

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, 2019

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:

<u>Title of each class</u>	<u>Trading Symbol(s)</u>	<u>Name of each exchange on which registered</u>
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 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 \$4,489,600 as of June 28, 2019, 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 25, 2020, the issuer has 2,099,951 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 2020 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, 2019.

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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, as and when we need it;
- our ability to maintain listing of our common stock on the Nasdaq Capital Market;
- 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. You should not place undue reliance on these forward-looking statements.

#### **REVERSE STOCK SPLIT**

On August 15, 2019, we effected a reverse stock split of the outstanding shares of our common stock by a ratio of one-for-ten, and our common stock began trading on the Nasdaq Capital Market on a split-adjusted basis on August 20, 2019. The par value of our common stock remained unchanged at \$0.001 per share after the reverse stock split. All share amounts, per share data, share prices, exercise prices and conversion rates have, where applicable, been adjusted retroactively to reflect the reverse stock split.

## 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 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. On September 19, 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, 2019 amounted to \$14.9 million with approximately \$12.4 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. We did not have revenue from continuing operations in the years ended December 31, 2019 or 2018. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

#### *Sale of Power Conversion Systems Division*

On September 19, 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 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.

On September 19, 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 July 22, 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.

#### *Private Placement of Common Stock and Warrants*

On November 7, 2019, we entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, our Chief Executive Officer and Chairman of the Board, for a private placement of our common stock and warrants to purchase common stock for aggregate gross proceeds of \$3.5 million and net proceeds of \$3.1 million (the "Offering"). The Offering closed on November 13, 2019. In the Offering, we 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 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 Offering, 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 started utilizing, and expect to continue to utilize, the net proceeds from the Offering for working capital and general corporate purposes.

## Industry Background

A semiconductor material is a substance that, as its name suggests, 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 DC to 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 part. Solid-state switches are typically more efficient due to lower losses during power processing.

The \$12 billion 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 & defense, healthcare and others. Among these, automotive electronics accounts for significant consumption of power semiconductors. The number of semiconductors in vehicles has surged 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.

## 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 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 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, we believe that the B-TRANs™ can significantly improve electrical efficiency in power converters and many other power conversion applications. The higher efficiency would substantially reduce the heat generated by the operation of products utilizing this technology. As a result, products incorporating B-TRANs™ will require less space for heat dissipation which would enable increased power density, or power per pound, and reduce material costs.

In 2016, one of our former semiconductor fabricators successfully tested single-sided B-TRAN™ silicon dies and the results were 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. In the second half of 2017, we shifted our focus to de-risking the proof of concept phase of the B-TRAN™ development timeline, as this phase of development was taking longer than anticipated due to the complexity of manufacturing complicated, two-sided power semiconductor devices. To facilitate this, we engaged another semiconductor fabricator, on a parallel path, to produce a less complex to manufacture B-TRAN™ on an accelerated schedule for proof of concept and initial testing. In the first quarter of 2018, we 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.

In the second quarter of 2018, a domestic semiconductor fabricator was engaged for a development run of our standard version of B-TRAN™ dies. In subsequent quarters and based on measurements and subsequent analysis of those results, we proceeded with the next phase, device fabrication. In 2019, two fabricators were contracted to produce the next generation of B-TRAN™ wafers. These runs, which have been completed, incorporate 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 packaging design based on our previous work. Packaged double-sided B-TRAN™ dies are currently undergoing testing in our laboratory to generate switching data and evaluate the preliminary packaging design and build quality. Testing results to date are consistent with our simulations, earlier unpackaged die testing and the requirements of our engineering prototype sampling program. Initial samples will be discrete packaged devices followed by packaged B-TRAN™ dies with laboratory prototype drivers. The coupling of device samples with drivers will form the basis of an intelligent module.

## Business Strategy & Target Markets

Once we have completed the fabrication of engineering samples 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, uninterruptible power supplies, electric and hybrid vehicles electronic controls, industrial motor drives, direct current-based distribution and transmission switches and controls and renewable energy and energy storage system power converters. 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, 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, 2019, we had 35 US and 14 foreign issued patents on our B-TRAN™ technology as well as over 35 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).

In April 2019, a patent associated with these agreements was issued and we 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, 2019, a total of three patents associated with the agreements were issued. At December 31, 2019 and 2018, the corresponding long-term liability for the estimated present value of future payments under the licensing agreement was \$595,802 and \$428,163, 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. 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. 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.

## Government Approval and Regulation

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

## Employees

As of February 28, 2020, 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 revenue and we may not achieve or maintain profitability in the future.***

We were formed in Texas on May 17, 2007 and converted to a Delaware corporation on July 15, 2013. 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 has 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 do not expect to generate any revenue in the near future.

Since inception, we have sustained approximately \$67.3 million in net losses and we had net losses for the years ended December 31, 2019 and 2018 of approximately \$3.9 million and \$7.9 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 revenue and, in order to fund our operations until we are profitable, will 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, investors will likely suffer a complete loss of their investments in our securities.

***There is substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain further financing.***

Our audited financial statements for the year ended December 31, 2019 were prepared under the assumption that we would continue our operations as a going concern. Our independent registered public accounting firm for the year ended December 31, 2019 included a “going concern” explanatory paragraph in its report on our financial statements as of, and for the year ended, December 31, 2019 regarding substantial doubt about our ability to continue as a going concern. There can be no assurance that we will be successful in obtaining third-party financing. If external financing sources are not available or are inadequate to fund operations, or the technology under development is not capable of generating sustainable revenues in the future, we will be required to reduce operating costs, which could jeopardize future strategic initiatives and business plans. Furthermore, uncertainty concerning our ability to continue as a going concern may hinder our ability to obtain future financing. Continued operations and our ability to continue as a going concern are dependent on our ability to obtain additional funding in the near future and thereafter, and there are no assurances that such funding will be available to us at all or will be available in sufficient amounts or on reasonable terms.

Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. Based on our current operating plan, existing working capital at December 31, 2019 is not sufficient to meet the cash requirements to fund planned operations through the period that is one year after the date our 2019 financial statements are issued unless we are able to raise additional capital to fund operations. Without additional funds from private and/or public offerings of debt or equity securities, sales of assets, sales of our licenses of intellectual property or technologies, or other transactions, we will exhaust our resources and will be unable to continue operations. If we cannot continue as a viable entity, our stockholders would likely lose most or all of their investment in us.

***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 initial prototypes of B-TRAN™ devices and testing of these devices is underway. We cannot predict whether 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 module. The driver development 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 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 licensees in achieving design wins, may be time consuming and expensive and may not be successful. If we or our licensees are not successful in achieving design wins, or if we or our 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 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 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 effect 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.***

On April 16, 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. On January 2, 2019, our Board of Directors 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 locate a buyer for our power conversion systems division and PPSA™ technology. On September 19, 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, obtain sufficient resources, including additional capital, 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 Advanced Research Projects Agency-Energy, or 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 slow down our product development.

***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 product; obtain one or more licenses in order to secure the rights to continue manufacturing or marketing certain products; 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.***

We intend to employ a licensing strategy for the production and potentially sales of our future B-TRAN™ products. 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 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 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 recent novel coronavirus (COVID-19) outbreak.***

In December 2019, a novel strain of coronavirus (COVID-19) began to impact the population of Wuhan, China. As of the date of this Annual Report on Form 10-K, the COVID-19 outbreak has already begun to cause a disruption to our business and potential financial impacts associated with the COVID-19 outbreak include, but are not limited to, delays in critical development and commercialization activities and potential incremental costs associated with mitigating the effects of the outbreak, including increased freight and logistics costs and other expenses. The COVID-19 outbreak 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 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 2020. However, as of the date of this Annual Report on Form 10-K, we do not expect our results of operations for 2020 to be significantly adversely affected.

Furthermore, we rely upon the facilities of our semiconductor fabricators in California and in China 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, China and other locations domestically and abroad where the COVID-19 impacts have been and/or are expected to be significant. The outbreak 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 quickly resume operations, if necessary, 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 the 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 are expected to be temporary, the duration of the production and supply chain disruption, and related financial impact, cannot be estimated at this time. Should the production and distribution closures continue for an extended period of time, the impact on our supply chain in China and globally could have a material adverse effect on our results of operations and cash flows. See "—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 outbreak 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 outbreak harms the United States economy in general. In addition, the continued spread of COVID-19 globally could result in a widespread health crisis that could adversely affect the global economy and financial markets, resulting in an 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 "—The macro-economic environment in the United States and abroad has adversely affected, and may in the future adversely affect, our ability to raise capital, which may potentially impact our ability to continue our operations."

