

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2020

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-36216

**IDEAL POWER INC.**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of  
incorporation or organization)

**14-1999058**  
(I.R.S. Employer Identification No.)

**4120 Freidrich Lane, Suite 100**  
**Austin, Texas 78744**  
(Address and zip code of principal executive offices)

**(512) 264-1542**  
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value \$0.001 per share	IPWR	The Nasdaq Capital Market

Securities registered pursuant to Section 12(g) of the Act: None.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company.

Large accelerated filer   
Non-accelerated filer

Accelerated filer   
Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark whether the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark whether the issuer is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$13,763,882 as of June 30, 2020, the last business day of the registrant's most recently completed second fiscal quarter, based upon the last sales price reported for such date on The Nasdaq Capital Market. For purposes of the foregoing calculation, all directors and executive officers of the registrant and holders of more than 10% of the registrant's common equity are assumed to be affiliates of the registrant. This determination of affiliate status is not necessarily a conclusive determination for other purposes.

As of March 24, 2021, the issuer had 5,872,046 shares of common stock, par value \$0.001, outstanding.

**DOCUMENTS INCORPORATED BY REFERENCE**

Certain information required by Part III of this Annual Report on Form 10-K is incorporated herein by reference from the registrant's definitive proxy statement relating to the 2021 annual meeting of stockholders, which shall be filed with the Securities and Exchange Commission within 120 days after the end of the registrant's fiscal year ended December 31, 2020.

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### SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS AND OTHER INFORMATION CONTAINED IN THIS REPORT

This report contains 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, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Forward-looking statements give our current expectations or forecasts of future events. You can identify these statements by the fact that they do not relate strictly to historical or current facts. You can find many (but not all) of these statements by looking for words such as "approximates," "believes," "hopes," "expects," "anticipates," "estimates," "projects," "intends," "plans," "would," "should," "could," "may" or other similar expressions in this report. In particular, these include statements relating to future actions, prospective products, applications, customers, technologies, future performance or results of anticipated products, expenses, and financial results. These forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from our historical experience and our present expectations or projections. Factors that could cause actual results to differ from those discussed in the forward-looking statements include, but are not limited to:

- our history of losses;
- our ability to generate revenue;
- our limited operating history;
- the size and growth of markets for our technology;
- regulatory developments that may affect our business;
- our ability to successfully develop new technologies, particularly our bi-directional bipolar junction transistor, or B-TRAN™;
- our expectations regarding the timing of prototype and commercial fabrication of B-TRAN™ devices;
- our expectations regarding the performance of our B-TRAN™ and the consistency of that performance with both internal and third-party simulations;
- the expected performance of future products incorporating our B-TRAN™;
- the performance of third-party consultants and service providers whom we have and will continue to rely on to assist us in development of our B-TRAN™ and related drive circuitry;
- the rate and degree of market acceptance for our B-TRAN™;
- the time required for third parties to redesign, test and certify their products incorporating our B-TRAN™;
- our ability to successfully commercialize our B-TRAN™ technology;
- our ability to secure strategic partnerships with semiconductor fabricators and others related to our B-TRAN™ technology;
- our ability to obtain, maintain, defend and enforce intellectual property rights protecting our technology;
- the success of our efforts to manage cash spending, particularly prior to the commercialization of our B-TRAN™ technology;

- general economic conditions and events and the impact they may have on us and our potential partners and licensees;
- our ability to obtain adequate financing in the future, if and when we need it;
- the impact of the novel coronavirus (COVID-19) on our business, financial condition and results of operations;
- our success at managing the risks involved in the foregoing items; and
- other factors discussed in this report.

The forward-looking statements are based upon management's beliefs and assumptions and are made as of the date of this report. We undertake no obligation to publicly update or revise any forward-looking statements included in this report, except as required by applicable law. You should not place undue reliance on these forward-looking statements.

## PART I

### ITEM 1: BUSINESS

#### Our Company

Ideal Power Inc. was formed in Texas on May 17, 2007 and converted to a Delaware corporation on July 15, 2013. Unless otherwise stated or the context otherwise requires, the terms "Ideal Power," "we," "us," "our" and the "Company" refer to Ideal Power Inc.

Until April 2018, we were primarily focused on the design, marketing and sale of electrical power conversion products using our proprietary technology called Power Packet Switching Architecture™, or PPSA™. PPSA™ is a power conversion technology that improves upon existing power conversion technologies in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. PPSA™ utilizes standardized hardware with application specific embedded software. Our products were designed to be used in both on-grid and off-grid applications with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

In April 2018, we realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our Bi-directional bi-polar junction TRANSistor (B-TRAN™) solid state switch technology.

In January 2019, our Board of Directors (our "Board") approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. In September 2019, we closed on the sale of our power conversion systems division and, since that time, we have been solely focused on the further development and commercialization of our B-TRAN™ technology. We show the power conversion systems division as a discontinued operation in our financial statements for the year ended December 31, 2019.

To date, operations have been funded primarily through the sale of common stock and warrants. Total revenue generated from inception to date as of December 31, 2020 amounted to \$15.3 million with approximately \$12.4 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. Revenue from continuing operations was \$428,129 and \$0 in the years ended December 31, 2020 and 2019, respectively, and related to a government grant. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

#### COVID-19 Impact

As of the date of this report, the COVID-19 pandemic continues to spread throughout the United States and the rest of the world. The ultimate extent of the impact of COVID-19 on the financial performance of the Company will depend on future developments, including, among other things, the duration and spread of COVID-19, the timing of vaccination efforts, additional governmental restrictions in response to the COVID-19 pandemic, and the overall economy, all of which are highly uncertain and cannot be predicted. The COVID-19 pandemic has caused significant volatility in the global financial markets, which may impact the Company's ability to raise additional capital if necessary, on acceptable terms or at all, though such risk has not materialized to date. If the financial markets and/or the overall economy are negatively impacted for an extended period, the Company's operating results may be materially and adversely affected.

While the outbreak of COVID-19 initially disrupted our business in the first and second quarters of 2020, the COVID-19 pandemic did not have a material adverse impact on our operations in the second half of 2020. However, the COVID-19 pandemic may disrupt our business in the future and cause delays in critical development and commercialization activities and/or result in potential incremental costs associated with mitigating the effects of the COVID-19 pandemic. The COVID-19 pandemic is ongoing, and its dynamic nature, including uncertainties relating to the ultimate spread of the virus, the severity of the disease, the duration of the outbreak and additional actions that may be taken by governmental authorities to contain the outbreak or to treat its impact, makes it difficult to forecast the effects on our business and results of operations for 2021 and thereafter. See "Item 1A: Risk Factors – Risks Related to the Company – Our business, including our supply chain, liquidity, financial condition and financial results may be adversely disrupted and impacted due to COVID-19 pandemic."

#### Sale of Power Conversion Systems Division

In September 2019, we closed on the sale of our power conversion systems division to CE+T Energy Solutions, Inc. ("CE+T Energy") The consideration consisted of \$200,000 in cash and 50 shares of CE+T Energy's common stock, which represented a 5% ownership interest in CE+T Energy as of the closing date. We did not record any value of the equity consideration obtained in the sale as there was not a market for such shares and we did not have access to current financial information and future financial projections of CE+T Energy. CE+T Energy also assumed certain liabilities of the power conversion systems division in connection with the sale. The net cash proceeds from the sale were \$23,587. In December 2020, CE+T Energy repurchased our shares of CE+T Energy's common stock for \$25,000.

In September 2019, we entered into a sublease with CE+T Energy pursuant to which we sublease approximately seventy-five (75%) percent of our Austin, Texas facility to CE+T Energy. Under the sublease, CE+T Energy is obligated to make monthly payments equal to 75% of all sums due under the master lease and 100% of any maintenance and repair costs related to the subleased premises. The sublease replaced a temporary agreement between us and CE+T Energy, effective in July 2019, that contained similar payment obligations by CE+T Energy for utilization of the subleased premises. Consistent with the master lease, the sublease terminates on May 31, 2021.

## February 2021 Offering

In February 2021, we issued and sold 1,352,975 shares of our common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter's option to purchase additional shares in full, in an underwritten public offering at a price of \$17.00 per share (the "February 2021 Offering"). The net proceeds to us from the February 2021 Offering were \$21.2 million. We intend to use the net proceeds from the February 2021 Offering to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

## Early Warrant Exercise Transaction

In August 2020, we closed the Early Warrant Exercise Transaction (as defined herein), pursuant to which certain holders of our outstanding Series A warrants exercised such Series A warrants to purchase an aggregate of 1,176,137 shares of common stock, and we issued to such holders new Series C warrants to purchase up to an aggregate of 705,688 shares of common stock with an exercise price of \$8.90 per share and an expiration date of August 4, 2025. We raised net proceeds of \$2.5 million in the Early Warrant Exercise Transaction. We intend to use the net proceeds from the Early Warrant Exercise Transaction to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

## Industry Background

A semiconductor material is a substance that is characterized for "conducting" electricity easily, while at the same time, working as an insulator to prevent the flow of electricity. By using semiconductors, it becomes possible to perform rectification for the one-directional flow of electricity, amplification for increasing electrical signals, and switching to open and close the flow of electricity.

Power semiconductors possess a structure that is different from regular semiconductors, enabling them to handle high voltages and large currents without damage. Failures may occur due to a rise in temperatures resulting from heat generated from handling large amounts of power. Therefore, methods have been developed to reduce the amount of power semiconductor loss, which is the cause of the heat generation, while also effectively releasing the generated heat to the outside.

Power semiconductors are mostly used in power conversion such as in changing voltages and frequencies, as well as changing direct current ("DC") to alternating current ("AC") and AC to DC. Power semiconductors play an indispensable role in accurately driving motors from low to high speeds, controlling the voltage and flow of electricity in electric and hybrid vehicles, supplying power grids with power generated from solar cells with less power loss, and providing a stable source of electricity to various home appliances and electrical equipment. In recent years, there has been a greater demand for energy-savings and power consumption reductions and, as a result, the need for power semiconductors that minimize power loss has been increasing.

Power semiconductors are solid-state devices that act as a switch without any mechanical movement. Solid-state devices are completely made from a solid material, typically silicon, and their flow of charges is confined within this solid material. The term solid-state is often used to show a difference with the earlier technologies of vacuum and gas-discharge tube devices and also to exclude the conventional electro-mechanical devices such as relays, switches, hard drives and other devices with moving parts. Solid-state switches are typically more efficient due to lower losses during power processing.

The global power semiconductor market may be categorized by component, material, end-use and geography. Based on component, the market includes power metal-oxide semiconductor field-effect transistors ("MOSFETs"), thyristors, rectifiers, bipolar junction transistors, insulated gate bipolar transistors ("IGBTs") and power diodes. With respect to material, the power semiconductor market is bifurcated into silicon/germanium, silicon carbide and gallium nitride.

The end-use market is classified into automotive, industrial, renewable energy, telecommunication, consumer electronics, aerospace and defense, healthcare and others. Among these, automotive electronics accounts for significant consumption of power semiconductors. The number of semiconductors in vehicles has surged in recent years with the rising adoption of electric vehicles, plug-in electric vehicles, and hybrid electric vehicles. Further, the advent of drive-by-wire or x-by-wire technologies have led to a rise in number of electric components in vehicles over mechanical vehicle parts. This rise helps reduce vehicle weight which is directly related to improved fuel efficiency and reduced vehicular emissions. The heavy consumption of power semiconductors across several end use markets such as industrial, automotive, consumer electronics and renewable energy is a key growth driver of the power semiconductor market.

The telecommunications market is also a significant end-user of power semiconductors. This segment displays demand for radio frequency ("RF") power amplifiers and IGBTs among others. With the launch of 5G, we believe the demand for power semiconductors is likely to increase.

Geographically, Asia Pacific accounts for the leading consumption of power semiconductors among other key regions. The region is also one of the leading exporters of power semiconductors in the world. The growth in the region is mainly attributed to China, which is the leading automotive and passenger vehicle market in the world. China is currently the leading consumer of power semiconductors. Furthermore, demand for power semiconductors is increasing from renewable energy sectors in the region.

Europe and North America are also leading consumers of power semiconductors among others in the global market.

Leading players in the global power semiconductor market include Infineon Technologies AG, Texas Instruments, ON Semiconductor, Fuji Electric Co. Ltd., ST Microelectronics N.V., Mitsubishi Electric Group, Semikron International GmbH, and Toshiba Corporation. While these companies are potential competitors, they are also potential licensees for our B-TRAN™ technology as there is not, to our knowledge, a high-efficiency bi-directional design available in the market. See "—Competition."

## Our Technology

To further improve the performance of our former bi-directional PPSA™ technology and products, we identified the need for a true bi-directional power switch and applied for and, in 2012, received a grant from the U.S. Department of Energy's Advanced Research Projects Agency-Energy ("ARPA-E") to develop a bi-directional solid-state power switch. At the outset, our efforts under the ARPA-E grant were focused on the development of, including the manufacturing process development for, a bi-directional insulated gate bipolar transistor ("BD-IGBT"). Although work on BD-IGBTs had previously been done by others in research labs, it was a technology that had not yet been commercialized.

Our former PPSA™-based products incorporate multiple IGBTs, which are power switches used in the process to convert power from one current form to another. IGBTs switch current in only one direction and require the use of a blocking diode to prevent current from flowing back through the system. To enable our former PPSA™ products to perform bi-directional power conversion, for each IGBT and diode used in our products, we were required to include a second IGBT and diode. These additional components have slight voltage drops that affect the electrical efficiency of our former PPSA™ products and generate heat that must be dissipated. To eliminate the need to utilize four devices to create one bi-directional switch and to improve the performance of bi-directional switching, a true bi-directional switch is necessary. While we initially focused on the development of a BD-IGBT under the ARPA-E grant, we shifted our focus under the grant to the development of a new, highly efficient power switch called a bi-directional bipolar transistor, or B-TRAN™, that we believe will allow us to substitute one B-TRAN™ for two pairs of IGBTs and diodes used in PPSA™ products but, more importantly, is a potential replacement for conventional power switches, such as IGBTs, in the broader power semiconductor market. The B-TRAN™ leverages many of the same processing steps we had developed for the BD-IGBT while also providing us with certain key advantages including patentability and higher efficiency compared to a BD-IGBT.

Based on third-party device software simulations and prototype testing to date, we believe that the B-TRANs™ can significantly improve electrical efficiency in power

converters and many other power conversion applications. Compared to conventional power switches, such as IGBTs, we believe the B-TRAN™ will reduce power losses by 50% or more depending on the application. The higher efficiency would substantially reduce the heat generated by the operation of products utilizing this technology. As a result, products incorporating B-TRANs™ would have lower thermal management requirements. This in turn would require significantly smaller surface area required for heat dissipation which would enable increased power density, or power per pound, and potentially result in smaller original equipment manufacturer, or OEM, products. In addition, B-TRAN™'s symmetric bi-directional operation reduces the number of components by 75% as compared to a conventional bi-directional switch utilizing IGBTs and diodes. This highly efficient and, we believe, unique symmetric operation will potentially provide a strong competitive advantage in bi-directional applications which are growing at rapid rates due to the electrification of transportation and the shift to renewable energy coupled with energy storage.

Our testing of B-TRAN™ silicon dies and prototypes to date are consistent with third-party simulations that predict significant performance and efficiency improvements over conventional power switches such as silicon-controlled rectifiers (“SCRs”), IGBTs and MOSFETs. We have also successfully confirmed the proof of concept of double-sided B-TRAN™ prototypes, validating the ability to make B-TRAN™ semiconductor power switches using conventional silicon semiconductor fabrication equipment and processes. Test results on the standard double-sided prototypes measured B-TRAN™ electrical losses at less than 40% that of conventional power switches such as silicon IGBTs.

As part of the B-TRAN development process and in partnership with our semiconductor fabrication partner, we continue with additional B-TRAN™ wafer runs, incorporating the results of prior runs and subsequent testing into the B-TRAN™ wafer fabrication. With the double-sided transistor behavior and low conduction losses measured and upgrades and improvements in the manufacturing process implemented, the next goal is to complete the fabrication of prototype engineering samples for evaluation by potential partners. These samples will include a new packaging design, incorporating input from a design for manufacturability, or DFM, review from a commercial packaging house. The samples will also include a second-generation prototype driver. Initial samples will be packaged B-TRAN™ dies with the prototype driver. The coupling of packaged devices with a driver will form the basis of an intelligent power module. Feedback from potential customers in the engineering sampling program will be incorporated into the intelligent power module for commercialization.

