Portable energy storage stacking patent

A an energy storage system includes a crane and a plurality of blocks, where the crane is operable to move blocks from a lower elevation to a higher elevation (via stacking of the blocks) to store electrical energy as potential energy of the blocks, and then operable to move blocks from a higher elevation to a lower elevation (via unstacking of the blocks) to generate ...

As the demand for flexible wearable electronic devices increases, the development of light, thin and flexible high-performance energy-storage devices to power them is a research priority. This review highlights the latest research advances in flexible wearable supercapacitors, covering functional classifications such as stretchability, permeability, self ...

The increasing demand for efficient, portable, and eco-friendly energy storage solutions is driving the development of supercapacitors and batteries with high energy and power densities.

Disclosed is an integrated packaging method for a portable energy storage device, the method comprising the following steps: 1. preparing a roll cell (1) or a stacked cell (1); and 2. placing ...

The invention relates to a portable energy station (1) comprising a box-shaped housing (2), an energy storage means (3) arranged in the housing (2), which is designed to supply an...

The invention relates to a stationary energy storage device (1) with two battery modules (2, 3, 4) which are stacked one over the other and which have a battery assembly (16) comprising a cell holder (17) for receiving and positioning a plurality of cells (18) at a mutual distance (25) to one another. The cells (18) are arranged next ...

The Portable Multi-stack Flywheel Energy Storage Assembly stores energy from any electrical grid or other energy source such as wind turbines and photovoltaic solar power to a flywheel ...

Scavenging energy from our day-to-day activity into useful electrical energy be the best solution to solve the energy crisis. This concept entirely reduces the usage of batteries, which have a complex issue in recycling and disposal. For electrical harvesting energy from vibration energy, there are few energy harvesters available, but the fabrication, ...

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