***We will 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.***

As our technology is in the development stage and has not yet been commercialized, we will be required to obtain additional financing to continue our operations and execute our business plan. We will need to raise additional capital from strategic partnerships, government grants and/or from investors within the next twelve months from the date of issuance of this report to fund our future operations. We may not be able to obtain such financing on commercially reasonable terms or at all. If we are unable to obtain such financing when needed, our business could fail.

We will continue to incur significant costs as we develop and commercialize our B-TRAN™ technology. Although we are executing our business plan to commercialize and license this technology, continuing losses may impair our ability to fully meet our business objective or threaten our ability to continue as a going concern in future years. Any such inability to continue as a going concern may result in our stockholders losing their entire investment. There is no guarantee that we will begin generating revenue or secure additional financing on acceptable terms, if and when needed, in the future.

We have been funding operations primarily through the sale of common stock and warrants. We currently generate no revenue and, in order to fund our operations until we are profitable, will 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, investors will likely suffer a complete loss of their investments in our securities.

***A failure to obtain 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, 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 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 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 government grants to offset a significant, or any, portion of our development spending. If we do not obtain grants or our efforts to obtain grants take longer than expected to be successful, we will need to rely on other means to fund our development.

***The macro-economic environment in the United States and abroad has adversely affected, and may in the future adversely affect, our ability to raise capital, which may potentially impact our ability to continue our operations.***

We have and, prior to commercialization at scale, will continue to rely on raising funds from investors and/or other sources to support our research and development activities and our operations. 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 to raise capital. Specifically, the outbreak of COVID-19 has caused significant disruptions to 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 as and when we need them, 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.

***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 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 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 or licensing revenue.

***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, 2020 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 of directors. Our board of directors 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, 2019, 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.

***We incur significant costs as a result of being a public company that reports to the Securities and Exchange Commission and our management is required to devote substantial time to meet compliance obligations.***

As a public company reporting to the SEC, we incur significant legal, accounting and other expenses. We are subject to reporting requirements of the Exchange Act and the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC that impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Our management and other personnel are required to devote a substantial amount of time to these and other new compliance initiatives. In addition, we believe these rules and regulations make it more costly for us to obtain director and officer liability insurance. Specifically, we reduced our policy limits in both of our last two annual renewals to, in part, avoid incurring substantially higher director and officer liability insurance costs. We may be required to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage in the future. As a result, it may be more difficult for us to attract and retain qualified people to serve on our board of directors, on our board committees or as executive officers.

***If we are unable to maintain compliance with the listing requirements of The Nasdaq Stock Market, our common stock may be delisted from The Nasdaq Capital Market ("Nasdaq"), which could have a material adverse effect on our financial condition and could make it more difficult for you to sell your shares.***

Our common stock is listed on Nasdaq, and we are therefore subject to its continued listing requirements, including requirements with respect to the market value of publicly-held shares, market value of listed shares, minimum bid price per share, and minimum stockholder's equity, among others, and requirements relating to board and committee independence. If we fail to satisfy one or more of the requirements, we may be delisted from the Nasdaq.

On September 7, 2018, we received a notice letter from the Listing Qualifications staff of Nasdaq indicating that, based upon the closing bid price of our common stock for the last 30 consecutive business days, we no longer met the requirement to maintain a minimum bid price of \$1 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). On August 15, 2019, in order to regain compliance with the minimum bid price requirement, we effected a reverse stock split of the outstanding shares of its common stock by a ratio of one-for-ten and our common stock began trading on the Nasdaq Capital Market on a split-adjusted basis on August 20, 2019. On September 4, 2019, we received a notice letter from Nasdaq that we had regained compliance with the minimum bid price requirement and the matter was closed.

On August 21, 2019, we were notified by the Nasdaq Listing Qualifications Department that we were not in compliance with the minimum stockholders' equity requirement under Nasdaq Listing Rule 5550(b)(1) for continued listing on the Nasdaq Capital Market because our stockholders' equity was below the required minimum of \$2.5 million, and, as of the date of the notification, we did not meet the alternatives of market value of listed securities or net income from continuing operations. On November 13, 2019, we closed on the Offering and filed a related Form 8-K with the SEC for the Offering. On November 25, 2019, we received written confirmation from Nasdaq notifying us that we had regained compliance with the minimum stockholders' equity requirement under Nasdaq Listing Rule 5550(b)(1) based on our Form 8-K filed with the SEC on November 13, 2019. Nasdaq indicated it would continue to monitor our compliance with the minimum stockholders' equity requirement under Nasdaq Listing Rule 5550(b)(1) in this Annual Report on Form 10-K. Although we were in compliance with Nasdaq Listing Rule 5550(b)(1) at December 31, 2019 as we reported stockholders' equity of \$3.9 million, if we do not evidence compliance in the future, we may be subject to delisting.

There can be no assurance that we will be able to maintain compliance with the continued listing requirements for Nasdaq. If we fail to maintain compliance with any such continued listing requirement, there can also be no assurance that we will be able to regain compliance with any such continued listing requirement in the future or that our common stock will not be delisted from Nasdaq Stock Market in the future.

Delisting from Nasdaq may adversely affect our ability to raise additional financing through the public or private sale of equity securities, may significantly affect the ability of investors to trade our securities and may negatively affect the value and liquidity of our common stock. Delisting also could have other negative results, including the potential loss of employee confidence, the loss of institutional investors or interest in business development opportunities. If we are delisted from The NASDAQ Stock Market and we are not able to list our common stock on another exchange, our common stock could be quoted on the OTC Bulletin Board or in the "pink sheets." As a result, we could face significant adverse consequences including, among others:

- a limited availability of market quotations for our securities;
- a determination that our common stock is a "penny stock" which will require brokers trading in our common stock to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and little or no analyst coverage for us;
- we would no longer qualify for exemptions from state securities registration requirements, which may require us to comply with applicable state securities laws; and
- a decreased ability to issue additional securities (including pursuant to short-form registration statements on Form S-3) or obtain additional financing in the future.

***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.

At December 31, 2019, we had 2,099,951 shares of common stock outstanding and 868,443 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 December 31, 2019, we had 2,633,043 potentially dilutive shares outstanding, exclusive of 868,443 pre-funded warrants 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. If our stock price rises, the holders of vested options, stock-based awards or warrants may exercise their options, stock-based awards 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 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 when needed, we may be required to delay, limit, reduce or terminate our development and commercialization efforts.

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

Under current SEC rules and regulations, because the aggregate market value of our common stock held by non-affiliates, or public float, was less than \$75 million (calculated as set forth in Form S-3 and SEC rules and regulations) at the time of filing of this Report on Form 10-K, the amount we can raise through primary public offerings of our securities in any twelve-month period using a registration statement on Form S-3 will 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, or Certificate, and 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 of directors 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;
- 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. See “Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents” for additional information.

***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 is influenced by the research and reports that industry or securities analysts publish about us or our business. Prior to 2018, a number of securities analysts published reports on us on a regular basis. In 2018, the number of securities analysts publishing reports on us declined and, in general, the ratings of these analysts on our common stock became less favorable. In 2019, one securities analyst published a report whereby they discontinued coverage on us and no other securities analysts published reports on us. If any of the analysts who cover us now or in the future issue an adverse opinion regarding our stock, our stock price would likely decline. If one or more analysts do not initiate coverage on us or one or more analysts 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.

**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. On April 20, 2018, we entered into an amendment to our lease which extended the lease term from May 31, 2018 to May 31, 2021. On September 19, 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.”

**ITEM 3: LEGAL PROCEEDINGS**

On April 11, 2019, we entered into an asset purchase agreement (the “APA”) with Pathion Holdings, Inc., a Delaware corporation, and Pathion, Inc., a Delaware corporation (together, “Pathion”), to sell certain assets (the “PPSA Assets”) related to our PPSA™ / Power Conversion Systems business (“PPSA Business”). The purchase price consisted of \$500,000 in cash and 150,000 shares of the common stock of Pathion Holdings, Inc. Pursuant to the APA, Pathion would also assume certain liabilities relating to the PPSA Business.