The primary raw material used in the fabrications of B-TRAN™ devices is silicon wafers. Silicon is abundant and the production of silicon wafers is a large, global business with most manufacturers in Europe and Asia.

### **Business Strategy and Target Markets**

Once we have completed the fabrication of engineering samples of packaged B-TRAN™ devices with a driver for engineering evaluation and evaluation by potential customers and partners, we intend to engage target customers for our B-TRAN™ utilizing a strategic partnership model.

Potential target markets for B-TRAN™ devices include, but are not limited to, electric and hybrid vehicles, electric vehicle charging, renewable energy and energy storage system power converters, uninterruptible power supplies (“UPS”) for data centers, industrial motor drives, direct current-based distribution and transmission switches and controls and other industrial and military markets. These markets typically utilize IGBTs for power switching in their applications. According to Mordor Intelligence, the IGBT market in 2020 was valued at \$6 billion and is projected to be valued at \$11 billion by 2026. We expect to initially target large and growing segments of the IGBT market, such as electric vehicles, electric vehicle charging, renewable energy and data center UPS systems. We expect the B-TRAN™ to provide a competitive advantage in the IGBT markets due to its higher expected efficiency and inherent bi-directionality, the growth in bi-directional applications such as electric vehicles and energy storage, and as it seems the IGBT has almost reached its technological limit. We are currently in the process of fully developing our commercialization strategy for our B-TRAN™ technology.

### **Intellectual Property**

We rely on a combination of patents, trade secrets, laws that protect intellectual property, confidentiality procedures and contractual restrictions with our employees and others to establish and protect our intellectual property rights. As of December 31, 2020, we had 36 U.S. and 21 foreign issued patents on our B-TRAN™ technology as well as 27 additional pending U.S. and international patent applications on our B-TRAN™ technology. Our first B-TRAN™ patent issued in 2015 and our patents generally have a 20-year life prior to expiration. We expect to continue to build our patent estate for our B-TRAN™ technology and other technological developments that broaden the scope of our technology platform.

### **License Agreement**

In 2015, we entered into licensing agreements which expire on February 7, 2033. Per the agreements, we have an exclusive royalty-free license associated with semiconductor power switches which enhances our intellectual property portfolio. The agreements include both fixed payments, all of which were paid prior to 2017, and ongoing variable payments. The variable payments are a function of the number of associated patent filings pending and patents issued under the agreements. We will pay \$10,000 for each patent filing pending and \$20,000 for each patent issued each year of the agreements, up to a maximum of \$100,000 each year (i.e. five issued patents).

Through December 31, 2020, a total of three patents associated with the agreements were issued. At December 31, 2020 and 2019, the corresponding long-term liability for the estimated present value of future payments under the licensing agreement was \$552,031 and \$595,802, respectively.

### **Competition**

We will compete against well-established incumbent power semiconductor device suppliers, including companies that already operate at a large scale in the single-sided (uni-directional) power switch market with IGBTs and MOSFETs, including silicon carbide MOSFETs. We expect that these power semiconductor device providers will base their products on current technologies serving the uni-directional power switch market, although we continue to monitor the competitive landscape for offerings or potential offerings based on new technologies. Many, if not all of our competitors, have greater financial resources, more comprehensive product offerings, broader market presence, longer standing relationships with business partners, longer operating histories, greater manufacturing capabilities, stronger brand recognition, and greater marketing resources than we have. To date, we are not aware of any offerings or potential offerings based on a true high efficiency bi-directional design other than our potential products based on our B-TRAN™ technology.

Power semiconductor device providers typically compete based on voltage, current and frequency capabilities with the larger providers offering a broad range of standard products, including discrete devices and modules. Smaller providers generally take a niche approach focused on a unique or customized device capability. Customers for these devices are typically looking for demonstrable product or system level improvements in efficiency and/or power density for their applications. Power semiconductor device providers utilize direct and indirect sales teams focused on capturing customer design wins.

### **Government Approval and Regulation**

Government approval is not required for us to license our B-TRAN™ technology or sell B-TRAN™ devices. However, government support for certain of our potential target markets including electric and hybrid vehicles, electric vehicle charging infrastructure, renewable energy, grid storage, and improved grid resiliency, may impact the size and growth rate of these potential target markets.

## Employees

As of February 28, 2021, we had 5 employees, all of whom are full-time employees. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good.

## Available Information

Our Internet address is [www.idealpower.com](http://www.idealpower.com) and our investor relations website is located at [ir.idealpower.com](http://ir.idealpower.com). We make available free of charge on our investor relations website under the heading “SEC Filings” our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports and our Proxy Statement as soon as reasonably practicable after such materials are electronically filed with (or furnished to) the SEC. These reports are also available free of charge via EDGAR through the SEC website ([www.sec.gov](http://www.sec.gov)) as soon as reasonably practicable after such materials are electronically filed with (or furnished to) the SEC. We also make available on our website, our corporate governance documents, including our code of conduct and ethics. Information contained on our website (or any other website referred to in this Annual Report on Form 10-K) is not incorporated by reference into this Annual Report on Form 10-K.

## ITEM 1A: RISK FACTORS

*We are subject to various risks that may materially harm our business, prospects, financial condition and results of operations. An investment in our common stock is speculative and involves a high degree of risk. In evaluating an investment in shares of our common stock, you should carefully consider the risks described below, together with the other information included in this report.*

*The risks described below are not the only risks we face. If any of the events described in the following risk factors actually occurs, or if additional risks and uncertainties later materialize that are not currently known to us or that we currently deem immaterial, then our business, prospects, results of operations and financial condition could be materially adversely affected. In that event, the trading price of our common stock could decline, and you may lose all or part of your investment in our shares. The risks discussed below include forward-looking statements, and our actual results may differ substantially from those discussed herein.*

### Risks Related to the Company

***We lack an established operating history on which to evaluate our business and determine if we will be able to execute our business plan. We have also incurred losses in prior periods, expect to incur losses in the future, currently generate no product revenue and we may not achieve or maintain profitability in the future.***

We have a limited operating history that makes it difficult to evaluate our business. In 2019, we discontinued and subsequently sold our power conversion systems division which historically accounted for all of our sales. Our focus is now exclusively on the development and commercialization of our B-TRAN™ technology. We cannot say with certainty when we will commercialize our B-TRAN™ technology, if ever, and thus may not generate any product revenue in the near future, or ever.

Since inception, we have sustained approximately \$75.1 million in net losses and we had net losses for the years ended December 31, 2020 and 2019 of approximately \$7.8 million and \$3.9 million, respectively. We expect to incur losses and negative cash flows from operating activities at least until such time as we have commercialized our B-TRAN™ technology and developed a substantial and stable revenue base. We cannot assure you that we can develop a stable revenue base or achieve or sustain profitability in the future.

We have been funding operations primarily through the sale of common stock and warrants. We currently generate no product revenue and, in order to fund our operations until we are profitable, we may need to raise additional funds and such funds may not be available on commercially acceptable terms, if at all. If we are unable to raise funds on acceptable terms if and as needed, we may not be able to execute our business plan and generate sustainable revenue. This may seriously harm our business, financial condition and results of operations. In the event we are not able to continue operations, you will likely suffer a complete loss of your investment in our securities.

***Product development is an inherently uncertain process, and we may encounter unanticipated development challenges and may not be able to meet our product design and commercialization milestones.***

Prototype and other pre-commercial development and testing may be subject to unanticipated and significant delays, expenses and technical or other problems. We cannot guarantee that we will successfully achieve our milestones within our planned timeframe or ever. We have developed and tested initial prototypes of B-TRAN™ devices. We cannot predict whether future prototypes of the B-TRAN™ will achieve results consistent with our expectations, third-party simulations or the expectations of our potential customers and/or licensees. A prototype could cost significantly more than expected or the prototype design and construction process could uncover problems that are not consistent with our expectations. Prototypes of B-TRAN™ devices are a material part of our business plan, and if they are not proven to be successful, our business and prospects would be harmed. In addition, for both testing and commercialization purposes, the B-TRAN™ will need to be packaged and paired with an efficient double-sided driver to form an intelligent power module. The driver development, which is underway is subject to similar risks as the B-TRAN™ prototype development including being subject to unanticipated and significant delays, expenses and technical or other problems.

More generally, the future commercialization of products using our technology and designs may also be adversely affected by many factors not within our control, including:

- the willingness of market participants to try new products incorporating our technology and the perceptions of these market participants of the safety, reliability, functionality and cost effectiveness of these products;
- the emergence of newer, possibly more effective technologies;
- the future cost and availability of the raw materials and components needed to manufacture and use products incorporating our technology; and
- the adoption of new regulatory or industry standards that may adversely affect the use or cost of products incorporating our technology.

Accordingly, we cannot predict that products incorporating our technology will be accepted on a scale sufficient to support development of mass markets for them.

***Our semiconductor fabrication partners may be unable to successfully and cost-effectively develop and implement new process steps necessary for bi-directional semiconductor device development at scale.***

While the manufacturing of B-TRAN™ devices uses conventional equipment and process steps, there is heightened risk in the fabrication process due to the handling and processing of both sides of the wafer and achieving the required front to back alignment of the features. Two-sided wafer processing and handling is necessary as the B-

TRAN™, unlike conventional power semiconductor devices, is a two-sided bi-directional device. In addition, the cost to manufacture a B-TRAN™ will be impacted by the number of process steps, the processing time and the size of the wafer. Current B-TRAN™ prototypes under development utilize smaller 4-inch and 5-inch diameter wafers resulting in fewer die per wafer. As a result, the cost per die is higher than if larger diameter wafers were utilized. For example, if an 8-inch wafer was used it would have four times the area and thus could produce four times as many die as a 4-inch wafer, or two and one half times the areas and thus could produce two and one half times as many die as a 5-inch wafer, resulting in a lower cost per die. If our semiconductor fabricator partners are unable to successfully and cost-effectively develop and implement new process steps necessary for bi-directional semiconductor device development at the prototype stage or at scale, our business, financial condition and results of operations would be materially and adversely affected.

There are a limited number of semiconductor fabrication development facilities in the United States and abroad. There are also a limited number of well-capitalized semiconductor fabricators working with the small diameter wafers necessary for our current development. Our inability to engage such partners in a cost-effective manner or the loss of any fabrication development partner once engaged may materially delay our development efforts and may have a materially adverse effect on our business, financial condition and results of operations.

***We, or our potential future licensees, must achieve design wins to obtain customers, although design wins achieved may not necessarily result in substantial sales or licensing revenue to us.***

We anticipate that our future designs will typically be integrated into systems by our potential customers. This may result in the need to customize our designs for certain applications or customers. We will need to work with semiconductor partners and/or manufacturers early in their design cycles to ensure that our designs will meet the requirements of their systems. Manufacturers typically choose one or two vendors to provide the components for use in their systems. Selection as one of these vendors is called a design win. It is critical that we, or our licensees, achieve these design wins in order to obtain customers and generate sales and/or licensing revenue.

We believe that equipment manufacturers often select their suppliers based on factors including long-term relationships and end user demand. Accordingly, we may have difficulty achieving design wins from equipment manufacturers as our products will be new entrants into the market. Our efforts to achieve design wins, or assist our potential future licensees in achieving design wins, may be time consuming and expensive and may not be successful. If we or our potential future licensees are not successful in achieving design wins, or if we or our potential future licensees do achieve design wins but the customers' systems that utilize our designs are not successful, our business, financial condition, and results of operations could be materially and adversely impacted.

Even if we, or our potential future licensees, achieve design wins, the timing of generation of sales and/or licensing revenue will be dependent on the customer's product design cycle. There may be significant time between when we, or our potential future licensees, achieve design wins and when we generate initial sales and/or licensing revenue from these design wins. Significant delays in our customers' product design cycles, or long product design cycles by these customers, could materially and adversely affect our business, financial condition and result of operations.

Once a manufacturer chooses a component for use in a particular system, it is likely to retain that component for the life of that system. In addition, the sales cycle into certain potential target markets such as the automotive market are typically very long. Our future growth could experience material and prolonged adverse effects if we fail to achieve design wins or if the design wins do not result in substantial revenue for us.

***Our corporate realignment and strategic shift may not be successful.***

In April 2018, we realigned our two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our B-TRAN™ solid state switch technology. In January 2019, our Board approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. In September 2019, we closed on an asset sale of our power conversion systems business and PPSA™ technology. We are now solely focused on the development and commercialization of our B-TRAN™ technology.

The success of this strategic shift will depend on our ability to successfully fabricate engineering samples for engineering evaluation and evaluation by our potential customers and partners for our B-TRAN™ technology, retain senior management or other highly qualified personnel, hire additional highly qualified personnel and successfully commercialize our B-TRAN™ technology. Accordingly, there are no assurances our change in strategic focus will be successful, which may have an adverse effect on our results of operations and financial condition.

***We previously received grant funds from the United States for the development of a bi-directional switch. In certain instances, the United States may obtain title to inventions related to this effort. If we were to lose title to those inventions, we may have to pay to license them from the United States in order to manufacture the inventions. If we were unable to license those inventions from the United States, it could slow down our product development.***

In conjunction with the ARPA-E grant we received from the Department of Energy, we granted to the United States a non-exclusive, nontransferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States inventions related to a bi-directional switch and made within the scope of the grant. If we failed to disclose to the Department of Energy an invention made with grant funds that we disclosed to patent counsel or for publication, or if we elect not to retain title to the invention, the United States may request that title to the subject invention be transferred to it.

We also granted "march-in-rights" to the United States in connection with any bi-directional switch inventions in which we choose not to retain title, if those inventions were made under the ARPA-E grant. Pursuant to the march-in-rights, the United States has the right to require us, any person to whom we have assigned our rights, or any exclusive licensee to grant a non-exclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant upon terms that are reasonable. If the license is not granted as requested, the United States has the right to grant the license if it determines that we have not achieved practical application of the invention in the field of use, the action is necessary to alleviate health or safety needs, the action is necessary to meet requirements for public use specified by Federal regulations and such requirements have not been satisfied, or the action is necessary because an agreement to manufacture the invention in the United States has not been obtained or waived or because any such agreement has been breached.

If we lost title to the United States as a result of any of these events, we would have to pay to license the inventions, if needed, from the United States to manufacture the applicable bi-directional switch. If we were unable to license those inventions from the United States, it could materially and adversely impact our business, financial condition and results of operations.

***As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement or competitors could infringe upon our intellectual property. We may incur substantial costs as a result of litigation or other proceedings relating to patent and other intellectual property rights.***

As we continue to grow and to develop our intellectual property, we could attract threats from patent monetization firms or competitors alleging infringement of intellectual property rights. In that event, we may incur significant costs to defend against such a claim even if the claim proves to have no merit. In addition, some of our future competitors will be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. If we do not prevail in this type of litigation, we may be required to: pay monetary damages; stop commercial activities relating to our technology; obtain one or more licenses in order to secure the rights to manufacturing or marketing certain future products incorporating our technology; or attempt to compete in the market with substantially similar products. Uncertainties resulting from the initiation and continuation of any litigation could limit our ability to continue some or all of our operations. We may face significant expenses and liability in connection with the protection of our intellectual property and, if we are unable to successfully protect our rights or resolve intellectual property conflicts with others, our business or financial condition could be adversely affected.

Our success depends in large part on our proprietary technology for which we seek protection under patent, copyright, trademark and trade secret laws. Such protection is also maintained in part using proprietary information and inventions agreements and non-disclosure agreements. The agreements we use in an effort to protect our intellectual property, confidential information, and other unpatented proprietary information may be ineffective or insufficient to prevent unauthorized use or disclosure of such trade secrets and information. A party to one of these agreements may breach the agreement and we may not have adequate remedies for such breach. As a result, our trade secrets, confidential information, and other unpatented proprietary rights and information may become known to others, including our competitors. Using third-party manufacturers may increase the risk of misappropriation of our trade secrets, confidential information and other unpatented proprietary information. Protection of our technology is important to us so that we may offer our future customers proprietary products unavailable from our competitors, and so that we may prevent our competitors from using technology that we have developed or exclusively licensed. If we are unable to effectively protect our intellectual property, our business and competitive position may be adversely affected.

