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Ideal Power Adds Global Circuit Protection Supplier to its B-TRAN(TM) Test and Evaluation Program

AUSTIN, TX / ACCESSWIRE / May 7, 2024 /Ideal Power Inc. ("Ideal Power," the "Company," "we," "us" or "our") (Nasdaq:IPWR), pioneering the development and commercialization of the highly efficient and broadly patented B-TRAN™ bidirectional semiconductor power switch, today announces a global leader in circuit protection, industrial fuses and power conversion electronics with over a billion in annual sales entered into an agreement with Ideal Power to test and evaluate B-TRAN™ power semiconductors for circuit protection in industrial markets including industrial fuses, renewable energy and energy storage power conversion, rail/transportation, and electric vehicle ("EV") power management.

"We are excited to collaborate with a global leader in circuit protection, industrial fuses and power conversion technology interested in B-TRAN™ as an enabling technology," said Dan Brdar, President and Chief Executive Officer of Ideal Power. "This global supplier presents multiple opportunities for us as they address several of our target markets. We look forward to gathering their feedback on their application-specific requirements to drive our product roadmap and to potentially secure design wins and/or a customer development agreement with them."

Circuit protection is required for renewable energy grid interfaces and EV power connections. Our B-TRAN™ technology has clear advantages in applications including EV power transfer, DC microgrids, energy storage systems and railway substations. These applications require fast-acting circuit protection to minimize electrical faults. In addition, B-TRAN™-based circuit protection also provides dramatically lower conduction losses and bidirectional capability thereby enabling greater efficiency while simultaneously lowering component count and system costs.

Ideal Power's patented semiconductor power switch, B-TRAN™, can reduce power losses by 50% or more over conventional power switches, depending on the application. B-TRAN™'s higher efficiency results in less heat being generated and therefore significantly lower thermal management requirements, requiring significantly smaller surface area to dissipate heat and giving rise to potentially smaller original equipment manufacturer products. B-TRAN™ offers the industry's only symmetric bidirectional operation, reducing the number of components required for an application by 75% compared to a conventional bidirectional switch utilizing IGBTs and diodes. This highly efficient and unique symmetric operation provides a strong competitive advantage in bidirectional applications, which are growing rapidly as transportation electrifies and power generation shifts to renewable energy

coupled with energy storage. For more information on B-TRAN™, visit here.

Ideal Power plans to continue adding potential customers to the test and evaluation program. The program is expected to remain an embedded process in the Company's sales and marketing effort and a source of input for its next generation of products. The Company's outreach continues to generate significant new interest resulting in inquiries from potential customers about B-TRAN™, the SymCool™ power module, the SymCool™ IQ intelligent power module and participation in the test and evaluation program.

About Ideal Power Inc.

Ideal Power (NASDAQ: IPWR) is pioneering the development and commercialization of its broadly patented bidirectional semiconductor power switch, creating highly efficient and ecofriendly energy control solutions for electric vehicle, electric vehicle charging, renewable energy, energy storage, UPS/data center, solid-state circuit breaker and other industrial and military applications. The Company is focused on its patented Bidirectional, Bipolar Junction Transistor (B-TRAN™) semiconductor technology. B-TRAN™ is a unique double-sided bidirectional AC switch that delivers substantial performance improvements over today's conventional power semiconductors. Ideal Power's B-TRAN™ can reduce conduction and switching losses, complexity of thermal management and operating cost in AC power switching and control circuitry. For more information, visit the Company's website at www.IdealPower.com, on LinkedIn, on Twitter, and on Facebook.

Safe Harbor Statement

All statements in this release that are not based on historical fact are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 and the provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. While Ideal Power's management has based any forward-looking statements included in this release on its current expectations, the information on which such expectations were based may change. Such forward-looking statements include, but are not limited to, statements regarding the Company potentially securing design wins and/or a customer development agreement with this program participant. These forward-looking statements rely on a number of assumptions concerning future events and are subject to a number of risks, uncertainties and other factors, many of which are outside of our control that could cause actual results to materially differ from such statements. Such risks, uncertainties, and other factors include, but are not limited to, the success of our B-TRAN™ technology, including whether the patents for our technology provide adequate protection and whether we can be successful in maintaining, enforcing and defending our patents, our inability to predict with precision or certainty the pace and timing of development and commercialization of our B-TRAN™ technology, including the timing of the completion of our wafer fabrication runs with our semiconductor fabrications partners, the rate and degree of market acceptance for our B-TRAN™, the impact of global health pandemics on our business, supply chain disruptions, and the expected performance of future products incorporating our B-TRAN™, and uncertainties set forth in our quarterly, annual and other reports filed with the Securities and Exchange Commission. Furthermore, we operate in a highly competitive and rapidly changing environment where new and unanticipated risks may arise. Accordingly, investors should not place any reliance on forward-looking statements as a prediction of actual results. We disclaim any intention to, and undertake no obligation to, update or revise forward-looking statements, except as

required by applicable law.

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