On June 13, 2019, we filed a petition in the district court of the 250th Judicial District in Travis County (the “Court”), naming Pathion and certain Pathion officers as defendants. The petition asserts breach of the APA and the related sublease agreement for failure by Pathion to pay any cash amounts due thereunder, and fraudulent inducement by Pathion and the individual defendants for misrepresenting Pathion’s financial position and its stock value. The petition also requests a declaratory judgment that Pathion has no rights to the PPSA Assets.

On July 15, 2019, Pathion filed a general denial to our petition.

On July 22, 2019, we filed a motion for partial summary judgment on its declaratory judgment action and for severance. Pathion responded to the motion for summary judgment on August 6, 2019. That same day, Pathion filed a counterclaim, and requested injunctive relief and a declaratory judgment.

On August 13, 2019, the Court conducted a hearing on our motion for summary judgment. On August 23, 2019, the Court issued an order granting our motion for summary judgment and fees and severing judgment from the remaining claims. Under this order, the Court declared that Pathion has no rights to the PPSA Assets and awarded us \$24,800 in legal fees. On October 15, 2019, the Court issued a writ of garnishment against Pathion's bank to enable collection of these legal fees.

On October 14, 2019, the Court granted Pathion's counsel's motion to withdraw. Ten days later, a new lawyer appeared for Pathion and, the next day, October 25, 2019, the Court issued a scheduling order requiring Pathion to produce documents and appear for deposition in December 2019 and set trial to begin on August 31, 2020. On December 12, 2019, after Pathion filed an emergency order to delay depositions, the Court set a new deposition date of January 7, 2020. The deposition occurred on January 7, 2020. On February 20, 2020, Pathon filed a request for us to produce documents within 30 days. We responded to this request on March 23, 2020.

We may be subject to other 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 25, 2020, we had 69 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 of directors 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 of directors deems relevant.

***Performance Graph***

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

**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 of Directors 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. On September 19, 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, 2019 amounted to \$14.9 million with approximately \$12.4 million of that revenue from discontinued operations and the remainder from grant revenue for bi-directional power switch development. We did not have revenue from continuing operations in the years ended December 31, 2019 and 2018. We may pursue additional research and development grants, if and when available, to further develop and/or improve our technology.

### Sale of Power Conversion Systems Division

On September 19, 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.

On September 19, 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 July 22, 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.

### Private Placement of Common Stock and Warrants

On November 7, 2019, we entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, our Chief Executive Officer and Chairman of the Board, for a private placement of our common stock and warrants to purchase common stock for aggregate gross proceeds of \$3.5 million and net proceeds of \$3.1 million, as discussed in more detail below.

## 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 from product sales in accordance with Accounting Standards Codification, or ASC, Topic 606, “Revenue from Contracts with Customers.” Revenue is recognized in an amount that reflects the expected consideration to be received in exchange for the transfer of the promised goods or services to customers. We generally sold our products FOB shipping, where the risk of loss and title passed to the customer at the shipping point, and recognized revenue when products were shipped. All revenue is included within loss from discontinued operations for the years ended December 31, 2019 and 2018.

**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, 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 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 paid dividends and have no plans to do so in the foreseeable future.

## Results of Operations

### Comparison of the year ended December 31, 2019 to the year ended December 31, 2018

**Research and Development Expenses.** Research and development expenses increased by \$178,409, or 20%, to \$1,050,151 in the year ended December 31, 2019 from \$871,742 in the year ended December 31, 2018. The increase was due primarily to higher personnel costs of \$160,551. Modestly higher material and third-party bi-directional power switch development costs were largely offset by \$84,258 lower stock-based compensation expense. Stock-based compensation expense was lower as the BTRAN Chief Commercial Officer did not receive annual grants in 2016 through 2018, which resulted in declining stock-based compensation expense as prior grants fully vested. We expect modestly higher research and development expenses in 2020 as we accelerate development and commercialization of our B-TRAN™ technology.

*General and Administrative Expenses.* General and administrative expenses decreased by \$1,374,770, or 40%, to \$2,065,112 in the year ended December 31, 2019 from \$3,439,882 in the year ended December 31, 2018. The decrease was due primarily to lower stock-based compensation costs of \$462,205, legal fees of \$382,256 and cost reduction activities, including lower personnel costs of \$313,021 and contract labor costs of \$102,563. Stock-based compensation expense was lower as the Chief Executive Officer received a new hire grant that immediately vested in 2018 and the Chief Financial Officer did not receive annual grants in 2016 through 2018, which resulted in declining stock-based compensation expense as prior grants fully vested. General and administrative expenses were also negatively impacted in the year ended December 31, 2018 by a significant increase in legal fees in connection with the Company's evaluation and pursuit of strategic alternatives for the business. We expect a further reduction in our general and administrative expenses in 2020 due to continuing cost reduction activities.

*Interest Income (Expense), Net.* Interest expense increased by \$44,288 to \$4,267 for the year ended December 31, 2019 from \$40,021 in interest income for the year ended December 31, 2018. Interest expense related to the accretion of interest for future payments under our license agreements. Interest income for the year ended December 31, 2018 included \$35,064 in late fees awarded to, and collected by, the Company in connection with a legal proceeding.

*Loss from Continuing Operations.* Our loss from continuing operations for the year ended December 31, 2019 was \$3,119,530 or 27% lower than the \$4,271,603 loss from continuing operations for year ended December 31, 2018, primarily driven by the factors discussed above.

*Loss from Discontinued Operations.* Our loss from discontinued operations for the year ended December 31, 2019 was \$799,025 or 78% lower than the \$3,633,386 loss from discontinued operations for year ended December 31, 2018. The loss from discontinued operations was significantly lower than the prior year due to the shutdown of our PPSA™ business in early 2019. Loss from discontinued operations include \$405,000 and \$360,000 impairments, respectively, for the years ended December 31, 2019 and 2018 on assets held for sale to write-down these assets to expected net proceeds from the sale.

*Loss on Sale of Discontinued Operations.* Our loss on sale of discontinued operation for the year ended December 31, 2019 was \$9,107.

*Net Loss.* Primarily as a result of the decreases in loss from discontinued operations and general and administrative expenses, our net loss decreased by \$3,977,327, or 50%, to \$3,927,662 the year ended December 31, 2019 from a net loss of \$7,904,989 for the year ended December 31, 2018.

## **Liquidity and Capital Resources**

We currently do not generate revenue. 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, 2019 and 2018, we had cash and cash equivalents of \$3,057,682 and \$3,258,077, respectively. Our net working capital and long-term debt at December 31, 2019 were \$2,620,620 and \$0, respectively.

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, 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.

Operating activities in the year ended December 31, 2018 resulted in cash outflows of \$6,546,216, which were due to the loss from continuing operations for the period of \$4,271,603, cash used in operating activities related to discontinued operations of \$2,713,957 and unfavorable balance sheet timing of \$485,471 offset by stock-based compensation of \$730,802, depreciation and amortization of \$137,509 and patent impairment charges of \$56,504.

We expect a reduction in cash outflows from operating activities in 2020 due to the sale of our discontinued operations in September 2019.

Investing activities related to continuing operations in the years ended December 31, 2019 and 2018 resulted in cash outflows of \$104,098 and \$134,149, 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. Investing activities related to discontinued operations in the year ended December 31, 2018 resulted in cash outflows of \$78,084.

Financing activities in the year ended December 31, 2019 resulted in cash inflows of \$3,098,773 related to the net proceeds from a private placement of our common stock and warrants to purchase common stock, as further described below. Financing activities in the year ended December 31, 2018 resulted in cash outflows of \$5,721 related to paying employee taxes in exchange for common stock upon the vesting of restricted stock units.