***We may license our technology in the future; however the terms of any such agreements may not prove to be advantageous to us. If the license agreements we may enter into do not prove to be advantageous to us, our business and results of operations will be adversely affected.***

Although we intend to initially employ a product sales strategy for products incorporating our B-TRAN™ technology, we may employ a licensing strategy for the production and potentially sales of our future B-TRAN™ products in certain instances. However, we may not be able to secure license agreements with semiconductor fabrication partners or other strategic partners at all or on terms that are advantageous to us. Furthermore, the timing and volume of revenue earned from license agreements will be outside of our control. If the license agreements we may enter into in the future do not prove to be advantageous to us, our business and results of operations will be adversely affected.

***Any future revenue may rely on the marketing and sales efforts of third parties whom we do not control.***

The marketing and sale of our future products to end user customers may be conducted by us, future licensees of our technology or a combination thereof. Consequently, commercial success of our products may depend, to a great extent, on the efforts of others. We may not be able to identify, maintain or establish appropriate relationships in the future. We can give no assurance that any such third parties will focus adequate resources on selling our products or will be successful in selling them. In addition, these third parties may require customization of our designs or other concessions that could reduce the potential profitability of these relationships. Failure to develop favorable licensing relationships in our target markets may adversely affect our commercialization schedule and, to the extent we enter into such relationships, the failure of our licensees to focus adequate resources on selling our products or be successful in selling them or to meet their monetary obligations to us may adversely affect our financial condition and results of operations.

***A material part of our success depends on our ability to manage third-party resources. Our failure to properly select, manage and retain qualified third-party resources could materially and adversely affect our results of operations and relations with our partners and future customers.***

Our development efforts are highly dependent on third-party resources for semiconductor expertise and manufacturing. These third-party resources include experts in power semiconductor switches, semiconductor fabrication suppliers and other resources within the power switch ecosystem. The loss of one or more of our third-party consultants could have a material adverse effect on the timing of our development efforts which could, in turn, result in our business and results of operations being adversely affected. We also rely on our semiconductor fabrication partners to develop prototype devices. There can be no assurance that these manufacturing partners will provide devices in a timely and cost-efficient manner, provide quality devices or otherwise meet our needs and expectations. Our ability to manage such relationships and timely replace such partners, if necessary, is critical to our success. Our failure to timely replace consultants, fabrication partners and other suppliers within the power switch ecosystem, should that become necessary, could materially and adversely affect our results of operations and relations with our partners and future customers.

***Our business, including our supply chain, liquidity, financial condition and financial results may be materially adversely disrupted and impacted due to the COVID-19 pandemic.***

In 2020, the COVID-19 pandemic drove global uncertainty and disruption and spread throughout the geographic region in which we operate our business and the geographic regions where our suppliers, business partners and potential customers are located. While the outbreak of COVID-19 initially disrupted our business in the first and second quarters of 2020, the COVID-19 pandemic did not have a material adverse impact on our operations in the second half of 2020. Potential financial impacts associated with the COVID-19 pandemic include, but are not limited to, delays in critical development and commercialization activities and potential incremental costs associated with mitigating the effects of the COVID-19 pandemic, including increased freight and logistics costs and other expenses. The COVID-19 pandemic is ongoing, and its dynamic nature, including uncertainties relating to the ultimate spread of the virus, the severity of the disease, the duration of the outbreak and additional actions that may be taken by governmental authorities to contain the outbreak or to treat its impact, makes it difficult to forecast any effects on our results of operations for 2021 and thereafter.

Furthermore, we rely upon the facilities of our semiconductor fabricator in California to support our business as well as vendors throughout the United States and abroad to supply silicon wafers and other materials and processing and engineering capabilities and expertise. Accordingly, a significant portion of our supply chain is located in California and other locations domestically and abroad where the COVID-19 impacts have been, and may continue to be, significant. The COVID-19 pandemic has resulted in significant governmental measures being implemented to control the spread of the virus, including, among others, restrictions on manufacturing and the movement of employees in many states or regions of these countries. As a result of COVID-19 and the measures designed to contain the spread of the virus, our suppliers may not have the materials, capacity, or capability to supply us the components needed to continue our development efforts according to our schedule. Any reduction in manufacturing or supply capacity may reduce or even halt the supply of necessary components needed for us to continue these activities. Further, there may be logistics issues, including our ability and our supply chain's ability to operate, and transportation demands that may cause further delays. If our suppliers' operations are curtailed, we may need to seek alternate sources of supply, which may be more expensive. Alternate sources may not be available or may result in delays in shipments to us from our supply chain, each of which would affect our results of operations. While disruptions and restrictions on the ability to travel, quarantines, and temporary closures of the facilities of our suppliers, as well as general limitations on movement in the region have occurred and may occur in the future, the duration of any potential production and supply chain disruption, and related financial impact, cannot be estimated at this time. Should production and distribution closures occur, the impact on our supply chain could have a material adverse effect on our results of operations, financial condition and cash flows. See "—Risks Related to the Company—Our semiconductor fabrication partners may be unable to successfully and cost-effectively develop and implement new process steps necessary for bi-directional semiconductor device development at scale." The COVID-19 pandemic may also delay the commercialization of our B-TRAN™ technology, which would materially and adversely affect our business and operating results.

Our operating results could also continue to be adversely affected to the extent that the COVID-19 pandemic continues to harm the United States economy in general. In addition, the COVID-19 pandemic has adversely affected the global economy and caused volatility in the financial markets, which could result in a continued economic downturn, and could also adversely impact our operations, including among others, our development activities, supply chain and commercialization plan and could have an



adverse impact on our business and our financial results. See also “—We may need additional financing to execute our business plan and fund operations, which additional financing may not be available on commercially reasonable terms or at all.”

***We may need additional financing to execute our business plan and fund operations, which additional financing may not be available on commercially reasonable terms or at all.***

We have and, prior to profitable commercialization at scale, may continue to rely on raising funds from investors and/or other sources to support our research and development activities and execute our business plan. Macro-economic conditions in the United States and abroad may result in a tightening of the credit markets and/or less capital available for small public companies, which may make it more difficult for us to raise capital on commercially reasonable terms or at all. Specifically, the COVID-19 pandemic has caused significant volatility in the global financial markets, which could increase the cost of capital and adversely impact our ability to raise additional capital, which could negatively affect our liquidity in the future. If we are unable to raise funds on acceptable terms if and as needed, we may be forced to curtail our operations or even cease operating altogether. Therefore, unfavorable macroeconomic conditions, particularly in the United States, including as a result of COVID-19 and any resulting recession or slowed economic growth, could have an outsized negative impact on us. This may seriously harm our business, financial condition and results of operations.

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***A failure to obtain additional government grants could have a material adverse effect on our development efforts and our ability to fund operations and execute on our business plan.***

We expect to fund a portion of our development efforts with funds received under government grants. However, we may not be awarded any such grants in the future, any such grant awards may be insufficient to fund a meaningful portion of our development spending and/or the timing of the receipt of any such award or awards may not coincide with the planned timing of our development efforts. Grants are subject to long procurement cycles, typically 6 to 12 months, and there may not be open grant solicitations for topics relevant to our B-TRAN™ technology. Grant topics are typically identified 1 to 2 years prior to the opening of the grant solicitation and the windows to submit proposals are discrete time periods. Further, the award of grants is a subjective process and government agencies often do not provide detailed feedback on why a grant was not received.

Other factors that could negatively impact our ability to obtain government grants is that our technology is still in a relatively early stage of development. If, in the future, grant agencies determine that our technological readiness is not sufficiently advanced for a funded demonstration incorporating B-TRAN™ or potential partners determine that our technological readiness is not sufficient to partner with us on grant proposals, we may be unable to obtain additional government grants. Overall, there is a high degree of uncertainty in obtaining grants, particularly for technologies that have not been demonstrated with device samples, and we can provide no assurance that we will be able to obtain additional government grants to offset a significant, or any, portion of our development spending. If we do not obtain additional grants or our efforts to obtain additional grants take longer than expected to be successful, we will need to rely on other means to fund our development.

***We are highly dependent on the services of key members of our management and technical teams. Our inability to retain these individuals could impede our business plan and growth strategies, which could have a negative impact on our business and the value of your investment.***

Our ability to implement our business plan depends, to a critical extent, on the continued efforts and services of key members of our management and technical teams. If we unexpectedly lose the services of any of these persons during this important time in our development, the loss may result in a delay in the implementation of our business plan and plan of operations. We can give no assurance that we could find satisfactory replacements for these individuals on terms that would not be unduly expensive or burdensome to us. We do not currently carry a key-man life insurance policy that would assist us in recouping our costs in the event of the death or disability of any of these persons.

In addition, we will need additional commercial and semiconductor expertise as we draw closer to the commercialization of our technology. We can give no assurance that we will be able to identify and secure the necessary expertise at the appropriate time or at all.

***Our operating results for any quarterly reporting period may fluctuate significantly depending on the timing and pace of our development spending and costs to commercialize our technology.***

Our research and development costs may vary significantly from quarter to quarter depending on the current phase of development and commercialization of our technology and the timing of pre-commercial semiconductor fabrication, commercial production and negotiations with potential strategic partners. We also may intentionally accelerate our development costs or may be faced with unexpected delays or challenges with development that could significantly impact our operating results. Significant adverse fluctuations in our research and development spending and other operating costs from period to period could adversely affect the market price for our common stock.

***New technologies in the power semiconductor switch industry may supplant our technology in this market, which would harm our business and operations, and we may not be able to compete effectively in this industry and with any such new technologies.***

The power semiconductor switch industry is subject to significant technological change. Our future success will depend on the cutting-edge relevance of our technology, and thereafter on our ability to appropriately respond to changing technologies and changes in function of products and quality. If new technologies supplant our technology, our business would be adversely affected and we will have to revise our plan of operation.

We or our potential licensees could be competing against large power semiconductor device suppliers with substantially greater resources than us, financial and otherwise. These competitors may also have more comprehensive product lines, broader market presence, longer standing relationships with customers, longer operating histories, greater manufacturing and/or product development capabilities, stronger brand recognition, and greater marketing resources than we and/or our licensees have. If any of these competitors develop products to compete with our technology, we may not be able to commercialize our technology and our technology may not result in sufficient, or any, product and/or licensing revenue.

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***We may not be able to use some or all of our net operating loss carryforwards to offset future income.***

We have net operating loss carryforwards due to prior period losses generated before January 1, 2021 which if not utilized will begin to expire in 2031 for net operating loss carryforwards prior to 2018 and which do not expire for net operating loss carryforwards for 2018 and thereafter. If we are unable to generate sufficient taxable income to utilize our net operating loss carryforwards, pre-2018 carryforwards could expire unused and be unavailable to offset future income tax liabilities.

In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, a corporation that undergoes an “ownership change” (generally defined as a greater than 50% change (by value) in its equity ownership over a three-year period) is subject to limitation on its ability to utilize its pre-change net operating loss and credit carry-forwards, or net operating losses, to offset future taxable income. We may have experienced one or more ownership changes under these Sections in connection with our

initial public offering and one or more subsequent financings. However, we do not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carryforwards until such time we project we will be able to utilize these tax attributes. In addition, future changes in our stock ownership, which may be outside of our control, may trigger an ownership change, as may future equity offerings or acquisitions that have equity as a component of the purchase price. If an ownership change has occurred or does occur in the future, our ability to utilize our net operating losses to offset income if we attain profitability may be limited.

## **Risks Related to Owning Our Common Stock**

***The public market for our common stock may be volatile. This may affect the ability of our investors to sell their shares as well as the price at which they sell their shares.***

The market price for our shares has experienced significant price and volume fluctuations. We cannot predict whether the price of our common stock will rise or fall. Our stock price may be significantly affected by factors such as, among others:

- variations in the volume of trading activity;
- actual or anticipated fluctuations in our liquidity, financial condition and operating results;
- quarterly and yearly operating results compared to market expectations;
- quarterly and yearly operating results of other companies in our industry compared to market expectations;
- general trends in markets we expect to serve;
- competition from existing products or new products that may emerge;
- future announcements concerning our business or our competitors' businesses;
- additions or departures of key management or other technical personnel;
- the public's reaction to our press releases, other public announcements and filings with the Securities and Exchange Commission (the "SEC");
- issuances or sales, or expected issuances or sales of our capital stock;
- disputes or other developments related to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- litigation involving us, our general industry or both; and
- changes in state or federal regulations affecting us and our industry.

Furthermore, in recent years the stock market has experienced extreme price and volume fluctuations that are unrelated or disproportionate to the operating performance of the affected companies. Such broad market fluctuations may adversely affect the market price of our common stock. In addition, price volatility may be greater if the public float and trading volume of our common stock is low. As a result, you may suffer a loss on your investment.

***We have the right to issue, and have in the past issued, shares of preferred stock. If we were to issue additional preferred stock, it may have rights, preferences and privileges that may adversely affect the common stock.***

We are authorized to issue 10,000,000 shares of "blank check" preferred stock, with such rights, preferences and privileges as may be determined from time-to-time by our Board. Our Board is empowered, without stockholder approval, to issue preferred stock in one or more series, and to fix for any series the dividend rights, dissolution or liquidation preferences, redemption prices, conversion rights, voting rights, and other rights, preferences and privileges for the preferred stock. The issuance of shares of preferred stock, depending on the rights, preferences and privileges attributable to the preferred stock, could reduce the voting rights and powers of the common stock and the portion of our assets allocated for distribution to common stockholders in a liquidation event, and could also result in dilution in the book value per share of the common stock we are offering. The preferred stock could also be utilized, under certain circumstances, as a method for raising additional capital or discouraging, delaying or preventing a change in control of the Company, to the detriment of the investors in the common stock offered hereby. We cannot assure you that we will not, under certain circumstances, issue shares of our preferred stock. At December 31, 2020, we had no shares of preferred stock outstanding.

***We have not paid dividends in the past and have no immediate plans to pay dividends.***

We plan to reinvest all of our earnings, to the extent we have earnings, in order to market our products and to cover operating costs and to otherwise become and remain competitive. We do not plan to pay any cash dividends with respect to our securities in the foreseeable future. As a result, only appreciation of the price of our common stock, which may never occur, will provide a return to stockholders. We cannot assure you that we would, at any time, generate sufficient surplus cash that would be available for distribution to the holders of our common stock as a dividend. Therefore, you should not expect to receive cash dividends on our common stock.

***Shares eligible for future sale, including warrants and options exercisable into shares of our common stock, may cause dilution to our existing stockholders and may adversely affect the market for our common stock.***

Sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur, could cause the market price of our common stock to decline. These sales could also make it more difficult for us to sell equity or equity-related securities in the future at a time and price that we deem appropriate.

On February 12, 2021, we completed an underwritten public offering of 1,352,975 shares of our common stock.

At February 28, 2021, we had 5,872,046 shares of common stock outstanding and 253,828 pre-funded warrants with an exercise price of \$0.001 that are included in our computation of basic earnings per share. Shares beneficially owned by our affiliates, if any, and employees are subject to volume and other restrictions under Rules 144 and 701 under the Securities Act, various vesting agreements, our insider trading policy and/or any applicable 10b5-1 trading plan. Shares that are not beneficially owned by our affiliates and employees generally can be freely sold in the public market, subject in some cases to restrictions under Rule 144.

At February 28, 2021, we had 1,192,357 potentially dilutive shares outstanding, exclusive of pre-funded warrants to purchase shares of common stock that are considered outstanding common shares and included in our computation of basic earnings per share, and we may grant additional options, stock-based awards and/or warrants in the future. The holders of vested options or warrants, including pre-funded warrants and excess warrant shares held in abeyance, may exercise their options and/or warrants and sell a large number of shares. Any sale of a substantial number of shares of our common stock may have a material adverse effect on the market price of our common stock.

