

# Flux Power Awarded New Patent for Predictive Quantum Balancing

Patent covers a breakthrough approach to battery charge balancing technology to optimize performance, extend battery life, and reduce downtime.

VISTA, Calif., Aug. 05, 2025 (GLOBE NEWSWIRE) -- Flux Power Holdings, Inc. (NASDAQ: FLUX), a leading developer of advanced lithium-ion energy storage solutions and software-driven electrification for commercial and industrial equipment, today announced it has been awarded another patent by the U.S. Patent and Trademark Office. The patent covers a breakthrough approach to battery charge balancing centered on a technology called Predictive Quantum Balancing, designed to optimize performance, extend battery life, and reduce operational downtime in mission-critical applications.

The newly patented system advances Flux Power's proprietary Battery Management System (BMS) by introducing an intelligent, data-driven method of managing charge distribution at the cell level, learning from past behavior to guide future performance. Rather than relying solely on reactive balancing during charge cycles, the system stores imbalance patterns in memory and assigns permanent discharge durations to overperforming cells, a proactive approach that improves stability and long-term efficiency.

"Predictive Quantum Balancing represents a leap forward in battery intelligence," said Paulus Geantil, Chief Technology Officer of Flux Power. "We've moved beyond just monitoring batteries; we're now training them to self-correct based on experience."

# How It Works: Data-Driven Balance, Delivered Automatically

Predictive Quantum Balancing addresses a core challenge in lithium-ion systems: maintaining 100% of the total pack capacity by balancing the battery 24/7. Flux Power's system continuously monitors cell behavior, logs imbalance trends in a histogram, and when long-term discrepancies are detected, assigns custom "bleed-off" durations to specific cells during each charge cycle.

### Key Benefits:

- Extended battery life to lower total cost of ownership (TCO)
- Faster, smarter charging to increase operational efficiencies
- Predictive maintenance capabilities for more proactive fleet management
- Fleet performance optimization for enhanced productivity and strategic business insights

"This patent reflects our commitment to innovation where it matters most: real-world uptime, battery longevity, and total cost of ownership for our customers," said Mark Barmettler, VP of

Engineering at Flux Power. "This type of intelligence makes a measurable difference for our partners in material handling, GSE, and logistics operations where every minute counts."

# **About Flux Power Holdings, Inc.**

Flux Power (NASDAQ: FLUX) designs, manufactures, and sells advanced lithium-ion energy storage solutions for electrification of a range of industrial and commercial sectors including material handling, airport ground support equipment (GSE), and stationary energy storage. Flux Power's lithium-ion battery packs, including the proprietary battery management system (BMS) and telemetry, provide customers with a better performing, lower cost of ownership, and more environmentally friendly alternative, in many instances, to traditional lead acid and propane-based solutions. Lithium-ion battery packs reduce CO2 emissions and help improve sustainability and ESG metrics for fleets. For more information, please visit <a href="https://www.fluxpower.com">www.fluxpower.com</a>.

# **Forward-Looking Statements**

This release contains projections and other "forward-looking statements" relating to Flux Power's business, that are often identified using "believes," "expects" or similar expressions. Forward-looking statements involve several estimates, assumptions, risks, and other uncertainties that may cause actual results to be materially different from those anticipated, believed, estimated, expected, etc. Accordingly, statements are not guarantees of future results. Some of the important factors that could cause Flux Power's actual results to differ materially from those projected in any such forward-looking statements include, but are not limited to: risks and uncertainties, related to Flux Power's business, results and financial condition; plans and expectations with respect to access to capital and outstanding indebtedness; Flux Power's ability to comply with the terms of the existing credit facilities to obtain the necessary capital from such credit facilities; Flux Power's ability to raise capital; Flux Power's ability to continue as a going concern. Flux Power's ability to obtain raw materials and other supplies for its products at competitive prices and on a timely basis,; the development and success of new products, projected sales, cancellation of purchase orders, deferral of shipments, Flux Power's ability to improve its gross margins, or achieve breakeven cash flow or profitability, Flux Power's ability to fulfill backlog orders or realize profit from the contracts reflected in backlog sale; Flux Power's ability to fulfill backlog orders due to changes in orders reflected in backlog sales, Flux Power's ability to obtain the necessary funds under the credit facilities. Flux Power's ability to timely obtain UL Listing for its products, Flux Power's ability to fund its operations, distribution partnerships and business opportunities and the uncertainties of customer acceptance and purchase of current and new products, and changes in pricing. Actual results could differ from those projected due to numerous factors and uncertainties. Although Flux Power believes that the expectations, opinions, projections, and comments reflected in these forward-looking statements are reasonable, they can give no assurance that such statements will prove to be correct, and that the Flux Power's actual results of operations, financial condition and performance will not differ materially from the results of operations, financial condition and performance reflected or implied by these forward-looking statements. Undue reliance should not be placed on the forward-looking statements and Investors should refer to the risk factors outlined in our Form 10-K, 10-Q and other reports filed with the SEC and available at www.sec.gov/edgar. These forward-looking statements are made as of the date of this news release, and Flux Power assumes no obligation to update these statements or

the reasons why actual results could differ from those projected.

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### Contacts

# Media & Investor Relations:

media@fluxpower.com info@fluxpower.com

### **External Investor Relations:**

Leanne Sievers | Joel Achramowicz Shelton Group flux-ir@sheltongroup.com



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