On November 7, 2019, we entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, our Chief Executive Officer and Chairman of the Board, for a private placement of our common stock and warrants to purchase common stock for aggregate gross proceeds of \$3.5 million and net proceeds of \$3.1 million (the "Offering"). The Offering closed on November 13, 2019. In the Offering, 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 Offering, 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. Pursuant to a registration rights agreement, the Company filed a registration statement with the SEC (which was declared effective on December 20, 2019) to register the resale of the shares of common stock and the shares of common stock issuable upon exercise of the warrants issued in the Offering. We have started utilizing, and expect to continue to utilize, the net proceeds from the Offering for working capital and general corporate purposes.

As our technology is in the development stage and has not yet been commercialized, we will be required to obtain additional financing to continue our operations and execute our business plan. We will need to raise additional capital within the next twelve to fifteen months from the date of issuance of this report to fund our future operations. We may not be able to obtain such financing on commercially reasonable terms or at all. If we are unable to obtain such financing when needed, we will be required to reduce operating costs, which could jeopardize current and future strategic initiatives and business plans, or cease operations. Based on our current operating plan, existing working capital at December 31, 2019 was not sufficient to meet the cash requirements to fund planned operations through the period that is one year after the date our 2019 financial statements are issued unless we are able to raise additional capital to fund operations. Our audited financial statements for the year ended December 31, 2019, were prepared under the assumption that we would continue our operations as a going concern. Our independent registered public accounting firm, in its report on our 2019 financial statements, has raised substantial doubt about our ability to continue as a going concern.

### **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, 2019, we did not have any off-balance sheet arrangements.

### **Trends, Events and Uncertainties**

Research and development of new technologies is, by its nature, unpredictable. Although we intend to undertake development efforts with commercially reasonable diligence, there can be no assurance that our net working capital of \$2,620,620 as of December 31, 2019 will be sufficient to enable us to develop our technology to the extent needed to create future sales to sustain operations as contemplated herein. If our working capital is insufficient for this purpose, we will consider other options to continue our path to commercialization, including, but not limited to, additional financing through follow-on stock offerings, debt financing, co-development agreements, government grants, curtailment of operations, suspension of operations, sale or licensing of developed intellectual property, or other alternatives.

We cannot assure you that 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 money as and when we need it to continue our operations. If we cannot raise funds as and when we need them, we may be required to severely curtail, or even to cease, our operations.

On January 2, 2019, our Board of Directors 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.

The recent outbreak of COVID-19 has already begun to cause a disruption to our business and will likely result in delays in critical development and commercialization activities and potential incremental costs associated with mitigating the effects of the outbreak, including increased freight and logistics costs and other expenses. The COVID-19 outbreak 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 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 2020.

Our operating results could also be adversely affected to the extent that the COVID-19 outbreak harms the United States economy in general. In addition, the continued spread of COVID-19 globally could result in a widespread health crisis that could adversely affect the global economy and financial markets, resulting in an economic downturn. Any economic downturn in the United States or globally would adversely impact our ability to raise capital at a time when our future operations are dependent on access to such capital. 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 the recent novel coronavirus (COVID-19) outbreak.”

Other than as discussed above and elsewhere in this report, we are not aware of any trends, events or uncertainties that are likely to have a material effect on our financial condition.

**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, 2019 and 2018, and the related statements of operations, stockholders' equity and cash flows, for each of the two years in the period ended December 31, 2019, 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, 2019 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

**Going Concern**

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company has incurred net losses and negative operating cash flows from inception, including a net loss of \$3.9 million and cash used in operations of \$3.2 million for the year ended December 31, 2019. These conditions, along with other matters as set forth in Note 2, raise substantial doubt about the Company's ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

**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.

/s/ Gumbiner Savett Inc.

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

Santa Monica, California

March 30, 2020

IDEAL POWER INC.

Balance Sheets

	December 31,	
	2019	2018
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 3,057,682	\$ 3,258,077
Prepayments and other current assets	248,148	333,877
Current assets of discontinued operations held for sale	-	1,096,323
Total current assets	<u>3,305,830</u>	<u>4,688,277</u>
Property and equipment, net	47,302	63,214
Intangible assets, net	1,634,378	1,396,409
Right of use asset	260,310	-
Other assets	17,920	17,920
Total assets	<u>\$ 5,265,740</u>	<u>\$ 6,165,820</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable	\$ 182,956	\$ 94,203
Accrued expenses	319,135	167,755
Current portion of lease liability	183,119	-
Current liabilities of discontinued operations held for sale	-	877,755
Total current liabilities	<u>685,210</u>	<u>1,139,713</u>
Long-term lease liability	82,055	-
Other long-term liabilities	<u>609,242</u>	<u>428,163</u>
Total liabilities	<u>1,376,507</u>	<u>1,567,876</u>
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.001 par value; 10,000,000 shares authorized; 0 shares issued and outstanding at December 31, 2019; 1,518,430 shares issued and outstanding at December 31, 2018	-	1,518
Common stock, \$0.001 par value; 50,000,000 shares authorized; 2,101,272 shares issued and 2,099,951 shares outstanding at December 31, 2019; 1,404,479 shares issued and 1,403,158 shares outstanding at December 31, 2018	2,101	1,404
Additional paid-in capital	71,242,256	68,022,484
Treasury stock, at cost; 1,321 shares at December 31, 2019 and 2018, respectively	(13,210)	(13,210)
Accumulated deficit	<u>(67,341,914)</u>	<u>(63,414,252)</u>
Total stockholders' equity	<u>3,889,233</u>	<u>4,597,944</u>
Total liabilities and stockholders' equity	<u>\$ 5,265,740</u>	<u>\$ 6,165,820</u>

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

IDEAL POWER INC.

Statements of Operations

	For the Year Ended	
	December 31,	
	2019	2018
Product revenue	\$ -	\$ -
Cost of product revenue	-	-
Gross profit	-	-
Operating expenses:		
Research and development	1,050,151	871,742
General and administrative	2,065,112	3,439,882
Sales and marketing	-	-
Total operating expenses	3,115,263	4,311,624
Loss from continuing operations before interest	(3,115,263)	(4,311,624)
Interest income (expense), net	(4,267)	40,021
Loss from continuing operations	(3,119,530)	(4,271,603)
Loss from discontinued operations	(799,025)	(3,633,386)
Loss on sale of discontinued operations	(9,107)	-
Net loss	\$ (3,927,662)	\$ (7,904,989)
Loss from continuing operations per share – basic and fully diluted	\$ (1.89)	\$ (3.05)
Loss from discontinued operations per share – basic and fully diluted	(0.49)	(2.59)
Net loss per share – basic and fully diluted	\$ (2.38)	\$ (5.64)
Weighted average number of shares outstanding – basic and fully diluted	1,653,996	1,401,462

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

IDEAL POWER INC.

Statement of Stockholders' Equity  
For the Years Ended December 31, 2019 and 2018

	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, 2017	1,401,566	\$ 1,402	1,518,430	\$ 1,518	\$ 67,093,955	236	\$ (7,489)	\$ (55,509,263)	\$ 11,580,123
Vesting of performance stock	600	—	—	—	—	178	(2,188)	—	(2,188)
Vesting of restricted stock units	2,313	2	—	—	(2)	598	(3,105)	—	(3,105)
Common stock tendered to pay taxes on restricted stock vesting	—	—	—	—	—	59	(428)	—	(428)
Forfeiture of unvested restricted stock	—	—	—	—	—	250	—	—	—
Stock-based compensation	—	—	—	—	928,531	—	—	—	928,531
Net loss for the year ended December 31, 2018	—	—	—	—	—	—	—	(7,904,989)	(7,904,989)
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, 2019	—	—	—	—	—	—	—	(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