***Raising additional capital, if necessary, may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our technologies.***

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and licensing arrangements. To the extent that we raise additional capital through the sale or issuance of equity, warrants or convertible debt securities, the ownership interest of our existing stockholders will be diluted, and the terms of such securities may include liquidation or other preferences that adversely affect your rights as a stockholder. If we raise capital through debt financing, it may involve agreements that include covenants limiting or restricting our ability to take certain actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we raise additional funds through strategic partnerships or licensing agreements with third parties, we may have to relinquish valuable rights to our technologies, or grant licenses on terms that are not favorable to us. If we are unable to raise additional funds if and when needed, we may be required to delay, limit, reduce or terminate our development and commercialization efforts.

***Our ability to raise capital may be limited by the Securities Act and SEC rules and regulations.***

Under current SEC rules and regulations, if the aggregate market value of our common stock held by non-affiliates, or public float, falls to less than \$75 million (calculated as set forth in Form S-3 and SEC rules and regulations) at the time of filing of our next Annual Report on Form 10-K, the amount we could raise through primary public offerings of our securities in any 12-month period using a registration statement on Form S-3 would be limited to one-third of our public float. Alternative means of raising capital through sales of our securities, including through the use of a “long form” registration statement on a Form S-1 or in private placements of equity or debt securities, may be more costly and time-consuming and more difficult to market to potential investors, which may have a material adverse effect on our ability to raise capital, our liquidity position and strategy.

***Our charter documents and Delaware law may inhibit a takeover that stockholders consider favorable.***

Our certificate of incorporation (as amended and restated to date, “our certificate”) and our bylaws (as amended and restated to date, our “bylaws”) and applicable provisions of Delaware law may delay or discourage transactions involving an actual or potential change in control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares, or transactions that our stockholders might otherwise deem to be in their best interests. The provisions in our certificate and bylaws:

- authorize our Board to issue preferred stock without stockholder approval and to designate the rights, preferences and privileges of each class; if issued, such preferred stock would increase the number of outstanding shares of our capital stock and could include terms that may deter an acquisition of us;

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- limit who may call stockholder meetings;
- do not permit stockholders to act by written consent;
- do not provide for cumulative voting rights; and
- provide that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

In addition, Section 203 of the Delaware General Corporation Law may limit our ability to engage in any business combination with a person who beneficially owns 15% or more of our outstanding voting stock unless certain conditions are satisfied. This restriction lasts for a period of three years following the share acquisition. These provisions may have the effect of entrenching our management team and may deprive you of the opportunity to sell your shares to potential acquirers at a premium over prevailing prices. This potential inability to obtain a control premium could reduce the price of our common stock.

***If securities or industry analysts do not publish or do not continue to publish research or reports about our business, or if they issue an adverse or misleading opinion regarding our stock, our stock price and trading volume could decline.***

The trading market for our common stock may be influenced by the research and reports that industry or securities analysts publish about us or our business. In 2020, no securities analysts published reports on us. If one or more analysts do not initiate coverage on us, initiates but then ceases coverage of our company or fails to publish reports on us regularly, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline. In addition, if one or more analysts issues an adverse opinion regarding our stock, our stock price would likely decline.

**ITEM 1B: UNRESOLVED STAFF COMMENTS**

None.

**ITEM 2: PROPERTIES**

Our principal office is located at 4120 Freidrich Lane, Suite 100, Austin, Texas 78744. We lease 14,782 square feet of office and laboratory space under a triple net lease. In April 2018, we entered into an amendment to our lease which extended the lease term from May 31, 2018 to May 31, 2021. In September 2019, we entered into a sublease agreement pursuant to which we sublet approximately seventy-five percent (75%) of this space to CE+T Energy, as discussed in “Item 1. Business.”

On March 10, 2021, we entered into a lease agreement for 4,070 square feet of office and laboratory space located at 5508 Highway 290 West, Suite 120, Austin, Texas 78735. The lease is expected to commence on June 1, 2021 and the term of the lease is 63 months. Upon commencement, this will be our new principal office.

**ITEM 3: LEGAL PROCEEDINGS**

We may be subject to litigation from time to time in the ordinary course of business. We are not currently party to any legal proceedings that we believe would reasonably have a material adverse impact on its business, financial results, and cash flows.

**ITEM 4: MINE SAFETY DISCLOSURES**

Not applicable.

**PART II**

**ITEM 5: MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES**

Our common stock is listed on the Nasdaq Capital Market under the symbol “IPWR.” As of March 24, 2021, we had 37 shareholders of record.

***Dividends***

We have not paid any cash dividends on our common stock since our inception and do not anticipate paying any cash dividends in the foreseeable future. We plan to retain our earnings, if any, to provide funds for the expansion of our business. The payment of future dividends, if any, will be at the discretion of our Board and will depend on our financial condition, results of operations, capital requirements, restrictions contained in future financing agreements, provisions of applicable law and any other factors our Board deems relevant.

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## Performance Graph

As a smaller reporting company, we are not required to provide this information.

## Purchases of Equity Securities by the Issuer

None.

## ITEM 6: SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide this information.

## ITEM 7: MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*The following discussion and analysis of our financial condition and results of operations should be read in conjunction with the audited financial statements and related notes included elsewhere in this Annual Report on Form 10-K. In addition to historical information, this discussion and analysis here and throughout this Form 10-K contains forward-looking statements that involve risks, uncertainties and assumptions. Our actual results may differ materially from those anticipated in these forward-looking statements.*

### Overview

Ideal Power is located in Austin, Texas. Until April 2018, we were primarily focused on the design, marketing and sale of electrical power conversion products using our proprietary technology called Power Packet Switching Architecture™, or PPSA™. PPSA™ is a power conversion technology that improves upon existing power conversion technologies in key product metrics, such as size and weight while providing built-in isolation and bi-directional and multi-port capabilities. PPSA™ utilizes standardized hardware with application specific embedded software. Our products were designed to be used in both on-grid and off-grid applications with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

In April 2018, we realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of our PPSA™ technology, and B-TRAN, to develop our Bi-directional bi-polar junction TRANSistor (B-TRAN™) solid state switch technology.

In January 2019, our Board approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. In September 2019, we closed on the sale of our power conversion systems division and are now solely focused on the further development and commercialization of our B-TRAN™ technology. Prior to the sale of our PPSA™ business and technology in September 2019, we classified this division as held for sale. We show this division as a discontinued operation in our financial statements.

To date, operations have been funded primarily through the sale of common stock and warrants. Total revenue generated from inception to date as of December 31, 2020 amounted to \$15.3 million with approximately \$12.4 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. Revenue from continuing operations was \$428,129 and \$0 in the years ended December 31, 2020 and 2019, respectively, and related to a government grant. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

### Trends, Events and Uncertainties

#### Research and Development

Research and development of new technologies is, by its nature, unpredictable. We cannot assure you that our research and development will be successful, our technology will be adopted, that we will ever earn revenues sufficient to support our operations or that we will ever be profitable. Furthermore, since we have no committed source of financing, we cannot assure you that we will be able to raise additional if and when we need it to continue our operations. If we cannot raise funds if and when we need them, we may be required to severely curtail, or even to cease, our operations.

#### Strategic Shift

In January 2019, our Board approved a strategic shift to focus on the commercialization of our B-TRAN™ technology and a plan to suspend further power converter system, or PPSA™, development and sales while we located a buyer for our power conversion systems division and PPSA™ technology. While we closed on the sale of this division in September 2019, it remains uncertain whether this strategic shift will be successful.

#### COVID-19 Impact

As of the date of this report, the COVID-19 pandemic continues to spread throughout the United States and the rest of the world. The ultimate extent of the impact of COVID-19 on our financial performance will depend on future developments, including, among other things, the duration and spread of COVID-19, the timing of vaccination efforts, additional governmental restrictions in response to the COVID-19 pandemic and the overall economy, all of which are highly uncertain and cannot be predicted. The COVID-19 pandemic has caused significant volatility in the global financial markets, which may impact our ability to raise additional capital, if necessary, on acceptable terms or at all, though such risk has not materialized to date. If the financial markets and/or the overall economy are negatively impacted for an extended period, our operating results may be materially and adversely affected.

While the outbreak of COVID-19 initially disrupted our business in the first and second quarters of 2020, the COVID-19 pandemic did not have a material adverse impact on our operations in the second half of 2020. However, the COVID-19 pandemic may disrupt our business in the future and cause delays in critical development and commercialization activities and/or result in potential incremental costs associated with mitigating the effects of the COVID-19 pandemic. The COVID-19 pandemic is ongoing, and its dynamic nature, including uncertainties relating to the ultimate spread of the virus, the severity of the disease, the duration of the outbreak and additional actions that may be taken by governmental authorities to contain the outbreak or to treat its impact, makes it difficult to forecast the effects on our business and results of operations for 2021 and thereafter. See "Item 1A: Risk Factors – Risks Related to the Company – Our business, including our supply chain, liquidity, financial condition and financial results may be adversely disrupted and impacted due to COVID-19 pandemic."

#### Sale of Power Conversion Systems Division

In September 2019, we closed on the sale of our power conversion systems division to CE+T Energy. The consideration consisted of \$200,000 in cash and 50 shares of CE+T Energy's common stock, which represented a 5% ownership interest in CE+T Energy as of the closing date. We did not record any value of the equity consideration

obtained in the sale as there is not currently a market for such shares and we do not have access to current financial information and future financial projections of CE+T Energy. CE+T Energy also assumed certain liabilities of the power conversion systems division in connection with the sale. The net cash proceeds from the sale were \$23,587.

In September 2019, we entered into a sublease with CE+T Energy pursuant to which we sublease approximately seventy-five (75%) percent of our Austin, Texas facility to CE+T Energy. Under the sublease, CE+T Energy is obligated to make monthly payments equal to 75% of all sums due under the master lease and 100% of any maintenance and repair costs related to the subleased premises. The sublease replaced a temporary agreement between us and CE+T Energy, effective in July 2019, that contained similar payment obligations by CE+T Energy for utilization of the subleased premises. Consistent with the master lease, the sublease terminates on May 31, 2021.

#### February 2021 Offering

In February 2021, we issued and sold 1,352,975 shares of our common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter's option to purchase additional shares in full, at a price of \$17.00 per share. The net proceeds to us from the February 2021 Offering were \$21.2 million. We intend to use the net proceeds from the February 2021 Offering to fund commercialization and development of its B-TRAN™ technology and general corporate and working capital purposes.

#### Early Warrant Exercise Transaction

In August 2020, we closed the Early Warrant Exercise Transaction, pursuant to which certain holders of our outstanding Series A warrants exercised such Series A warrants to purchase an aggregate of 1,176,137 shares of common stock, and we issued to such holders new Series C warrants to purchase up to an aggregate of 705,688 shares of common stock with an exercise price of \$8.90 per share and an expiration date of August 4, 2025. We raised net proceeds of \$2.5 million in the Early Warrant Exercise Transaction. We intend to use the net proceeds from the Early Warrant Exercise Transaction to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

#### Private Placement

In November 2019, we entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, our former Chief Executive Officer and Chairman of the Board, for a private placement of our common stock and warrants to purchase common stock for net proceeds of \$3.1 million.

### **Critical Accounting Policies**

The following discussion and analysis of our financial condition and results of operations is based upon our financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Certain accounting policies and estimates are particularly important to the understanding of our financial position and results of operations and require the application of significant judgment by our management or can be materially affected by changes from period to period in economic factors or conditions that are outside of our control. As a result, they are subject to an inherent degree of uncertainty. In applying these policies, we use our judgment to determine the appropriate assumptions to be used in the determination of certain estimates. Those estimates are based on our historical operations, our future business plans and projected financial results, the terms of existing contracts, our observance of trends in the industry, information provided by our customers and information available from other outside sources, as appropriate. Please see Footnote 2 to our financial statements for a more complete description of our critical accounting policies.

**Revenue Recognition.** We recognize revenue and related cost of revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers" and, as applicable, with the guidance issued by the FASB in June 2018 for the recipients of grants.

Currently, we recognize grant revenue and cost of grant revenue only. Government contracts, including grants, are agreements that generally provide us with cost reimbursement for certain types of development activities over a contractually defined period. Grant revenue is recognized in the period during which we incur the related costs, provided that we incur the cost in accordance with the specifications and work plans determined between us and the government entity.

**Research and Development.** Research and development costs are presented as a line item under operating expenses and are expensed as incurred.

**Intangible Assets.** Our intangible assets are composed of patents, which are recorded at cost, and other intangible assets, which are recorded at cost plus the estimated present value of all future payments associated with the other intangible assets. We capitalize third-party legal costs and filing fees, if any, associated with obtaining patents on our new inventions or other intangible assets. Once the patent asset has been placed in service, we amortize these costs over the shorter of the asset's legal life, generally 20 years, or its estimated economic life using the straight-line method. For the other intangible assets, we amortize the asset over the term of the underlying agreements.

**Leases.** On January 1, 2019, we adopted ASC 842 utilizing a modified retrospective approach with a date of initial application at the beginning of the period of adoption. At adoption, we recognized a right of use asset of \$422,819 and lease liability of \$427,131. As the discount rate implicit in the lease was not readily determinable and we did not have any outstanding indebtedness, we utilized market data, giving consideration to remaining term of the lease, to estimate our incremental borrowing rate at 8% per annum for purposes of calculating the right of use asset and lease liability.

**Income Taxes.** We account for income taxes using an asset and liability approach which allows for the recognition and measurement of deferred tax assets based upon the likelihood of realization of tax benefits in future years. Under the asset and liability approach, deferred taxes are provided for the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before we are able to realize their benefits, or that future deductibility is uncertain. Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position.

**Stock-Based Compensation.** We apply Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 718, "Stock Compensation," when recording stock-based compensation. Grants to non-employees are also accounted for under ASC 718. The fair value of each stock option award is estimated on the date of grant using the commonly used Black-Scholes option valuation model. The assumptions used in the Black-Scholes model are as follows:

**Grant Price** — The grant price is determined based on the closing share price on the date of grant.

**Risk-free interest rate** — The risk-free interest rate is based on the implied yield available on US Treasury securities at the time of grant with an equivalent term of the expected life of the award.

**Expected lives** — As permitted by SAB 107, due to our insufficient history of option activity, we utilize the simplified approach to estimate the options' expected term, calculated as the midpoint between the vesting period and the contractual life of the award.

**Expected volatility** — Volatility is estimated based on the historical volatilities of comparable companies.

**Expected dividend yield** — Dividend yield is based on current yield at the grant date or the average dividend yield over the historical period. We have never declared or

## Results of Operations

### Comparison of the year ended December 31, 2020 to the year ended December 31, 2019

*Grant Revenues.* Grant revenues for the year ended December 31, 2020 were \$428,129. The grant revenues relate to a \$1.2 million subcontract with Diversified Technologies, Inc. (“DTI”) to supply B-TRAN™ devices as part of a two-year contract awarded to DTI by the United States Naval Sea Systems Command (“NAVSEA”) for the development and demonstration of a B-TRAN™ enabled high efficiency direct current circuit breaker. We expect the grant revenue related to the NAVSEA subcontract to continue throughout 2021 with zero or minimal revenue recognized in 2022. We also expect to pursue additional government funding that may result in additional grant revenues in the future.

*Cost of Grant Revenues.* Cost of grant revenues for the year ended December 31, 2020 was \$428,129. The cost of grant revenues relates to the subcontract discussed above and are equal to the associated grant revenues resulting in no gross profit. We expect no gross profit under the subcontract with DTI or other grants that we are pursuing, or may pursue, in 2021.

*Research and Development Expenses.* Research and development expenses increased by \$670,742, or 64%, to \$1,720,893 in the year ended December 31, 2020 from \$1,050,151 in the year ended December 31, 2019. The increase was due primarily to higher stock-based compensation expense of \$392,556, contract labor for B-TRAN™ driver design of \$115,063, semiconductor fabrication costs of \$108,879 and personnel costs of \$58,840. Stock-based compensation expense was higher as a majority of stock option grants in 2020 vested immediately. We expect modestly higher research and development expenses in 2021 as we accelerate development and commercialization of our B-TRAN™ technology.

