a battery energy storage system? A battery energy storage system comprising: a plurality of battery packs; a string controller coupled to the plurality of battery packs and configured to control charging and discharging of the plurality of battery packs via a power control system that is external to the battery energy storage system; and

What is the battery energy storage system of claim 16? The battery energy storage system of claim 16, wherein each of the n string controllers comprise a power interface that is configured to couple to a power control system, and are further configured to charge or discharge the m battery packs via the power control system. 18.

How are warranty threshold values maintained in a battery pack? In an embodiment, each battery pack may maintain a list of warranty threshold values, for example warranty threshold values 2011 - 2016, in a computer-readable storage device. In another embodiment, the list of warranty threshold values may be maintained in a computer-readable storage device that is external to the battery pack.

How does a battery pack store warranty status? In an embodiment, the battery pack may store a warranty status in a computer-readable storage device. The warranty status may be any type of data capable of representing a status. For example, the warranty status may be a binary flag that indicates whether the warranty has been voided.

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What components are disposed inside the housing of battery pack 600? Turning to FIGS. 6C-D, example components that are disposed inside the housing of battery pack 600 are shown, including (but not limited to) balancing charger 632, battery pack controller (BPC) 634, and battery module controller (BMC) 638.

It has advanced energy storage systems capable of demand shaving, PV shouldering, net metering, and power outage backup. Johnson Controls offers various lithium-ion battery solutions and lead-acid batteries for ???

The energy storage system 100 illustrates a sealed container including various components and features described herein. With reference to FIG. 1B, an explode view of the energy storage system 100 of FIG. 1a is ???

A method and apparatus for controlling a battery energy storage system of the type in which an inverter is coupled to convert direct current power from a DC source to a controlled ???

In this study, PLA of recent advancements in the NM-based BESS was critically analyzed, future technologies forecasted, and potential challenges outlined. A search was performed in the Lens database using "energy storage system," ???

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The importance of batteries has been growing as a solution in a very dynamic puzzle. As a set of technologies at the intersection of the clean-digital transition, their role is ???

Fig.2 Multiphysics model of the hybrid energy storage system. Zheng, JS., et al. developed a new hybrid electrochemical device based on a synergetic inner combination of Li ion battery and Li ion capacitor (HyLIC) as ???