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

**IDEAL POWER INC.**

**Statements of Cash Flows**

	<b>For the Year Ended December 31,</b>	
	<b>2019</b>	<b>2018</b>
<b>Cash flows from operating activities:</b>		
Loss from continuing operations	\$ (3,119,530)	\$ (4,271,603)
<b>Adjustments to reconcile net loss to net cash used in operating activities:</b>		
Depreciation and amortization	110,463	137,509
Write-off of capitalized patents	14,707	56,504
Stock-based compensation	184,339	730,802
<b>Decrease (increase) in operating assets:</b>		
Prepaid expenses and other assets	85,729	(58,349)
<b>Increase (decrease) in operating liabilities:</b>		
Accounts payable	88,753	(118,621)
Accrued expenses	104,956	(308,501)
Net cash used in operating activities	<u>(2,530,583)</u>	<u>(3,832,259)</u>
Net cash used in operating activities – discontinued operations	<u>(688,074)</u>	<u>(2,713,957)</u>
<b>Cash flows from investing activities:</b>		
Purchase of property and equipment	(4,253)	(1,088)
Acquisition of intangible assets	(99,845)	(133,061)
Net cash used in investing activities	<u>(104,098)</u>	<u>(134,149)</u>
Net cash provided by (used in) investing activities – discontinued operations	<u>23,587</u>	<u>(78,084)</u>
<b>Cash flows from financing activities:</b>		
Net proceeds from issuance of common stock and pre-funded warrants	3,098,773	—
Payment of taxes related to restricted stock vesting	—	(5,721)
Net cash provided by (used in) financing activities	<u>3,098,773</u>	<u>(5,721)</u>
Net increase (decrease) in cash and cash equivalents – continuing operations	464,092	(3,972,129)
Net decrease in cash and cash equivalents – discontinued operations	(664,487)	(2,792,041)
Cash and cash equivalents at beginning of year	<u>3,258,077</u>	<u>10,022,247</u>
Cash and cash equivalents at end of year	<u>\$ 3,057,682</u>	<u>\$ 3,258,077</u>

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

## 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.

On April 16, 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.

On January 2, 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. On September 19, 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. Prior to the sale of our PPSA™ business and technology on September 19, 2019, the Company classified this division as held for sale. 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.

##### Reverse Stock Split

On August 15, 2019, the Company effected a reverse stock split of the outstanding shares of its common stock by a ratio of one-for-ten, and its common stock began trading on the Nasdaq Capital Market on a split-adjusted basis on August 20, 2019. The par value of the Company’s common stock remained unchanged at \$0.001 per share after the reverse stock split. All share amounts, per share data, share prices, exercise prices and conversion rates set forth in these notes and the accompanying financial statements have, where applicable, been adjusted retroactively to reflect the reverse stock split. See Note 8.

##### Liquidity and Going Concern

The Company has incurred net losses and negative operating cash flows since inception, including a net loss of \$3.9 million and cash used in operating activities of \$3.2 million for the year ended December 31, 2019. At December 31, 2019, the Company had net working capital of \$2.6 million and the Company’s principal source of liquidity consisted of \$3.1 million of cash and cash equivalents.

In order to meet the Company's operating requirements through at least the next twelve months from the date of issuance of these financial statements, it will need to raise additional capital from third parties. There can be no assurance that the Company will be successful in obtaining third-party financing. Additionally, the outbreak of COVID-19 has caused significant disruptions to the global financial markets which could impact the Company's ability to raise additional capital. If external financing sources are not available or are inadequate to fund operations, or the technology under development is not capable of generating sustainable revenues in the future, the Company will be required to reduce operating costs, which could jeopardize future strategic initiatives and business plans. Accordingly, these factors, among others raise 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 raise additional capital and to develop profitable operations through implementation of its current business initiatives, however, there can be no assurances that the Company will be able to do so. The accompanying financial statements do not include any adjustments that might be necessary if the Company is unable to continue as a going concern.

#### 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.

#### 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.

#### Assets and Liabilities of Discontinued Operations Held for Sale

Assets and liabilities are classified as held for sale when all of the following criteria for a plan of sale have been met: (1) management, having the authority to approve the action, commits to a plan to sell the assets; (2) the assets are available for immediate sale, in their present condition, subject only to terms that are usual and customary for sales of such assets; (3) an active program to locate a buyer and other actions required to complete the plan to sell the assets have been initiated; (4) the sale of the assets is probable and is expected to be completed within one year; (5) the assets are being actively marketed for a price that is reasonable in relation to their current fair value; and (6) actions required to complete the plan indicate that it is unlikely that significant changes to the plan will be made or the plan will be withdrawn. When all of these criteria have been met, the assets (and liabilities) are classified as held for sale in the balance sheet. Assets classified as held for sale are reported at the lower of their carrying value or fair value less costs to sell. Depreciation of assets ceases upon designation as held for sale. See Note 3.

#### 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 \$14,707 and \$56,504 during the years ended December 31, 2019 and 2018, 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

Revenue from product sales is recognized in accordance with Accounting Standards Codification, or ASC, Topic 606, "Revenue from Contracts with Customers." Revenue is recognized in an amount that reflects the expected consideration to be received in exchange for the transfer of the promised goods or services to customers. The Company generally sold its products FOB shipping, where the risk of loss and title passed to the customer at the shipping point, and recognized revenue when products were shipped. All revenue is included within loss from discontinued operations for the years ended December 31, 2019 and 2018.

## 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, 2019 and 2018, 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.

## Net Loss Per Share

The Company applies Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("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 has included 868,443 pre-funded warrants with an exercise price of \$0.001 in its computation of earnings per share and excluded these pre-funded warrants from potentially dilutive shares outstanding. See Note 8. At December 31, 2019 and 2018, potentially dilutive shares outstanding amounted to 2,633,043, exclusive of the 868,443 pre-funded warrants, and 879,544, respectively.

#### 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.

#### Presentation of Sales Taxes

Certain states impose a sales tax on the Company's sales to nonexempt customers. The Company collects that sales tax from customers and remits the entire amount to the states. The Company's accounting policy is to exclude the tax collected and remitted to the states from revenues and cost of revenues.

#### 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.

#### Recently Adopted Standard

In February 2016, the FASB issued Accounting Standards Update ("ASU") 2016-02, Leases (Topic 842), to increase transparency and comparability among organizations by requiring the recognition of lease assets and lease liabilities on the balance sheet. Most prominent among the amendments is the recognition of assets and liabilities by lessees for those leases classified as operating leases under previous U.S. GAAP. Under the new standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The Company adopted this standard effective January 1, 2019. Upon adoption, the Company recognized its lease commitment as a lease liability and right-of-use asset. For more details regarding the lease commitment, see Note 12.

In June 2018, the FASB issued ASU 2018-07, Improvements to Nonemployee Share-Based Payment Accounting, which simplifies the accounting for share-based payments granted to nonemployees for goods and services. The ASU aligns most of the guidance on share-based payments granted to nonemployees to the requirements for share-based payments granted to employees. The Company adopted this standard effective January 1, 2019. The adoption of this standard did not have a material effect on the Company's financial statements upon adoption or for the year ended December 31, 2019.

#### 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 — Sale of Power Conversion Systems Division**

On January 2, 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. On January 4, 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.

On September 19, 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 on December 11, 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 is not currently a market for such shares and the Company does 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.

As a result of the sale, the financial statements for the year ended December 31, 2019 do not include assets held for sale.

The following is a reconciliation of the carrying amounts of major classes of assets and liabilities of the discontinued operations to assets and liabilities held for sale:

	<b>December 31, 2018</b>
Accounts receivable, net	\$ 270,768
Inventories, net	131,342
Prepayments and other current assets	22,322
Property and equipment, net	329,738
Intangible assets, net	342,153
Current assets held for sale (1)	<u>\$ 1,096,323</u>
Accounts payable	\$ 356,113
Accrued expenses	521,642
Current liabilities held for sale	<u>\$ 877,755</u>

- (1) The assets of the discontinued operations classified as held for sale are classified as current on the December 31, 2018 balance sheet as it was deemed probable that the sale would occur and proceeds would be collected within one year.

