

Switching Battery Reinvents the Battery for Renewable Integration

Revolutionary Energy Conservation Achieved Through Independent Control of Positive and Negative Nodes of Batteries, Solar and Motor for Seamless DC Integration

GILROY, CA, UNITED STATES, December 26, 2023 /EINPresswire.com/ -- In a significant breakthrough similar to Apple's iPhone playbook, the Switching Battery system is set to revolutionize the way we think about and use batteries. By integrating battery with solar PV technology, the <u>patented plug-</u> and-play system enables simultaneous charging and discharging, enhancing energy efficiency, while also supporting high-performance variable frequency



12V Kinematic Charger fast charges its 3 batteries in parallel at 5V but combine in series to drive 12V load.

drive (VFD) for DC motors. This seamless integration will benefit the renewable industry by significantly reducing the cost and size of battery and solar panels.

٢

Our system enables solar Watt-Peak (Wp) shifting from conventional 36V to 6V solar panels, charging 4V batteries. This allows various series output voltages, including the standard 24V."

Batteries Conserve Electricity

Batteries, vital for storing electricity, often face issues like bulkiness and high storage costs. Electricity, if not consumed immediately, would be destroyed and energy storage is vital for conservation efforts to improve the power grids. <u>Many US and Canadian regions could face</u> <u>electricity shortages from 2024</u> to 2028 due to rising energy demands from the tech industry and increased electrification of buildings and vehicles, according to a recent report by the North American Electric Reliability Corporation.

Kannappan Chettiar

Independent Control of Nodes Within Each Battery

"In traditional batteries, fixed positive and negative nodes constrain flexibility, leading to high voltage and highfrequency charging, causing interference with machines and the human body," explained Kannappan Chettiar, the inventor and founder of Switching Battery Inc. "The Switching Battery chip takes a deep dive into the battery's internal structure, enabling individual control of positive and negative nodes, resulting in reduced frequency and voltage using an innovative parallel-series switching."

Revolutionary Solar Wp Shift for Compact Power Solutions The breakthrough shrinks battery systems and solar panel sizes significantly as it enables seamless integration across all DC systems. Chettiar explains, "Our system enables solar Watt-Peak (Wp) shifting from conventional 36V to 6V solar panels, charging 4V batteries. This seamless integration enables parallel charging from the solar while delivering any required series output voltages, including the standard 24V."

Plug-and-Play Approach The technology emulates a central bank, efficiently functioning like a



A one-gallon load, equivalent to eight pints, can be efficiently filled by rapidly alternating between two one-pint glasses.



The K8 graph shows the benefit of independent control of nodes in batteries, solar and load

compact reservoir, temporarily storing energy from the source before distribution to the load. This plug-and-play feature facilitates cell balancing and voltage modulation with built-in AC electricity generation, eliminating the need for additional components like solar charge controllers, MPPTs, converters, regulators, inverters and battery management systems.

VFD Features in DC Motors

The Switching Battery system incorporates VFD features into DC motors, simplifying operations and reducing costs. VFDs are known for efficient AC motor control by modulating frequency and voltage.

Kinematic Charger Launch at CES

Switching Battery will debut its first product, the Kinematic Charger at CES's Eureka Park in Las Vegas, from January 9-12, 2024. <u>Eureka Park is for startups with potential for significant market impact</u> and groundbreaking role in consumer technology.

Cenobia Majella Switching Battery Inc. +1 408-406-2010 cenobia@switchingbattery.com Visit us on social media: Facebook Twitter LinkedIn YouTube

This press release can be viewed online at: https://www.einpresswire.com/article/677306065

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2023 Newsmatics Inc. All Right Reserved.