*General and Administrative Expenses.* General and administrative expenses increased by \$281,977, or 14%, to \$2,347,089 in the year ended December 31, 2020 from \$2,065,112 in the year ended December 31, 2019. The increase was due primarily to higher stock-based compensation costs of \$291,752 as a majority of stock option grants in 2020 vested immediately. Higher personnel costs of \$249,101 and chief executive officer search fees of \$137,459 were offset by lower legal fees of \$214,057 and cost reduction activities of \$182,278, including, but not limited to, lower facilities costs, insurance, taxes and travel, with lower travel primarily being a result of the COVID-19 pandemic. We expect our general and administrative expenses to remain relatively flat in 2021.

*Other Expenses.* Other expenses increased by \$3,721,648 to \$3,725,915 for the year ended December 31, 2020 from \$4,267 in the year ended December 31, 2019. The increase in other expenses was due to non-cash warrant inducement expense of \$3,720,866 in connection with the Early Warrant Exercise Transaction, as discussed below.

*Loss from Continuing Operations.* Our loss from continuing operations for the year ended December 31, 2020 was \$7,793,897 or 150% higher than the \$3,119,530 loss from continuing operations for year ended December 31, 2019, driven by the factors discussed above including the non-cash warrant inducement expense of \$3,720,866 and higher research and development and general and administrative spending.

*Loss from Discontinued Operations.* We did not have a loss from discontinued operations for the year ended December 31, 2020. Our loss from discontinued operations for the year ended December 31, 2019 was \$799,025. Loss from discontinued operations for the year ended December 31, 2019 included a \$405,000 impairment on assets held for sale to write-down these assets to expected net proceeds from the sale. Our discontinued operations were sold in September 2019.

*Loss on Sale of Discontinued Operations.* We did not have a loss on sale of discontinued operations for the year ended December 31, 2020 as our discontinued operations were sold in September 2019. Our loss on sale of discontinued operation for the year ended December 31, 2019 was \$9,107.

*Net Loss.* Our net loss increased by \$3,866,235, or 98%, to \$7,793,897 for the year ended December 31, 2020 from a net loss of \$3,927,662 for the year ended December 31, 2019 for the reasons discussed above.

## Liquidity and Capital Resources

We currently generate grant revenue only and expect grant revenue to likely be our only source of revenue for 2021. We have incurred losses since inception. We have funded our operations to date through the sale of common stock and warrants.

As of December 31, 2020 and 2019, we had cash and cash equivalents of \$3,157,256 and \$3,057,682, respectively. Our net working capital and long-term debt at December 31, 2020 were \$2,786,900 and \$91,407, respectively. As discussed below, in May 2020, we received a PPP Loan (as defined below) to temporarily subsidize our payroll and facilities costs in a business landscape impacted by the COVID-19 pandemic.

Operating activities in the year ended December 31, 2020 resulted in cash outflows of \$3,019,032, which were due to the loss from continuing operations for the period of \$7,793,897 and slightly unfavorable balance sheet timing of \$7,461, partly offset by non-cash items including warrant inducement expense of \$3,720,866, stock-based compensation of \$868,648, depreciation and amortization of \$122,152, stock issued for services of \$50,000 and patent impairment charges of \$20,660.

Operating activities in the year ended December 31, 2019 resulted in cash outflows of \$3,218,657, which were due to the loss from continuing operations for the period of \$3,119,530 and cash used in operating activities related to discontinued operations of \$688,074, partly offset by favorable balance sheet timing of \$279,438, stock-based compensation of \$184,339, depreciation and amortization of \$110,463 and patent impairment charges of \$14,707.

We expect a modest increase in cash outflows from operating activities in 2021 as we accelerate development and commercialization of our B-TRAN™ technology.

Investing activities related to continuing operations in the years ended December 31, 2020 and 2019 resulted in cash outflows of \$67,160 and \$104,098, respectively, primarily for the acquisition of intangible assets. Investing activities related to discontinued operations in the year ended December 31, 2019 resulted in a cash inflow of \$23,587 on the net proceeds from the sale of these discontinued operations in September 2019.

Financing activities in the year ended December 31, 2020 resulted in cash inflows of \$3,185,766 and included net proceeds from the exercise of warrants of \$3,094,359 and proceeds from loans of \$91,407. Financing activities in the year ended December 31, 2019 resulted in cash inflows of \$3,098,773 related to the net proceeds from the Private Placement, as defined and further described below.

### PPP Loan

In May 2020, we entered into a Loan Agreement and Promissory Note (collectively the “PPP Loan”) with BBVA USA pursuant to the Paycheck Protection Program (the “PPP”) under the Coronavirus Aid, Relief, and Economic Security Act (“CARES Act”) administered by the U.S. Small Business Administration. We received total proceeds of \$91,407 from the unsecured PPP Loan. The PPP Loan is scheduled to mature in May 2022 and has an interest rate of 1.00% per annum and is subject to the terms and conditions applicable to loans administered by the U.S. Small Business Administration under the CARES Act. The PPP Loan may be prepaid by us at any time prior to its maturity with no prepayment penalties. The first payment due date was originally in December 2020 but BBVA USA extended the first due date to May 2021 as the PPP Flexibility Act of 2020 extended the deferral period for payment of principal and interest for all PPP borrowers.

The PPP Loan contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. Subject to certain conditions, the PPP Loan may be forgiven in whole or in part by applying for forgiveness pursuant to the CARES Act and the PPP. The amount of loan proceeds eligible for forgiveness is based on a formula based on a number of factors, including the amount of loan proceeds used by us during the 8-week or 24-week period after the loan origination for certain purposes, including payroll costs, rent payments on certain leases and certain qualified utility payments, provided that, among other things, at least 60% of the loan amount is used for eligible payroll costs, the employer maintaining or rehiring employees and maintaining salaries at certain level. In accordance with the requirements of the CARES Act and the PPP, we used the proceeds from the PPP Loan primarily for payroll costs. We applied for forgiveness of the PPP Loan during the first quarter of 2021. It is our expectation that the PPP Loan will be forgiven but no assurance can be given that we will be granted forgiveness of the PPP Loan in whole or in part.

#### February 2021 Offering

In February 2021, we issued and sold 1,352,975 shares of our common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter’s option to purchase additional shares in full, at a price of \$17.00 per share. The net proceeds to us from the February 2021 Offering were \$21.2 million. We intend to use the net proceeds from the February 2021 Offering to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

#### Early Warrant Exercise Transaction

In July 2020, we entered into letter agreements (the “Letter Agreements”) with certain of our Series A warrant holders (the “Series A Warrant Holders”), who were previously issued warrants (the “Original Warrants”) to purchase shares of our common stock in the Private Placement. The Series A Warrant Holders agreed to the early exercise of their Original Warrants pursuant to the Letter Agreements (the “Early Warrant Exercise Transaction”). The transaction closed in August 2020. We raised net proceeds of \$2.5 million in the Early Warrant Exercise Transaction. We intend to utilize the net proceeds from the Early Warrant Exercise Transaction to fund commercialization and development of our B-TRAN™ technology and general corporate and working capital purposes.

Pursuant to the Letter Agreements, in consideration of the Series A Warrant Holders exercising Original Warrants to purchase an aggregate of 1,176,137 shares of common stock, we issued to the Series A Warrant Holders new Series C warrants (the “New Warrants”) to purchase up to an aggregate of 705,688 shares of common stock, which is equal to 60% of the shares underlying the Original Warrants included in the Transaction. The New Warrants have an exercise price of \$8.90 per share and an expiration date of August 4, 2025. The estimated fair value of the New Warrants was \$3.7 million on the date of issuance and was recognized as a non-cash warrant inducement expense within other expenses in our statement of operations.

#### Private Placement

In November 2019, we entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, our former Chief Executive Officer and Chairman of the Board, for a private placement of our common stock and warrants to purchase common stock for net proceeds of \$3.1 million (the “Private Placement”). The Private Placement closed in November 2019. In the Private Placement, we issued an aggregate of (i) 544,950 shares of common stock at a price of \$2.4763 per share and (ii) pre-funded warrants to purchase 868,443 shares of common stock that are immediately exercisable and have no expiration date, at a price of \$2.4763 less a nominal exercise price of \$0.001 per pre-funded warrant. We also issued to the investors warrants to purchase up to an aggregate of 1,766,751 shares of common stock at an exercise price of \$2.32 per share that are immediately exercisable and will expire five years from the issuance date. As compensation to the placement agent in the Private Placement, in addition to a cash fee for its services, we also issued to the placement agent a warrant to purchase up to 70,670 shares of common stock, with an exercise price of \$2.9716 per share. The other terms of the placement agent warrant are substantially the same as the investor warrants. We have utilized a majority, and expect to utilize the remainder, of the net proceeds from the Private Placement to fund development of our B-TRAN™ technology and working capital and general corporate purposes.

#### **Contractual Obligations and Commitments**

As a smaller reporting company, we are not required to provide this information.

#### **Off-Balance Sheet Arrangements**

As of December 31, 2020, we did not have any off-balance sheet arrangements.

#### **ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

As a smaller reporting company, we are not required to provide this information.

#### **ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

##### **REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of  
Ideal Power Inc.

#### **Opinion on the Financial Statements**

We have audited the accompanying balance sheets of Ideal Power Inc. (the “Company”) as of December 31, 2020 and 2019, and the related statements of operations, stockholders’ equity and cash flows, for each of the two years in the period ended December 31, 2020, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the

results of its operations and its cash flows for each of the two years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

#### **Basis for Opinion**

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

#### **Critical Audit Matters**

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

##### Carrying Value of Intangible Assets

As described in Note 2 to the financial statements, the Company evaluates for potential impairment of long-lived assets, including intangible assets composed of patents, no less frequently than annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable.

We identified the carrying value of intangible assets as a critical audit matter. The methods and underlying assumptions in an impairment analysis involve high levels of management estimates and judgment, and in turn led to a high degree of auditor judgment and subjectivity in performing procedures and evaluating audit evidence.

The following are the primary procedures we performed to address this critical audit matter. We reviewed current and previously operating conditions for indication of impairment. We reviewed board minutes and news for indications of impairment. We reviewed professional industry reports for indications of impairment. We reviewed documents from potential future customers indicating future recoverability.

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##### Accounting for Grant Revenue

As described in Note 2 to the financial statements, grant revenue is recognized in the period during which the Company incurs the related costs, provided that the Company has incurred the cost in accordance with the specifications and work plans determined between the Company and the government entity.

We identified the accounting for grant revenue as a critical audit matter. Significant judgment was used in determining whether the grant is a contract with a customer, and in turn led to a high degree of auditor judgment in performing procedures and evaluating audit evidence.

The following are the primary procedures we performed to address this critical audit matter. We reviewed the grant agreement to identify significant terms. We reviewed management's accounting treatment and evaluated whether such was reasonable. We selected a sample of grant related costs recognized during the current year and reviewed the supporting documents.

##### Accounting for Early Warrant Exercise Transaction

As described in Note 10 to the financial statements, in July 2020, the Company entered into letter agreements with certain of the Company's Series A warrant holders. Pursuant to such agreements, Series A warrants were exercised and the Company issued Series C warrants. The estimated fair value of the Series C warrants on the date of issuance was recognized as a non-cash warrant inducement expense within other expenses in the statement of operations.

We identified the accounting for the early warrant transaction as a critical audit matter. Significant judgment was used in assessing the most appropriate accounting treatment, and in turn led to a high degree of auditor judgment in performing procedures and evaluating audit evidence.

The following are the primary procedures we performed to address this critical audit matter. We reviewed the letter agreements, Series A warrants and Series C warrants to identify significant terms. We reviewed management's accounting treatment and evaluated whether such was reasonable. We recalculated the fair value of the Series C warrants on the date of issuance. For the exercise of Series A warrants, we traced funds received, recalculated amounts recorded to equity accounts, reviewed the calculation of shares to be held in abeyance, and reviewed documents supporting the issuance of shares. We reviewed supporting documents for costs directly related to the transaction.

/s/ Gumbiner Savett Inc.

We have served as the Company's auditor since 2013.

Santa Monica, California

March 26, 2021

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## **IDEAL POWER INC.**

### **Balance Sheets**

	<b>December 31,</b>	
	<b>2020</b>	<b>2019</b>
<b>ASSETS</b>		
Current assets:		



Cash and cash equivalents	\$ 3,157,256	\$ 3,057,682
Accounts receivable, net	170,287	-
Prepayments and other current assets	118,883	248,148
Total current assets	3,446,426	3,305,830
Property and equipment, net	37,125	47,302
Intangible assets, net	1,568,903	1,634,378
Right of use asset	79,719	260,310
Other assets	-	17,920
Total assets	\$ 5,132,173	\$ 5,265,740
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 101,984	\$ 182,956
Accrued expenses	475,487	319,135
Current portion of lease liability	82,055	183,119
Total current liabilities	659,526	685,210
Long-term debt	91,407	-
Long-term lease liability	-	82,055
Other long-term liabilities	552,031	609,242
Total liabilities	1,302,964	1,376,507
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000,000 shares authorized; 0 shares issued and outstanding at December 31, 2020 and 2019	-	-
Common stock, \$0.001 par value; 50,000,000 shares authorized; 3,265,740 shares issued and 3,264,419 shares outstanding at December 31, 2020; 2,101,272 shares issued and 2,099,951 shares outstanding at December 31, 2019	3,266	2,101
Additional paid-in capital	78,974,964	71,242,256
Treasury stock, at cost; 1,321 shares at December 31, 2020 and 2019, respectively	(13,210)	(13,210)
Accumulated deficit	(75,135,811)	(67,341,914)
Total stockholders' equity	3,829,209	3,889,233
Total liabilities and stockholders' equity	\$ 5,132,173	\$ 5,265,740

The accompanying notes are an integral part of these financial statements.

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## IDEAL POWER INC.

### Statements of Operations

	For the Year Ended December 31,	
	2020	2019
Grant revenue	\$ 428,129	\$ -
Cost of grant revenue	428,129	-
Gross profit	-	-
Operating expenses:		
Research and development	1,720,893	1,050,151
General and administrative	2,347,089	2,065,112
Total operating expenses	4,067,982	3,115,263
Loss from continuing operations before interest	(4,067,982)	(3,115,263)
Other expenses:		
Interest expense, net	5,049	4,267
Warrant inducement expense	3,720,866	-
Total other expenses	3,725,915	4,267
Loss from continuing operations	(7,793,897)	(3,119,530)
Loss from discontinued operations	-	(799,025)
Loss on sale of discontinued operations	-	(9,107)
Net loss	\$ (7,793,897)	\$ (3,927,662)
Loss from continuing operations per share – basic and fully diluted	\$ (2.20)	\$ (1.89)
Loss from discontinued operations per share – basic and fully diluted	-	(0.49)
Net loss per share – basic and fully diluted	\$ (2.20)	\$ (2.38)
Weighted average number of shares outstanding – basic and fully diluted	3,539,217	1,653,996

The accompanying notes are an integral part of these financial statements.

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IDEAL POWER INC.

Statement of Stockholders' Equity  
For the Years Ended December 31, 2020 and 2019

	Common Stock		Preferred Stock		Additional Paid-In Capital	Treasury Stock		Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount		Shares	Amount		
Balances at December 31, 2018	1,404,479	\$ 1,404	1,518,430	\$ 1,518	\$ 68,022,484	1,321	\$ (13,210)	\$ (63,414,252)	\$ 4,597,944
Shares and pre-funded warrants issued in offering, net of issuance costs	544,950	545	—	—	3,098,228	—	—	—	3,098,773
Conversion of preferred stock to common stock	151,843	152	(1,518,430)	(1,518)	1,366	—	—	—	—
Stock-based compensation	—	—	—	—	120,178	—	—	—	120,178
Net loss for the year ended December 31, 2018	—	—	—	—	—	—	—	(3,927,662)	(3,927,662)
Balances at December 31, 2019	2,101,272	\$ 2,101	—	\$ —	\$ 71,242,256	1,321	\$ (13,210)	\$ (67,341,914)	\$ 3,889,233
Exercise of warrants	765,315	766	—	—	546,007	—	—	—	546,773
Early warrant exercise transaction	372,837	373	—	—	2,547,213	—	—	—	2,547,586
Warrant inducement expense	—	—	—	—	3,720,866	—	—	—	3,720,866
Stock issued for services	26,316	26	—	—	49,974	—	—	—	50,000
Stock-based compensation	—	—	—	—	868,648	—	—	—	868,648
Net loss for the year ended December 31, 2020	—	—	—	—	—	—	—	(7,793,897)	(7,793,897)
Balances at December 31, 2020	3,265,740	\$ 3,266	—	\$ —	\$ 78,974,964	1,321	\$ (13,210)	\$ (75,135,811)	\$ 3,829,209

The accompanying notes are an integral part of these financial statements.