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

	<b>December 31,</b>	
	<b>2019</b>	<b>2018</b>
Product revenue	\$ 115,000	\$ 1,624,773
Cost of product revenue	141,647	1,968,648
Research and development	228,641	2,095,138
General and administrative	79,306	59,873
Sales and marketing	59,431	774,500
Impairment (1)	405,000	360,000
Loss on discontinued operations	<u>\$ (799,025)</u>	<u>\$ (3,633,386)</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:

	December 31,	
	2019	2018
Prepaid insurance	\$ 169,832	\$ 220,969
Prepaid software	39,475	43,409
Other	38,841	69,499
	<u>\$ 248,148</u>	<u>\$ 333,877</u>

**Note 5 — Property and Equipment**

Property and equipment, net consisted of the following:

	December 31,	
	2019	2018
Machinery and equipment	\$ 89,559	\$ 64,258
Building leasehold improvements	25,090	187,128
Furniture, fixtures, software and IT equipment	114,880	135,285
	<u>229,529</u>	<u>386,671</u>
Accumulated depreciation and amortization	(182,227)	(323,457)
	<u>\$ 47,302</u>	<u>\$ 63,214</u>

**Note 6 — Intangible Assets**

Intangible assets, net consisted of the following:

	December 31,	
	2019	2018
Patents	\$ 909,142	\$ 824,004
Other intangible assets	964,542	732,175
	<u>1,873,684</u>	<u>1,556,179</u>
Accumulated amortization	(239,306)	(159,770)
	<u>\$ 1,634,378</u>	<u>\$ 1,396,409</u>

At December 31, 2019 and 2018, the Company had capitalized approximately \$335,224 and \$354,427, respectively, for costs related to patents that have not been awarded. During the years ended December 31, 2019 and 2018, the Company wrote-off \$14,707 and \$56,504, respectively, in previously capitalized patent costs.

Amortization expense amounted to \$79,536 and \$64,981 for the years ended December 31, 2019 and 2018, respectively. Amortization expense for the succeeding five years and thereafter is \$87,813 (2020-2024) and \$860,088 (thereafter).

**Note 7 — Accrued Expenses**

Accrued expenses consisted of the following:

	December 31,	
	2019	2018
Accrued professional fees	\$ 44,500	\$ 47,000
Accrued compensation	42,659	43,822
Accrued licensing fees	60,000	40,000
Accrued board of director fees	30,000	30,000
Accrued taxes	54,160	4,987
Accrued semiconductor fabrication costs	55,000	—
Accrued certification costs	30,978	—
Other	1,838	1,946
	<u>\$ 319,135</u>	<u>\$ 167,755</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

On November 7, 2019, the Company entered into a securities purchase agreement with certain institutional and accredited investors, including Dr. Lon E. Bell, 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 aggregate gross proceeds of \$3.5 million and net proceeds of \$3.1 million (the "Offering"). The Offering closed on November 13, 2019. In the Offering, 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 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. 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 are immediately exercisable and will expire five years from the issuance date. As compensation to the placement agent in the Offering, 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 Offering. Pursuant to a registration rights agreement, the Company filed a registration statement with the SEC (which was declared effective on December 20, 2019) to register the resale of the shares of common stock and the shares of common stock issuable upon exercise of the warrants issued in the Offering.

### Reverse Stock Split

On August 15, 2019, after receipt of stockholder and Board approval, the Company filed a Certificate of Amendment to the Certificate of Incorporation of Ideal Power Inc. to effect a one-for-ten (1:10) reverse stock split of all issued and outstanding shares of the Company's common stock. The Company's common stock began trading on the Nasdaq Capital Market on a split-adjusted basis when the market opened on August 20, 2019. The par value of the Company's common stock remained unchanged at \$0.001 per share after the reverse stock split.

The reverse stock split reduced the number of shares of the Company's common stock outstanding from 14,722,840 to 1,474,001, inclusive of full shares received for fractional interests. The number of shares of the Company's common stock issuable upon conversion of the outstanding shares of the Company's preferred stock was reduced from 810,000 shares to 81,000 shares. The number of authorized shares of the Company's common stock was not changed by the reverse stock split.

The reverse stock split proportionately affected the number of shares of the Company's common stock available for issuance under the Company's equity incentive plans. The number of shares of the Company's common stock subject to all options, warrants and stock awards of the Company outstanding immediately prior to the reverse stock split were proportionately adjusted in accordance with their terms.

### Preferred Stock

In February 2017, the Company's Board of Directors 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.

On February 21, 2019, a shareholder converted 708,430 shares of preferred stock to 70,843 shares of common stock. On December 12, 2019, a shareholder converted 810,000 shares of preferred stock to 81,000 shares of common stock. At December 31, 2019, there was no preferred stock outstanding.

### Nasdaq Compliance

On March 7, 2019 and following an initial notice of non-compliance from Nasdaq on September 7, 2018, the Company received a notice letter from Nasdaq indicating that it had not regained compliance with the minimum bid price requirement of \$1 per share, as set forth in Nasdaq Listing Rule 5550(a)(2). However, Nasdaq determined that the Company was eligible for an additional 180-day period, or until September 3, 2019, to regain compliance based on the fact that it met the continued listing requirement for market value of publicly held shares and all other initial listing standards for the Nasdaq Capital Market, with the exception of the minimum bid price requirement, and it had provided written notice to Nasdaq of its intent to cure the deficiency during this second compliance period, by effecting a reverse stock split, if necessary.

On September 4, 2019, the Company received a notice letter from Nasdaq that the Company had regained compliance with the minimum bid price requirement and the matter was closed.

On August 21, 2019, the Company was notified by the Nasdaq Listing Qualifications Department that the Company was not in compliance with the minimum stockholders' equity requirement under Nasdaq Listing Rule 5550(b)(1) for continued listing on the Nasdaq Capital Market because the Company's stockholders' equity was below the required minimum of \$2.5 million, and, as of the date of the notification, the Company did not meet the alternatives of market value of listed securities or net income from continuing operations. In accordance with Nasdaq Listing Rules, the Company had 45 calendar days, or until October 3, 2019, to submit a plan to regain compliance. The Company submitted a plan of compliance on October 3, 2019 addressing how it intended to regain compliance with Nasdaq Listing Rule 5550(b). On October 31, 2019, Nasdaq notified the Company of approval of the compliance plan, and Nasdaq granted the Company an extension through November 30, 2019 to take action to evidence compliance with Nasdaq Listing Rule 5550(b), which would require, among other things, that the Company demonstrate compliance within its periodic report for the fiscal year ending December 31, 2019.

On November 13, 2019, the Company closed on the Offering and filed a related Form 8-K with the SEC for the Offering. On November 25, 2019, the Company received written confirmation from Nasdaq notifying the Company that it had regained compliance with the minimum stockholder's equity requirement under Nasdaq Listing Rule 5550(b)(1) based on the Company's Form 8-K filed with the SEC on November 13, 2019. In this annual report for the fiscal year ending December 31, 2019 of which these audited financial statements form a part, the Company demonstrated compliance with Nasdaq Listing Rule 5550(b)(1) as the Company reported stockholders' equity of \$3.9 million. As such, at December 31, 2019, the Company was in compliance with the continued listing requirements of the Nasdaq Capital Market.

#### Note 9 — Equity Incentive Plan

On May 17, 2013, the Company adopted the 2013 Equity Incentive Plan (the "Plan") and reserved shares of common stock for issuance under the Plan. The Plan is administered by the Compensation Committee of the Company's Board of Directors.

On April 4, 2019, the Company entered into Award Forfeiture Agreements ("Forfeiture Agreements") with certain of the Company's executives and members of its Board. Pursuant to the Forfeiture Agreements, these individuals voluntarily forfeited their equity award grants with a grant date prior to January 1, 2018. The forfeitures included 49,584 stock options and 11,900 performance stock units ("PSUs") issued under the Plan, and 25,000 stock options not issued under the Plan. In April 2019, the Company accelerated the recognition of \$80,492 of stock compensation expense in connection with the unvested, forfeited awards.

At December 31, 2019, there were 22,663 shares of common stock available for issuance under the Plan.

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.

During the year ended December 31, 2018, the Company granted 12,206 stock options to Board members and 30,000 immediately vested stock options to an executive under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was \$330,713, all of which was recognized during the year ended December 31, 2018.

During the year ended December 31, 2018, the Company granted 11,750 restricted stock units ("RSUs") and 1,200 PSUs to employees. The estimated fair value of these awards, calculated based on the closing stock price on the dates of grant, was \$158,110, of which \$37,880 was forfeited and \$45,467, net of a reversal of \$6,481, was recognized during the year ended December 31, 2018. The RSUs vest in four equal installments over a two-year vesting period. For the year ended December 31, 2018, 6,000 PSUs vested and 6,000 PSUs were canceled as the related performance condition was not met.