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IDEAL POWER INC.

Statements of Cash Flows

	For the Year Ended December 31,	
	2020	2019
Cash flows from operating activities:		
Loss from continuing operations	\$ (7,793,897)	\$ (3,119,530)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	122,152	110,463
Write-off of capitalized patents	20,660	14,707
Stock-based compensation	868,648	184,339
Stock issued for services	50,000	—
Warrant inducement expense	3,720,866	—
Decrease (increase) in operating assets:		
Accounts receivable	(170,287)	—
Prepaid expenses and other assets	147,185	85,729
Increase (decrease) in operating liabilities:		
Accounts payable	(80,972)	88,753
Accrued expenses	96,613	104,956
Net cash used in operating activities	(3,019,032)	(2,530,583)
Net cash used in operating activities – discontinued operations	—	(688,074)
Cash flows from investing activities:		
Purchase of property and equipment	(13,940)	(4,253)
Acquisition of intangible assets	(53,220)	(99,845)
Net cash used in investing activities	(67,160)	(104,098)
Net cash provided by investing activities – discontinued operations	—	23,587
Cash flows from financing activities:		
Proceeds from loans	91,407	—
Net proceeds from exercise of warrants	3,094,359	—
Net proceeds from issuance of common stock and pre-funded warrants	—	3,098,773
Net cash provided by financing activities	3,185,766	3,098,773
Net increase in cash and cash equivalents – continuing operations	99,574	464,092
Net decrease in cash and cash equivalents – discontinued operations	—	(664,487)
Cash and cash equivalents at beginning of year	3,057,682	3,258,077
Cash and cash equivalents at end of year	\$ 3,157,256	\$ 3,057,682

The accompanying notes are an integral part of these financial statements.

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Ideal Power Inc.

Notes to Financial Statements

Note 1 — Organization and Description of Business

Ideal Power Inc. (the "Company") was incorporated in Texas on May 17, 2007 under the name Ideal Power Converters, Inc. The Company changed its name to Ideal Power Inc. on July 8, 2013 and re-incorporated in Delaware on July 15, 2013. With headquarters in Austin, Texas, it developed power conversion solutions with a focus on solar + storage, microgrid and stand-alone energy storage applications. The principal products of the Company were 30-kilowatt power conversion systems, including 2-port and multi-port products.

In April 2018, the Company realigned into two operating divisions: Power Conversion Systems, to continue the commercialization of its PPSA™ technology, and B-TRAN, to develop its Bi-directional bi-polar junction TRANsistor (B-TRAN™) solid state switch technology.

In January 2019, the Board of Directors of the Company (the “Board”) approved a strategic shift to focus on the commercialization of its B-TRAN™ technology and a plan to suspend further power converter system development and sales while the Company located a buyer for its power conversion systems division and PPSA™ technology. In September 2019, the Company closed on the sale of the power conversion systems division and the Company is now solely focused on the further development and commercialization of its B-TRAN™ technology. The Company show this division as a discontinued operation in these financial statements.

Since its inception, the Company has generated limited revenues from the sale of products and has financed its research and development efforts and operations primarily through the sale of common stock and warrants. The Company’s continued operations are dependent upon its ability to obtain adequate sources of funding through future revenues, follow-on stock offerings, issuances of warrants, debt financing, co-development agreements, government grants, sale or licensing of developed intellectual property or other alternatives.

## **Note 2 — Summary of Significant Accounting Policies**

### Basis of Presentation

The preparation of financial statements in conformity with US GAAP requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

### Reclassifications

Certain items in prior period financial statements have been reclassified to conform to current year presentation. Such reclassifications did not impact the Company’s reported net loss or financial position.

### Liquidity and Going Concern

The Company has incurred net losses and negative operating cash flows since inception, including a net loss of \$7.8 million and cash used in operating activities of \$3.0 million for the year ended December 31, 2020. At December 31, 2020, the Company had net working capital of \$2.8 million and the Company’s principal source of liquidity consisted of \$3.2 million of cash and cash equivalents.

In February 2021, the Company completed the February 2021 Public Offering (as defined below). See Note 16. The Company raised net proceeds of \$21.2 million in the February 2021 Public Offering, thereby alleviating the substantial doubt about the Company’s ability to continue as a going concern.

The accompanying financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. The ability of the Company to continue as a going concern is dependent on its ability to develop profitable operations through implementation of its current business initiatives and/or raise additional capital, however, there can be no assurances that the Company will be able to do so.

### Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents.

### Accounts Receivable

Trade accounts receivable are stated net of an allowance for doubtful accounts. Management estimates the allowance for doubtful accounts based on review and analysis of specific customer balances that may not be collectible, customer payment history and any other customer-specific information that may impact the evaluation of the specific customer’s credit. Trade accounts receivable at December 31, 2020 relate to a \$1.2 million subcontract with Diversified Technologies, Inc. (DTI), signed in June 2020, to supply B-TRAN™ devices as part of a two-year contract awarded to DTI by the United States Naval Sea Systems Command (NAVSEA) for the development and demonstration of a B-TRAN™ enabled high efficiency direct current circuit breaker. At December 31, 2020, unbilled grant receivables, which are included in accounts receivable, net, were \$48,939 and the allowance for doubtful accounts was \$0.

### Property and Equipment

Property and equipment are stated at historical cost less accumulated depreciation and amortization. Major additions and improvements are capitalized while maintenance and repairs that do not improve or extend the useful life of the respective asset are expensed. Depreciation and amortization of property and equipment is computed using the straight-line method over their estimated useful lives. Leasehold improvements are amortized over the shorter of the life of the asset or the related leases. Estimated useful lives of the principal classes of assets are as follows:

Leasehold improvements	Shorter of lease term or useful life
Machinery and equipment	5 years
Furniture, fixtures and IT equipment	3 – 5 years

### Intangible Assets

The Company’s intangible assets are composed of patents, which are recorded at cost, and other intangible assets, which are recorded at cost plus the estimated present value of all future payments associated with the other intangible assets. The Company capitalizes third-party legal costs and filing fees, if any, associated with obtaining patents or other intangible assets. Once the patent asset has been placed in service, the Company amortizes these costs over the shorter of the asset’s legal life, generally 20 years, or its estimated economic life using the straight-line method. For the other intangible assets, the Company amortizes the asset over the 17-year term of the underlying agreements.

### Impairment of Long-Lived Assets

The long-lived assets, consisting of property and equipment and intangible assets, held and used by the Company are reviewed for impairment no less frequently than annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. In the event that facts and circumstances indicate that the cost of any long-lived assets may be impaired, an evaluation of recoverability is performed. For continuing operations, management has determined that there was an impairment in the value of long-lived assets in the amount of \$20,660 and \$14,707 during the years ended December 31, 2020 and 2019, respectively.

### Fair Value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Assets and liabilities measured at fair value are categorized based on whether or not the inputs are observable in the market and the degree that the inputs are observable. The categorization of financial assets and liabilities within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels of inputs used to establish fair value are the following:

- Level 1 — Quoted prices in active markets for identical assets or liabilities;
- Level 2 — Inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and
- Level 3 — Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities

The Company's financial instruments primarily consist of cash and cash equivalents, accounts payable and long-term liabilities. As of the balance sheet dates, the estimated fair values of the financial instruments were not materially different from their carrying values as presented on the balance sheets. This is primarily attributed to the short-term nature of these instruments.

In 2016, the Company recorded a long-term liability for the estimated present value of future payments under a licensing agreement. In 2017 and 2019, the Company recorded an adjustment to increase the long-term liability due to an increase in the future payments due under this licensing agreement. The Company determined the discount rate to estimate the present value of the future payments based on the applicable treasury rates. The Company's long-term liability is classified within Level 3. See Note 6 and Note 13 for more details regarding the licensing agreement. The Company did not identify any other assets and liabilities that are required to be presented in the balance sheets at fair value.

### Revenue Recognition

The Company recognizes revenue and related cost of revenue in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers" and, as applicable, with the guidance issued by the FASB in June 2018 for the recipients of grants.

Currently, the Company recognizes grant revenue and cost of grant revenue only. Government contracts, including grants, are agreements that generally provide the Company with cost reimbursement for certain types of development activities over a contractually defined period. Grant revenue is recognized in the period during which the Company incurs the related costs, provided that the Company has incurred the cost in accordance with the specifications and work plans determined between the Company and the government entity.

For the year ended December 31, 2020, the Company recognized \$428,129 of grant revenue and cost of grant revenue. The grant revenue relates to a \$1.2 million subcontract with DTI, signed in June 2020, to supply B-TRANT™ devices as part of a two-year contract awarded to DTI by NAVSEA for the development and demonstration of a B-TRANT™ enabled high efficiency direct current circuit breaker. The Company accounts for this subcontract as an exchange transaction under applicable guidance. No grant revenue was recognized in the year ended December 31, 2019.

### Research and Development

Research and development costs are presented as a line item under operating expenses and are expensed as incurred.

### Income Taxes

The Company accounts for income taxes using an asset and liability approach which allows for the recognition and measurement of deferred tax assets based upon the likelihood of realization of tax benefits in future years. Under the asset and liability approach, deferred taxes are provided for the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. A valuation allowance is provided for deferred tax assets if it is more likely than not these items will either expire before the Company is able to realize their benefits, or that future deductibility is uncertain. At December 31, 2020 and 2019, the Company has established a full reserve against all deferred tax assets.

Tax benefits from an uncertain tax position are recognized only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate resolution.

### Earnings Per Share

The Company applies FASB ASC 260, "Earnings per Share." Basic earnings (loss) per share is computed by dividing earnings (loss) available to common stockholders by the weighted-average number of common shares outstanding. Diluted earnings (loss) per share is computed similar to basic earnings (loss) per share except that the denominator is increased to include additional common shares available upon exercise of equity awards and warrants using the treasury stock method. In periods with a net loss, no common share equivalents are included because their effect would be anti-dilutive.

In accordance with ASC 260, shares issuable for little or no cash consideration are considered outstanding common shares and included in the computation of basic earnings per share. As such, the Company includes pre-funded warrants to purchase shares of common stock and warrants shares held in abeyance in its computation of earnings per share. The pre-funded warrants were issued in the Private Placement (as defined below) with an exercise price of \$0.001. See Note 8. The warrant shares held in abeyance were a result of the Early Warrant Exercise Transaction (as defined below). See Note 10.

At December 31, 2020 and 2019, potentially dilutive shares outstanding amounted to 1,541,518 shares and 2,633,043 shares, respectively, and exclude pre-funded warrants to purchase shares of common stock and excess warrant shares held in abeyance.

### Stock Based Compensation

The Company applies FASB ASC 718, "Stock Compensation," when recording stock-based compensation. Grants to non-employees are also accounted for under ASC 718. The fair value of each stock option award is estimated on the date of grant using the Black-Scholes option valuation model.

The Company issues common stock upon exercise of equity awards and warrants.

## Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents. The Company maintains its cash with a major financial institution located in the United States. Balances are insured by the Federal Deposit Insurance Corporation up to \$250,000. The Company maintains balances in excess of federally insured limits. The Company has not experienced losses in such accounts and believes it is not exposed to significant credit risk regarding its cash and cash equivalents.

## Recent Accounting Pronouncements

Management does not believe that any recently issued, but not yet effective, accounting standards, if adopted, would have a material impact on the Company's financial statements.

## Note 3 — Discontinued Operations

In January 2019, the Board approved a strategic shift to focus on the commercialization of the Company's B-TRAN™ technology and a plan to suspend further power conversion system development and sales while the Company located a buyer for its power conversion systems division. In addition, in January 2019, the Company implemented a reduction-in-force in connection with this exit activity and recognized an expense of \$92,600 in involuntary termination benefits.

The Company's power conversion system division, a component supplier to energy storage system integrators, had not achieved the necessary scale to generate positive cash flows. As the division was dependent on the ability of its customers to scale in the small commercial and industrial segment of the storage market and based on the sales forecasts and commitments provided by these customers, the Company did not expect its power conversion systems division to scale sufficiently in the short term, requiring an inflow of additional capital for the business. As such, the decision was made to exit the power conversion systems business and sell the division and the Company's PPSA™ technology and focus on the Company's B-TRAN™ technology.

As a result, the assets held for sale and discontinued operations criteria were met and the Company's financial statements are presented in accordance with ASC 205. Under ASC 205-20-45-10, during the period in which a component meets the assets held for sale and discontinued operations criteria, an entity must present the assets and liabilities of the discontinued operation separately in the asset and liability sections of the balance sheet for the comparative reporting periods. The prior period balance sheet should be reclassified for the held for sale items. For income statements, the current and prior periods should report the results of operations of the component in discontinued operations when comparative income statements are presented.

In September 2019, the Company closed on the sale of its power conversion systems division to CE+T Energy Solutions, Inc. ("CE+T Energy"). The consideration consisted of \$200,000 in cash, received at closing, and 50 shares of CE+T Energy's common stock, issued in December 2019, which represented a 5% ownership interest in CE+T Energy as of the closing date. The Company did not record any value of the equity consideration obtained in the sale as there was not a market for such shares and the Company did not have access to current financial information and future financial projections of CE+T Energy. CE+T Energy also assumed certain liabilities of the power conversion systems division in connection with the sale. The net cash proceeds from the sale were \$23,587. In December 2020, the Company and CE+T Energy entered into an agreement whereby CE+T Energy would repurchase the Company's shares of CE+T Energy's common stock for \$25,000.

As a result of the sale, the Balance Sheets at December 31, 2020 and 2019 do not include assets held for sale.

The following is a detail of the major classes of line items constituting loss on discontinued operations shown in the Statement of Operations:

	<b>December 31, 2019</b>
Product revenue	\$ 115,000
Cost of product revenue	141,647
Research and development	228,641
General and administrative	79,306
Sales and marketing	59,431
Impairment (1)	405,000
Loss on discontinued operations	<u>\$ (799,025)</u>

(1) Impairment charge was calculated as the net book value of assets held for sale prior to the impairment less the expected net proceeds from the planned sale. The expected net proceeds were based on the estimated fair value of the net assets held for sale less the estimated cost to sell the net assets held for sale. For the year ended December 31, 2019, the Company recorded a loss on the sale of discontinued operations of \$9,107.

## Note 4 — Prepayments and Other Current Assets

Prepayments and other current assets consisted of the following:

	<b>December 31,</b>	
	<b>2020</b>	<b>2019</b>
Prepaid insurance	\$ 18,477	\$ 169,832
Prepaid software	4,814	39,475
Prepaid rent	23,686	22,769
Deposits	23,769	7,414
Other	48,137	8,658
	<u>\$ 118,883</u>	<u>\$ 248,148</u>

## Note 5 — Property and Equipment

Property and equipment, net consisted of the following:

	<b>December 31,</b>	
	<b>2020</b>	<b>2019</b>
Machinery and equipment	\$ 89,559	\$ 89,559

Building leasehold improvements	25,090	25,090
Furniture, fixtures, software and IT equipment	45,517	114,880
	160,166	229,529
Accumulated depreciation and amortization	(123,041)	(182,227)
	<u>\$ 37,125</u>	<u>\$ 47,302</u>

#### Note 6 — Intangible Assets

Intangible assets, net consisted of the following:

	December 31,	
	2020	2019
Patents	\$ 941,701	\$ 909,142
Other intangible assets	964,542	964,542
	1,906,243	1,873,684
Accumulated amortization	(337,340)	(239,306)
	<u>\$ 1,568,903</u>	<u>\$ 1,634,378</u>

At December 31, 2020 and 2019, the Company had capitalized approximately \$270,000 and \$335,224, respectively, for costs related to patents that have not been awarded. During the years ended December 31, 2020 and 2019, the Company wrote-off \$20,660 and \$14,707, respectively, in previously capitalized patent costs.