A summary of the Company's RSU and PSU activity is as follows:

	RSUs	PSUs
Outstanding at January 1, 2019	6,938	11,900
Forfeited	(6,938)	(11,900)
Outstanding at December 31, 2019	—	—

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,	
	2019	2018
Average risk-free interest rate	2.12%	2.76%
Expected dividend yield	—%	—%
Expected life	5.16 to 6.25 years	3.25 to 5.63 years
Expected volatility	80%	70%

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

	2019			2018		
	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	147,054	\$ 50.79	6.8	123,234	\$ 64.39	6.8
Granted	118,400	\$ 3.14		42,206	\$ 13.08	
Forfeited	(95,474)	\$ 67.64		(18,386)	\$ 55.38	
Outstanding at December 31	169,980	\$ 8.13	9.1	147,054	\$ 50.79	6.8
Exercisable at December 31	74,980	\$ 14.81	8.1	140,163	\$ 51.09	6.8

The following table sets forth additional information about stock options outstanding at December 31, 2019:

Range of Exercise Prices	Options Outstanding	Weighted Average Remaining Life (in years)	Weighted Average Exercise Price	Options Exercisable
\$2.85 – \$4.25	118,400	9.7	\$ 3.14	23,400
\$12.20 – \$15.60	42,206	8.3	\$ 13.08	42,206
\$29.71 – \$79.40	9,374	4.6	\$ 48.98	9,374
	169,980			74,980

Stock options granted under the Plan have ten-year terms and generally vest 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, 2019 and the exercise prices, multiplied by the number of vested in-the-money options) is \$0. This amount changes based on the fair value of the Company's stock.

As of December 31, 2019, there was \$176,266 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 1.5 years.

#### Note 10 — Warrants

During the year ended December 31, 2019 and in connection with the Offering, the Company issued pre-funded warrants to purchase 868,443 shares of common stock that are 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 Offering, 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:

	2019		2018	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at January 1	713,652	\$ 26.19	748,155	\$ 27.87
Granted	2,705,864	\$ 1.59	—	\$ —
Forfeited/Expired	(88,010)	\$ 38.70	(34,503)	\$ 62.50
Outstanding at December 31	3,331,506	\$ 5.88	713,652	\$ 26.19

All warrants were exercisable at December 31, 2019. The weighted average remaining life, excluding the 868,443 pre-funded warrants with no expiration date, is 3.7 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, 2019 and the exercise prices, multiplied by the number of in-the-money warrants) is \$0.

For certain investors in the Offering, including the Company's four largest beneficial owners, the warrants they received in connection with the Offering as well as certain other warrants may 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.

#### Note 11 — Income Taxes

Income taxes are disproportionate to income due to net operating loss carryforwards, which are fully reserved. As of December 31, 2019, the Company has federal net operating loss carryforwards of approximately \$54 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, 2019 and 2018.

The following is a summary of the significant components of the Company's net deferred income tax assets and liabilities as of December 31, 2019 and 2018:

	For the Year Ended December 31,	
	2019	2018
Current deferred income tax assets:		
Inventory – uniform capitalization	\$ —	\$ 23,000
Accrued compensation and other	9,000	63,000
Less: valuation allowance	(9,000)	(86,000)
	\$ —	\$ —
Non-current deferred income tax assets and (liabilities):		
Net operating loss	\$ 11,382,000	\$ 10,435,000
Research and development credit	18,000	18,000
Warranty reserve	—	81,000
Warrants issued for services	45,000	45,000
Depreciation and amortization	76,000	73,000
Exercise of options and warrants	(33,000)	(33,000)
Stock based compensation	775,000	759,000
Intangibles and other	(425,000)	(422,000)
Less: valuation allowance	(11,838,000)	(10,956,000)
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, 2019 and 2018, 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, 2019, and 2018, 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 2015. 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:

	<b>For the Year Ended December 31,</b>	
	<b>2019</b>	<b>2018</b>
Statutory federal income tax rate	(21)%	(21)%
Stock based compensation	1	1
Tax Reform	—	—
Valuation allowance	20	20
	<u>—%</u>	<u>—%</u>

#### **Note 12 — Lease**

##### Lease

The Company leases 14,782 square feet of office and laboratory space located in Austin, Texas. On April 20, 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.

On September 19, 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 July 22, 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, 2019, CE+T Energy made payments of \$89,257 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:

For the Year Ended December 31,	Master Lease	Sublease Income	Net
2020	196,477	(147,357)	49,120
2021	83,149	(62,362)	20,787
Total future undiscounted minimum lease payments	\$ 279,626	\$ (209,719)	\$ 69,907
Less: imputed interest	(14,452)		
Total lease liability	<u>\$ 265,174</u>		

For the year ended December 31, 2019, operating cash outflows for lease payments totaled \$189,086 and the operating lease cost, recognized on a straight-line basis, totaled \$193,950. At December 31, 2019, the remaining lease term was 17 months.

### Note 13 — Commitments and Contingencies

#### License Agreement

In 2015, the Company entered into licensing agreements which expire on February 7, 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, 2019, a total of three patents associated with the agreements were issued. At December 31, 2019 and 2018, the corresponding long-term liability for the estimated present value of future payments under the licensing agreement was \$595,802 and \$428,163, 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

On April 11, 2019, the Company entered into an asset purchase agreement (the "APA") with Pathion Holdings, Inc., a Delaware corporation, and Pathion, Inc., a Delaware corporation, (together, "Pathion") to sell certain assets (the "PPSA Assets") related to the Company's PPSA™ / Power Conversion Systems business ("PPSA Business"). The purchase price consisted of \$500,000 in cash and 150,000 shares of the common stock of Pathion Holdings, Inc. Pursuant to the APA, Pathion would also assume certain liabilities relating to the PPSA Business.

On June 13, 2019, the Company filed a petition in the district court of the 250<sup>th</sup> Judicial District in Travis County (the "Court"), naming Pathion and certain Pathion officers as defendants. The petition asserts breach of the APA and the related sublease agreement for failure by Pathion to pay any cash amounts due thereunder, and fraudulent inducement by Pathion and the individual defendants for misrepresenting Pathion's financial position and its stock value. The petition also requested a declaratory judgment that Pathion has no rights to the PPSA Assets.

On July 15, 2019, Pathion filed a general denial to the Company's petition.

On July 22, 2019, the Company filed a motion for partial summary judgment on its declaratory judgment action and for severance. Pathion responded to the motion for summary judgment on August 6, 2019. That same day, Pathion filed a counterclaim, and requested injunctive relief and a declaratory judgment.

On August 13, 2019, the Court conducted a hearing on the Company's motion for summary judgment. On August 23, 2019, the Court issued an order granting the Company's motion for summary judgment and fees and severing judgment from remaining claims. Under this order, the Court declared and decreed that Pathion has no rights to the PPSA Assets and awarded the Company \$24,800 in legal fees. On October 15, 2019, the Court issued a writ of garnishment against Pathion's bank to enable collection of these legal fees.

On October 14, 2019, the Court granted Pathion's counsel's motion to withdraw. Ten days later, a new lawyer appeared for Pathion, and the next day, October 25, 2019, the Court issued a scheduling order requiring Pathion to produce documents and appear for deposition in December 2019 and set trial to begin on August 31, 2020. On December 12, 2019, after Pathion filed an emergency order to delay depositions, the Court set a new deposition date of January 7, 2020. The deposition occurred on January 7, 2020. On February 20, 2020, Pathion filed a request for the Company to produce documents within 30 days. The Company responded to this request on March 23, 2020.

At this time, the Company, even though it does not expect an unfavorable outcome related to this proceeding, is unable to estimate the possible gain or loss, if any, related to this proceeding.

On April 11, 2018, the Company received \$203,121 pursuant to a Judgment of Garnishment dated March 23, 2018 and related to the non-payment of an overdue accounts receivable balance by a former customer of the Company. The judgment included the past due balance of \$162,000 plus late fees and recovery of legal costs. During the year ended December 31, 2018, the Company reversed the allowance for doubtful accounts of \$162,000, originally recorded in 2017, with a corresponding reduction in loss from discontinued operations, recognized interest income of \$35,064 associated with late fees and a reduction in general and administrative expense of \$6,057 for the partial recovery of legal fees.