Amortization expense amounted to \$98,035 and \$79,536 for the years ended December 31, 2020 and 2019, respectively. Amortization expense for the succeeding five years and thereafter is \$94,532 (2021-2025) and \$826,244 (thereafter).

#### Note 7 — Accrued Expenses

Accrued expenses consisted of the following:

	December 31,	
	2020	2019
Accrued professional fees	\$ 32,500	\$ 44,500
Accrued compensation	191,556	42,659
Accrued licensing fees	60,000	60,000
Accrued Board fees	45,000	30,000
Accrued taxes	—	54,160
Accrued semiconductor fabrication costs	92,600	55,000
Accrued certification costs	—	30,978
Other	53,831	1,838
	<u>\$ 475,487</u>	<u>\$ 319,135</u>

#### Note 8 — Equity

All shares of common stock have a par value of \$0.001. Each holder of common stock is entitled to one vote per share outstanding.

##### Private Placement

In November 2019, the Company entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, former Chief Executive Officer and Chairman of the Board, for a private placement of the Company's common stock and warrants to purchase common stock for net proceeds of \$3.1 million (the "Private Placement"). The Private Placement closed in November 2019. In the Private Placement, the Company issued an aggregate of (i) 544,950 shares of common stock at \$2.4763 per share and (ii) pre-funded warrants to purchase 868,443 shares of common stock that were immediately exercisable and have no expiration date, at a price of \$2.4763 less a nominal exercise price of \$0.001 per pre-funded warrant. The Company also issued to the investors warrants to purchase up to an aggregate of 1,766,751 shares of common stock at an exercise price of \$2.32 per share that were immediately exercisable and will expire five years from the issuance date. As compensation to the placement agent in the Private Placement, in addition to a cash fee for its services, the Company also issued to the placement agent a warrant to purchase up to 70,670 shares of common stock, with an exercise price of \$2.9716 per share. The other terms of the placement agent warrant are substantially the same as the investor warrants. For his investment of \$500,000, Dr. Bell received 201,914 shares of common stock and 252,393 warrants in the Private Placement.

##### Preferred Stock

In February 2017, the Board authorized Series A Convertible Preferred Stock consisting of 3,000,000 shares. Each share of the preferred stock has a par value of \$0.001 and is convertible at any time at the option of the holder into one-tenth shares of common stock. The holder cannot convert the preferred stock to the extent its beneficial ownership would exceed 4.99% of the Company's common stock outstanding, subject to adjustment as provided in the Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock. The shares have no voting power, no liquidation preference or additional dividend entitlements.

In February 2019, a shareholder converted 708,430 shares of preferred stock to 70,843 shares of common stock. In December 2019, a shareholder converted 810,000 shares of preferred stock to 81,000 shares of common stock. At December 31, 2020 and 2019, there was no preferred stock outstanding.

##### Stock Issuance

In April 2020, the Company issued 26,316 unregistered shares of common stock, valued at \$50,000 at the time of issuance, to a third-party vendor as compensation for services performed.

#### Note 9 — Equity Incentive Plan

In May 2013, the Company adopted the 2013 Equity Incentive Plan (as amended and restated, the "Plan") and reserved shares of common stock for issuance under the Plan, which was amended in June 2020. As a result of the amendment, the number of shares authorized for issuance under the Plan increased by 350,000 shares and the Plan will

now terminate in June 2030, unless sooner terminated or extended by the Board. The Plan is administered by the Compensation Committee of the Board. At December 31, 2020, there were 148,961 shares of common stock available for issuance under the Plan.

During the year ended December 31, 2020, the Company granted 52,791 stock options to Board members, 168,400 stock options to executives and 5,500 stock options to employees under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was \$758,214, of which \$754,369 was recognized during the year ended December 31, 2020.

In April 2020, the Board approved a modification of a stock option grant to Dr. Lon E. Bell in connection with his retirement as Chief Executive Officer and President. The modification accelerated the vesting of Dr. Bell's October 2019 stock option grant with full vesting effective immediately prior to the end of Dr. Bell's term on the Board in June 2020. During the year ended December 31, 2020, the Company recognized \$79,444 of expense related to this grant subsequent to the modification.

During the year ended December 31, 2019, the Company granted 23,400 stock options to Board members, 94,000 stock options to executives and 1,000 stock options to an employee under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was \$253,074, of which \$76,808 was recognized during the year ended December 31, 2019.

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As permitted by SAB 107, management utilizes the simplified approach to estimate the expected term of stock options, which represents the period of time that options granted are expected to be outstanding. The risk-free interest rate for periods within the contractual life of the option is based on the U.S. treasury yield in effect at the time of grant. The volatility is estimated based on the historical volatilities of comparable companies. The Company has never declared or paid dividends and has no plans to do so in the foreseeable future.

The assumptions used in the Black-Scholes model are as follows:

	For the year ended December 31,	
	2020	2019
Average risk-free interest rate	0.83%	2.12%
Expected dividend yield	—%	—%
Expected life	5.00 to 6.25 years	5.16 to 6.25 years
Expected volatility	90%	80%

A summary of the Company's stock option activity and related information is as follows:

	2020			2019		
	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Life (in years)
Outstanding at January 1	169,980	\$ 8.13	9.1	147,054	\$ 50.79	6.8
Granted	226,691	\$ 4.84		118,400	\$ 3.14	
Forfeited / Expired	(5,021)	\$ 49.39		(95,474)	\$ 67.64	
Outstanding at December 31	391,650	\$ 5.70	8.1	169,980	\$ 8.13	9.1
Exercisable at December 31	364,567	\$ 5.91	8.0	74,980	\$ 14.81	8.1

The following table sets forth additional information about stock options outstanding at December 31, 2020:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life (in years)	Weighted Average Exercise Price	Options Exercisable
\$1.99 – \$2.85	206,791	7.7	\$ 2.49	180,458
\$4.25 – \$7.59	138,300	9.5	\$ 6.90	137,550
\$12.20 – \$15.60	42,206	5.2	\$ 13.08	42,206
\$31.50 – \$79.40	4,353	5.6	\$ 48.50	4,353
	391,650			364,567

Stock options granted under the Plan have ten-year terms and generally vest immediately or annually over a three-year or four-year vesting period except for option grants to independent directors that generally vest quarterly over a one-year vesting period.

The estimated aggregate pretax intrinsic value (the difference between the Company's stock price on the last day of the year ended December 31, 2020 and the exercise prices, multiplied by the number of vested in-the-money options) is \$1.2 million. This amount changes based on the fair value of the Company's stock.

As of December 31, 2020, there was \$47,372 of unrecognized compensation cost related to non-vested share-based compensation arrangements. That cost is expected to be recognized over a weighted average period of 1 year.

## Note 10 — Warrants

### Early Warrant Exercise Transaction

In July 2020, the Company entered into letter agreements with certain of the Company's Series A warrant holders (the "Series A Warrant Holders"), who were previously issued warrants (the "Original Warrants") to purchase shares of common stock of the Company in the Private Placement. The Series A Warrant Holders agreed to the early exercise of Series A warrants pursuant to the letter agreements (the "Early Warrant Exercise Transaction"). The transaction closed in August 2020. The Company raised net proceeds of \$2.5 million in the Early Warrant Exercise Transaction.

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Pursuant to the letter agreements and in consideration of the Series A Warrant Holders exercising Series A warrants to purchase an aggregate of 1,176,137 shares of common stock, the Company issued to the Series A Warrant Holders new Series C warrants to purchase up to an aggregate of 705,688 shares of common stock with an exercise price of \$8.90 per share and an expiration date of August 4, 2025. The estimated fair value of the Series C warrants, calculated using the Black-Scholes model, was \$3.7 million on the date of issuance and was recognized as a non-cash warrant inducement expense within other expenses in the statement of operations. The assumptions used in the Black Scholes model included a risk-free interest rate of 0.22%, a zero expected dividend yield, an expected life of 5 years and an expected volatility of 90%.

To the extent that a Series A Warrant Holder's exercise of Original Warrants would result in such holder exceeding beneficial ownership of 9.99% of the outstanding common stock of the Company, such excess warrant shares will be held in abeyance for the benefit of such Series A Warrant Holder until such time as its right thereto would not result in the holder exceeding this limitation. The term of the abeyance shall extend no later than May 12, 2025.

During the year ended December 31, 2019 and in connection with the Private Placement, the Company issued pre-funded warrants to purchase 868,443 shares of common stock that were immediately exercisable and have no expiration date. The pre-funded warrants were recorded as a component of stockholders' equity within additional paid-in capital. Also in connection with the Private Placement, investors received warrants to purchase 1,766,751 shares of common stock at an exercise price of \$2.32 per share that will expire five year from the date of issuance. The placement agreement received 70,670 warrants to purchase shares of common stock as part of its placement agent fee. The placement agent warrant has an exercise price of \$2.9716 per share and expires five year from the date of issuance.

The warrants were sold with shares of common stock or pre-funded warrants for \$2.4763 per unit. The unit price was allocated to the warrants and common stock or pre-funded warrants based upon the relative fair value of the securities, with the warrants valued using the Black-Scholes model. The allocated fair value of the warrants was estimated to be \$1.6 million on the date of issuance. In addition, the placement agent warrant was valued at \$98,592 on the date of issuance.

The assumptions used in the Black-Scholes model for these warrants are as follows:

Average risk-free interest rate	1.69%
Expected dividend yield	—%
Expected life	5 years
Expected volatility	80%

A summary of the Company's warrant activity and related information is as follows:

	Warrants		Pre-Funded Warrants	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at January 1, 2019	713,652	\$ 26.19	—	\$ —
Granted	1,837,421	\$ 2.35	868,443	\$ 0.001
Expired	(88,010)	\$ 38.70	—	\$ —
Outstanding at December 31, 2019	2,463,063	\$ 7.96	868,443	\$ 0.001
Granted	705,688	\$ 8.90	—	\$ —
Exercised	(589,941)	\$ 2.39	(548,242)	\$ 0.001
Held in abeyance	(803,300)	\$ 2.32	—	\$ —
Expired	(625,642)	\$ 24.44	—	\$ —
Outstanding at December 31, 2020	1,149,868	\$ 6.36	320,201	\$ 0.001

At December 31, 2020, 803,300 excess warrant shares were held in abeyance.

All warrants were exercisable at December 31, 2020 although warrants may generally be exercised only to the extent that the total number of shares of common stock then beneficially owned by these shareholders does not exceed 4.99% (or, at the investor's election, 9.99%) of the outstanding shares of the Company's stock.

The weighted average remaining life, excluding the 320,201 pre-funded warrants with no expiration date, of the outstanding warrants is 4.3 years.

The estimated aggregate pre-tax intrinsic value (the difference between the Company's stock price on the last day of the year ended December 31, 2020 and the exercise prices, multiplied by the number of in-the-money warrants) is \$11.8 million.

## Note 11 — Income Taxes

Income taxes are disproportionate to income due to net operating loss carryforwards, which are fully reserved. As of December 31, 2020, the Company has federal net operating loss carryforwards of approximately \$57 million. The federal net operating loss carryforward for years prior to 2018 expire from 2031 through 2038. Federal net operating loss carryforwards for year 2018 and thereafter do not expire.

Pursuant to Internal Revenue Code Sections 382 and 383, use of the Company's net operating loss and credit carryforwards may be limited if a cumulative change in ownership of more than 50% occurs within any three-year period since the last ownership change. The Company may have had one or more changes in control under these Sections. However, the Company does not anticipate performing a complete analysis of the limitation on the annual use of the net operating loss and tax credit carryforwards until the time that it projects it will be able to utilize these tax attributes.

Management has concluded that it is more likely than not that the Company will not have sufficient foreseeable taxable income within the carryforward period as applicable and permitted by current law to allow for the utilization of certain of the deductible amounts generating the deferred tax assets; therefore, a full valuation allowance has been established to reduce the net deferred tax assets to zero at December 31, 2020 and 2019.

The following is a summary of the significant components of the Company's net deferred income tax assets and liabilities as of December 31, 2020 and 2019:

	For the Year Ended December 31,	
	2020	2019
Current deferred income tax assets:		
Accrued compensation and other	11,000	9,000
Less: valuation allowance	(11,000)	(9,000)



	\$	\$
Non-current deferred income tax assets and (liabilities):		
Net operating loss	\$ 12,003,000	\$ 11,382,000
Research and development credit	18,000	18,000
Warrants issued for services	45,000	45,000
Depreciation and amortization	95,000	76,000
Exercise of options and warrants	(33,000)	(33,000)
Stock based compensation	957,000	775,000
Intangibles and other	(471,000)	(425,000)
Less: valuation allowance	(12,614,000)	(11,838,000)
Net non-current deferred tax assets	\$ —	\$ —

The Company has applied the provisions of FASB ASC 740, *Income Tax*, which clarifies the accounting for uncertainty in tax positions. FASB ASC 740 requires the recognition of the impact of a tax position in the financial statements if that position is more likely than not of being sustained on a tax return upon examination by the relevant taxing authority, based on the technical merits of the position. At December 31, 2020 and 2019, the Company had no unrecognized tax benefits.

The Company recognizes interest and penalties related to income tax matters in interest expense and operating expenses, respectively. As of December 31, 2020, and 2019, the Company has no accrued interest and penalties related to uncertain tax positions.

The Company is subject to tax in the United States (“U.S.”) and files tax returns in the U.S. federal and certain state jurisdictions. The Company is no longer subject to U.S. federal, state and local income tax examinations by tax authorities for years before 2016. The Company currently is not under examination by any tax authority.

The reconciliation between the statutory income tax rate and the effective tax rate is as follows:

	For the Year Ended December 31,	
	2020	2019
Statutory federal income tax rate	(21)%	(21)%
Stock based compensation	0	1
Warrant inducement	10	—
Valuation allowance	11	20
	—%	—%

## Note 12 — Lease

### Lease

The Company leases 14,782 square feet of office and laboratory space located in Austin, Texas. In April 2018, the Company entered into an amendment to its existing operating lease which extended the lease term from May 31, 2018 to May 31, 2021. The annual base rent in the first year of the lease extension was \$184,775 and increases by \$7,391 in each succeeding year of the lease extension. In addition, the Company is required to pay its proportionate share of operating costs for the building under this triple net lease. The lease does not contain renewal or termination options.

On January 1, 2019, the Company adopted ASC 842 utilizing a modified retrospective approach with a date of initial application at the beginning of the period of adoption. At adoption, the Company recognized a right of use asset of \$422,819 and lease liability of \$427,131. As the discount rate implicit in the lease was not readily determinable and the Company did not have any outstanding indebtedness, the Company utilized market data, giving consideration to remaining term of the lease, to estimate its incremental borrowing rate at 8% per annum for purposes of calculating the right of use asset and lease liability.

In September 2019, the Company entered into a sublease with CE+T Energy pursuant to which the Company subleases approximately seventy-five (75%) percent of its Austin, Texas facility to CE+T Energy. Under the sublease, CE+T Energy is obligated to make monthly payments equal to 75% of all sums due under the master lease and 100% of any maintenance and repair costs related to the subleased premises. The sublease replaced a temporary agreement between the Company and CE+T Energy, effective in July 2019, that contained similar payment obligations by CE+T Energy for utilization of the subleased premises. Consistent with the master lease, the sublease terminates on May 31, 2021. During the year ended December 31, 2020, CE+T Energy made payments of \$207,000 to the Company related to the subleased premises. The payments included CE+T Energy’s prorated share of rent as well as its prorated and proportionate share of operating costs for the building under the master lease. The Company recognized these payments as a reduction in general and administrative expenses.

Future minimum payments under the lease, as amended, are as follows:

	Master Lease	Sublease Income	Net
2021	\$ 83,149	\$ (62,362)	\$ 20,787
Less: imputed interest		(1,094)	
Total lease liability	\$ 82,055		

For the year ended December 31, 2020, operating cash outflows for lease payments totaled \$196,477 and the operating lease cost, recognized on a straight-line basis, totaled \$193,950. At December 31, 2020, the remaining lease term was 5 months.

## Note 13 — Commitments and Contingencies

### License Agreement

In 2015, the Company entered into licensing agreements which expire in February 2033. Per the agreements, the Company has an exclusive royalty-free license associated with semiconductor power switches which enhances its intellectual property portfolio. The agreements include both fixed payments, all of which were paid prior to 2017, and ongoing variable payments. The variable payments are a function of the number of associated patent filings pending and patents issued under the agreements. The Company will pay \$10,000 for each patent filing pending and \$20,000 for each patent issued each year of the agreements, up to a maximum of \$100,000 each year (i.e. five issued patents).

In April 2019, a patent associated with these agreements was issued and the Company recorded, as a non-cash activity, an asset and a corresponding liability of \$232,367, representing the estimated present value of future payments under the licensing agreements for this issued patent. Through December 31, 2020, a total of three patents associated with the agreements were issued. At December 31, 2020 and 2019, the corresponding long-term liability for the estimated present value of future payments under the licensing

agreement was \$552,031 and \$595,802, respectively. The Company is accruing interest for future payments related to the issued patents associated with the agreement. This long-term liability incurred in connection with these patent issuances is a non-cash investing activity with regard to the Company's statements of cash flows.

#### Legal Proceedings

The Company may be subject to litigation from time to time in the ordinary course of business. The Company is not currently party to any legal proceedings that it believes would reasonably have a material adverse impact on its business, financial results, and cash flows.

#### Indemnification Obligations

In connection with the sale of its power conversion systems division, the Company entered into an Asset Purchase Agreement with CE+T Energy that contains mutual indemnification obligations for breaches of representations, warranties and covenants and for certain other matters, including indemnification by the Company for assets and liabilities excluded from the sale and by CE+T Energy for liabilities assumed in the sale.

The employment agreements of Company executives include an indemnification provision whereby the Company shall indemnify and defend, at the Company's expense, its executives so as long as an executive's actions were taken in good faith and in furtherance of Company's business and within the scope of executive's duties and authority.

#### COVID-19 Pandemic

As of the date of these financial statements, the COVID-19 pandemic continues to spread throughout the United States and the rest of the world. The ultimate extent of the impact of COVID-19 on the financial performance of the Company will depend on future developments, including, among other things, the duration and spread of COVID-19, the timing of vaccination efforts, additional governmental restrictions in response to the COVID-19 pandemic, and the overall economy, all of which are highly uncertain and cannot be predicted. The COVID-19 pandemic has already caused significant volatility in the global financial markets which may impact the Company's ability to raise additional capital if necessary, on acceptable terms or at all, though such risk has not materialized to date. If the financial markets and/or the overall economy are negatively impacted for an extended period, the Company's operating results may be materially and adversely affected.

#### **Note 14 – Loans**

In May 2020, the Company entered into a Loan Agreement and Promissory Note (collectively the "PPP Loan") with BBVA USA pursuant to the Paycheck Protection Program (the "PPP") under the Coronavirus Aid, Relief, and Economic Security Act ("CARES Act") administered by the U.S. Small Business Administration. The Company received total proceeds of \$91,407 from the unsecured PPP Loan. The PPP Loan is scheduled to mature in May 2022 and has an interest rate of 1.00% per annum and is subject to the terms and conditions applicable to loans administered by the U.S. Small Business Administration under the CARES Act. The PPP Loan may be prepaid by the Company at any time prior to its maturity with no prepayment penalties. The first payment due date was originally in December 2020 but BBVA USA extended the first due date to May 2021 as the PPP Flexibility Act of 2020 extended the deferral period for payment of principal and interest for all PPP borrowers.

The PPP Loan contains customary events of default relating to, among other things, payment defaults and breaches of representations and warranties. Subject to certain conditions, the PPP Loan may be forgiven in whole or in part by applying for forgiveness pursuant to the CARES Act and the PPP. The amount of loan proceeds eligible for forgiveness is based on a formula based on a number of factors, including the amount of loan proceeds used by the Company during the 8-week or 24-week period after the loan origination for certain purposes, including payroll costs, rent payments on certain leases and certain qualified utility payments, provided that, among other things, at least 60% of the loan amount is used for eligible payroll costs, the employer maintaining or rehiring employees and maintaining salaries at certain level. In accordance with the requirements of the CARES Act and the PPP, the Company used the proceeds from the PPP Loan primarily for payroll costs. The Company applied for forgiveness of the PPP Loan during the first quarter of 2021. There can be no assurance that the Company will be granted forgiveness of the PPP Loan in whole or in part.

In April 2020, the Company also received a \$5,000 advance related to a U.S. Small Business Administration Economic Injury Disaster Loan. The Company expects to repay this advance and has included it within accrued expenses.

#### **Note 15 — Retirement Plan**

The Company has a defined contribution retirement plan covering all of its employees. Under the plan, Company contributions are discretionary. No discretionary contributions were made by the Company in the years ended December 31, 2020 and 2019.

#### **Note 16 — Subsequent Events**

##### February 2021 Public Offering

In February 2021, the Company issued and sold 1,352,975 shares of its common stock, including 176,475 additional shares of common stock pursuant to the exercise of the underwriter's option to purchase additional shares in full, in an underwritten public offering at a price of \$17.00 per share (the "February 2021 Offering"). The net proceeds to the Company from the February 2021 Offering were \$21.2 million. The Company intends to use the net proceeds from the February 2021 Offering to fund commercialization and development of its B-TRAN™ technology and general corporate and working capital purposes.

#### Lease

On March 10, 2021, the Company entered into a lease agreement for 4,070 square feet of office and laboratory space located in Austin, Texas. The commencement of the lease is expected to occur on June 1, 2021 and the term of the lease is 63 months. The annual base rent in the first year of the lease is \$56,471 and is net of \$18,824 in abated rent over the first three months of the lease term. The annual base rent in the second year of the lease is \$77,330 and increases by \$2,035 in each succeeding year of the lease. In addition, the Company is required to pay its proportionate share of operating costs for the building under this triple net lease. The lease contains a 5-year fair market renewal option. It does not contain a termination option.

#### Warrant Exercises

Subsequent to December 31, 2020 and through February 28, 2021, warrant holders exercised warrants to purchase 429,821 shares of our common stock. The Company received \$3.2 million in proceeds from the exercise of these warrants. In addition, the Company issued 803,300 excess warrant shares that were held in abeyance. At

**ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

Not applicable.

**ITEM 9A: CONTROLS AND PROCEDURES**

Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Exchange Act is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer ("CEO"), our principal executive officer, and our Chief Financial Officer ("CFO"), our principal financial and accounting officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of the end of the period covered by this report. The evaluation was undertaken in consultation with our accounting personnel. Based on that evaluation, our CEO and CFO concluded that, as of December 31, 2020, our disclosure controls and procedures are effective to ensure that information required to be disclosed by us in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

**Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Internal control over financial reporting is a process designed by, or under the supervision of, our CEO and CFO and effected by our Board, management and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. Our management, under the supervision and with the participation of our CEO and CFO, conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations (COSO). Based on such evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2020.

This Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation requirements by our independent registered public accounting firm pursuant to rules of the SEC that permit us to provide only management's report in this Annual Report.

**Changes in Internal Control over Financial Reporting**

There were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rule 13a-15(d) or 15d-15(d) of the Act during the three months ended December 31, 2020 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Inherent Limitations on Effectiveness of Controls**

Our management, including our CEO and CFO, do not expect that our disclosure controls or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty and that breakdowns can occur because of a simple error or mistake. Controls can also be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of control effectiveness to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

**ITEM 9B: OTHER INFORMATION**

Not applicable.

**PART III**

**ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE**

The information required by this item is incorporated herein by reference from our definitive proxy statement relating to the 2021 annual meeting of stockholders to be filed no later than 120 days after the end of our fiscal year ended December 31, 2020.

**ITEM 11: EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference from our definitive proxy statement relating to the 2021 annual meeting of stockholders to be filed no later than 120 days after the end of our fiscal year ended December 31, 2020.

**ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED SHAREHOLDER MATTERS**

The information required by this item is incorporated by reference from our definitive proxy statement relating to the 2021 annual meeting of stockholders to be filed no later than 120 days after the end of our fiscal year ended December 31, 2020.

**ITEM 13: CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE**

The information required by this item is incorporated by reference from our definitive proxy statement relating to the 2021 annual meeting of stockholders to be filed no

later than 120 days after the end of our fiscal year ended December 31, 2020.

#### ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by this item is incorporated by reference from our definitive proxy statement relating to the 2021 annual meeting of stockholders to be filed no later than 120 days after the end of our fiscal year ended December 31, 2020.

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### PART IV

#### ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(a) Documents Filed with Report

(1) *Financial Statements.*

<a href="#">Report of Independent Registered Accounting Firm</a>	<a href="#">23</a>
<a href="#">Balance Sheets as of December 31, 2020 and 2019</a>	<a href="#">25</a>
<a href="#">Statements of Operations for the years ended December 31, 2020 and 2019</a>	<a href="#">26</a>
<a href="#">Statement of Stockholders' Equity for the years ended December 31, 2020 and 2019</a>	<a href="#">27</a>
<a href="#">Statements of Cash Flows for the years ended December 31, 2020 and 2019</a>	<a href="#">28</a>

(2) *Schedules.*

All financial statement schedules have been omitted because they are not required, are not applicable or the information is included in the consolidated financial statements or related notes thereto.

(3) *Exhibits.*

The following exhibits are filed as part of this Annual Report on Form 10-K or incorporated by reference, as indicated:

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### EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description of Document</u>
<a href="#">3.1</a>	<a href="#">Delaware Certificate of Conversion including Certificate of Incorporation of Ideal Power Inc. (1)</a>
<a href="#">3.2</a>	<a href="#">Certificate of Amendment of the Certificate of Incorporation of Ideal Power Inc. (2)</a>
<a href="#">3.3</a>	<a href="#">Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (3)</a>
<a href="#">3.4</a>	<a href="#">Amended and Restated Bylaws of Ideal Power Inc. (4)</a>
<a href="#">4.1</a>	<a href="#">Specimen Common Stock Certificate (5)</a>
<a href="#">4.2</a>	<a href="#">Form of Series A Common Stock Purchase Warrant (6)</a>
<a href="#">4.3</a>	<a href="#">Form of Series B Pre-Funded Common Stock Warrant (7)</a>
<a href="#">4.4</a>	<a href="#">Form of Series C Common Stock Purchase Warrant (8)</a>
<a href="#">4.5</a>	<a href="#">Description of Registrant's Securities (9)</a>
<a href="#">10.1</a>	<a href="#">Ideal Power Inc. Amended and Restated 2013 Equity Incentive Plan (10) +</a>
<a href="#">10.2</a>	<a href="#">Second Revised and Restated Employment Agreement between the Company and R. Daniel Brdar dated April 8, 2020 (11) +</a>
<a href="#">10.3</a>	<a href="#">Employment Agreement between the registrant and Timothy W. Burns dated September 16, 2014 (12) +</a>
<a href="#">10.4</a>	<a href="#">Registration Rights Agreement, dated November 13, 2019, by and between Ideal Power Inc. and each purchaser identified on the signature pages thereto (13)</a>
<a href="#">23.1</a>	<a href="#">Consent of Gumbiner Savett Inc.*</a>
<a href="#">31.1</a>	<a href="#">Certification of Principal Executive Officer, pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*</a>
<a href="#">31.2</a>	<a href="#">Certification of Principal Financial and Accounting Officer pursuant to Rule 13a-14(a) or 15d-14(a) of the Securities and Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002*</a>
<a href="#">32.1</a>	<a href="#">Certification of Principal Executive Officer and Principal Financial and Accounting Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**</a>
101.INS	XBRL Instance Document*
101.SCH	XBRL Taxonomy Extension Schema*
101.CAL	XBRL Taxonomy Extension Calculation Linkbase*
101.DEF	XBRL Taxonomy Extension Definition Linkbase*
101.LAB	XBRL Taxonomy Extension Label Linkbase*
101.PRE	XBRL Taxonomy Extension Presentation Linkbase*

\* Filed herewith

\*\* Furnished herewith

+ Indicates a management contract or compensatory agreement

- (1) Incorporated by reference to Exhibit 3.1 to the registrant's registration statement on Form S-1, file no. 333-190414, originally filed with the Securities and Exchange Commission on August 6, 2013, as amended.
- (2) Incorporated by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 20, 2019.
- (3) Incorporated by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on February 27, 2017.
- (4) Incorporated by reference to Exhibit 3.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 29, 2020.

- (5) Incorporated by reference to Exhibit 4.5 to the registrant's registration statement on Form S-3, file no. 333-235500, filed with the Securities and Exchange Commission on December 13, 2019.

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- (6) Incorporated by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 13, 2019.
- (7) Incorporated by reference to Exhibit 4.2 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 13, 2019.
- (8) Incorporated by reference to Exhibit 4.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on August 3, 2020.
- (9) Incorporated by reference to Exhibit 4.5 to the registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 30, 2020.
- (10) Incorporated by reference to Exhibit 10.1 the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on June 18, 2020.
- (11) Incorporated by reference to Exhibit 10.1 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on April 14, 2020.
- (12) Incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on September 19, 2014.
- (13) Incorporated by reference to Exhibit 10.2 to the registrant's Current Report on Form 8-K filed with the Securities and Exchange Commission on November 13, 2019.

**ITEM 16: FORM 10-K SUMMARY**

None.

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**SIGNATURES**

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Austin, State of Texas, on this 26th day of March 2021.

IDEAL POWER INC.

By: /s/ R. Daniel Brdar  
R. Daniel Brdar,  
Chief Executive Officer

By: /s/ Timothy Burns  
Timothy Burns,  
Chief Financial Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Dated: March 26, 2021

/s/ R. Daniel Brdar  
R. Daniel Brdar,  
Chief Executive Officer  
(principal executive officer),  
President and Director

Dated: March 26, 2021

/s/ Timothy Burns  
Timothy Burns,  
Chief Financial Officer  
(principal financial and accounting officer),  
Secretary and Treasurer

Dated: March 26, 2021

/s/ David Eisenhaure  
David B. Eisenhaure, Chairman of the Board

Dated: March 26, 2021

/s/ Michael Turmelle  
Michael C. Turmelle, Director

Dated: March 26, 2021

/s/ Ted Lesster  
Ted Lesster, Director

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**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in Registration Statement Nos. 333-239270, 333-205627 and 333-201337 on Form S-8 and Registration Statement Nos. 333-250844, 333-248466, 333-235500 and 333-217088 on Form S-3 of our report dated March 26, 2021, relating to the financial statements of Ideal Power Inc, appearing in this Annual Report on Form 10-K for the year ended December 31, 2020.

/s/ Gumbiner Savett Inc.  
Santa Monica, California  
March 26, 2021

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**CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER  
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002**

I, R. Daniel Brdar, certify that:

1. I have reviewed this annual report on Form 10-K of Ideal Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15-d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 26, 2021

/s/ R. Daniel Brdar

R. Daniel Brdar

Chief Executive Officer (Principal Executive Officer)

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**CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER  
PURSUANT TO SECTION 302(a) OF THE SARBANES-OXLEY ACT OF 2002**

I, Timothy W. Burns, certify that:

1. I have reviewed this annual report on Form 10-K of Ideal Power Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15-d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 26, 2021

/s/ Timothy W. Burns

Timothy W. Burns

Chief Financial Officer (Principal Financial and Accounting Officer)

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**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the annual report of Ideal Power Inc. (the "Company") on Form 10-K for the year ended December 31, 2020 as filed with the Securities and Exchange Commission (the "Report"), we, R. Daniel Brdar, Chief Executive Officer (Principal Executive Officer) and Timothy W. Burns, Chief Financial Officer (Principal Financial and Accounting Officer) of the Company, hereby certify as of the date hereof, solely for purposes of Title 18, Chapter 63, Section 1350 of the United States Code, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company at the dates and for the periods indicated.

Date: March 26, 2021

/s/ R. Daniel Brdar

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R. Daniel Brdar

Chief Executive Officer (Principal Executive Officer)

/s/ Timothy W. Burns

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Timothy W. Burns

Chief Financial Officer (Principal Financial and Accounting Officer)

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