In 2017, the Company entered into arbitration with Libra Industries, Inc. (Libra), its prior contract manufacturer, with both parties asserting claims against the other party. At December 31, 2017, the Company recorded a \$100,000 accrual for the arbitration based on an expired settlement offer made by the Company to Libra. On June 21, 2018, the arbitrator issued a Final Award, final and binding award on all issues except as to attorney's fees and costs. In the Final Award, the arbitrator denied Libra's claims and awarded the Company \$163,105 on its claims. On July 15, 2018, the arbitrator issued a Supplemental Final Award on Attorney's Fees and Costs, awarding the Company an additional \$165,346. As a result, during the year ended December 31, 2018, the Company reversed the previously recorded \$100,000 accrual resulting in a reduction to general and administrative expense and recognized the Final Award of \$163,105 as a reduction in loss from discontinued operations and the Supplemental Final Award on Attorney's Fees and Costs of \$165,347 as a reduction in general and administrative expense. The Company received full payment on the total award on August 2, 2018.

The Company may be subject to other 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.

#### **Note 14 — 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, 2019 and 2018.

#### **Note 15 — Subsequent Events**

Subsequent to December 31, 2019, the Company granted 52,791 stock options to Board members and 57,000 stock options to executives, that are subject to cancellation in the event the Company does not obtain shareholder approval of an increase in the shares reserved for issuance under the Plan at the 2020 Annual Shareholder Meeting, and 3,000 stock options to employees under the Plan. The estimated fair value of these stock options, calculated using the Black-Scholes option valuation model, was \$173,184, of which \$169,339 is expected to be recognized during the year ended December 31, 2020.

In March 2020, 616,648 warrants with a weighted-average exercise price of \$24.28 per share expired.

In March 2020, the World Health Organization declared the outbreak of a novel coronavirus ("COVID-19") as a pandemic, which continues to spread throughout the United States. The ultimate extent of the impact of COVID-19 on the financial performance of the Company will depend on future developments, including the duration and spread of COVID-19, and the overall economy, all of which are highly uncertain and cannot be predicted. If the financial markets and/or the overall economy are impacted for an extended period, the Company's operating results may be materially and adversely affected.

**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 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 of directors, 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, 2019.

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, 2019 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 to be filed no later than 120 days after the end of our fiscal year ended December 31, 2019.

**ITEM 11: EXECUTIVE COMPENSATION**

The information required by this item is incorporated by reference from our Definitive Proxy Statement to be filed no later than 120 days after the end of our fiscal year ended December 31, 2019.

**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 to be filed no later than 120 days after the end of our fiscal year ended December 31, 2019.

**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 to be filed no later than 120 days after the end of our fiscal year ended December 31, 2019.

**ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES**

The information required by this item is incorporated by reference from our Definitive Proxy Statement to be filed no later than 120 days after the end of our fiscal year ended December 31, 2019.

**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="#">25</a>
<a href="#">Balance Sheets as of December 31, 2019 and 2018</a>	<a href="#">26</a>
<a href="#">Statements of Operations for the years ended December 31, 2019 and 2018</a>	<a href="#">27</a>
<a href="#">Statement of Stockholders' Equity for the years ended December 31, 2019 and 2018</a>	<a href="#">28</a>
<a href="#">Statements of Cash Flows for the years ended December 31, 2019 and 2018</a>	<a href="#">29</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:

## EXHIBIT INDEX

Exhibit No.	Description of Document
<a href="#">2.1</a>	<a href="#">Asset Purchase Agreement between Ideal Power Inc., Pathion Holdings, Inc. and Pathion, Inc. dated April 11, 2019 (17)†</a>
<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. (12)</a>
<a href="#">3.3</a>	<a href="#">Certificate of Designation of Preferences, Rights and Limitations of Series A Convertible Preferred Stock (6)</a>
<a href="#">3.4</a>	<a href="#">Bylaws of Ideal Power, Inc. (2)</a>
<a href="#">4.1</a>	<a href="#">Specimen Common Stock Certificate (16)</a>
<a href="#">4.2</a>	<a href="#">Form of Series A Common Stock Purchase Warrant (14)</a>
<a href="#">4.3</a>	<a href="#">Form of Series B Pre-Funded Common Stock Warrant (15)</a>
<a href="#">4.4</a>	<a href="#">Form of Warrant issued by the registrant to investors in the offering completed on July 29, 2013 (19)</a>
<a href="#">4.5</a>	<a href="#">Description of Registrant's Securities*</a>
<a href="#">10.1</a>	<a href="#">Ideal Power Inc. 2013 Amended and Restated Equity Incentive Plan (5)</a>
<a href="#">10.2</a>	<a href="#">Revised and Restated Employment Agreement between the Company and R. Daniel Brdar dated April 16, 2018 (8) +</a>
<a href="#">10.3</a>	<a href="#">Lease Agreement between the Company and Agellan Commercial REIT U.S. L.P. dated March 24, 2014 (3)</a>
<a href="#">10.4</a>	<a href="#">Amendment No. 1 to Lease, effective April 17, 2018, by and between Ideal Power Inc. and Agellan Commercial REIT US L.P. (10)</a>
<a href="#">10.5</a>	<a href="#">Employment Agreement between the registrant and Timothy W. Burns dated September 16, 2014 (4) +</a>
<a href="#">10.6</a>	<a href="#">Employment Agreement between the Company and Lon Bell dated April 27, 2018 (9) +</a>
<a href="#">10.7</a>	<a href="#">Asset Purchase Agreement, dated September 19, 2019, by and between Ideal Power Inc. and CE+T Entergy Solutions, Inc. (12)</a>
<a href="#">10.8</a>	<a href="#">Sublease Agreement, dated September 19, 2019, by and between Ideal Power Inc. and CE+T Entergy Solutions, Inc. (13)††</a>
<a href="#">10.9</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 (18)</a>
<a href="#">21.1</a>	<a href="#">Subsidiaries of Ideal Power 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	
† Certain schedules have been omitted pursuant to Item 601(a)(5) of Regulation S-K under the Securities Exchange Act of 1934, as amended.	
†† Certain schedules have been omitted pursuant to Item 601(b)(2) of Regulation S-K under the Securities Exchange Act of 1934, as amended.	
(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 3.2 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.
(3)	Incorporated by reference to Exhibit 10.49 to the registrant's Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 28, 2014.

- (4) 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.
- (5) Incorporated by reference to Exhibit 10.1 the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on November 13, 2015.
- (6) 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.
- (7) 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 February 27, 2017.
- (8) Incorporated by reference to Exhibit 10.3 to the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018.
- (9) Incorporated by reference to Exhibit 10.1 to the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2018.
- (10) 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 26, 2018.
- (11) 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.
- (12) 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 September 24, 2019.
- (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 September 24, 2019.
- (14) 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.
- (15) 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.
- (16) 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.
- (17) Incorporated by reference to Exhibit 2.1 to the registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on May 15, 2019.
- (18) 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.
- (19) Incorporated by reference to Exhibit 10.34 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.

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

None.

**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 30th day of March 2020.

IDEAL POWER INC.

By: /s/ Lon Bell  
Lon Bell,  
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 30, 2020 /s/ Lon Bell  
Lon Bell,  
Chief Executive Officer  
(principal executive officer),  
President and Chairman of the Board

Dated: March 30, 2020 /s/ Timothy Burns  
Timothy Burns,  
Chief Financial Officer  
(principal financial and accounting officer),  
Secretary and Treasurer

Dated: March 30, 2020 /s/ R. Daniel Brdar  
R. Daniel Brdar, BTRAN Chief Commercial Officer and Director

Dated: March 30, 2020 /s/ David Eisenhaure  
David B. Eisenhaure, Director

Dated: March 30, 2020 /s/ Michael Turmelle  
Michael C. Turmelle, Director

Dated: March 30, 2020 /s/ Ted Lesster  
Ted Lesster, Director

**DESCRIPTION OF SECURITIES REGISTERED PURSUANT TO SECTION 12 OF THE SECURITIES EXCHANGE ACT OF 1934**

*Ideal Power (the “Company,” “we,” “our,” or “us”) has one class of securities registered under Section 12 of the Securities Exchange Act of 1934, as amended: our common stock, par value \$0.001 per share (our “common stock”).*

**DESCRIPTION OF CAPITAL STOCK**

*The following description of our capital stock is intended as a summary only. This description is based upon, and is qualified by reference to, our certificate of incorporation, as amended to date (our “certificate of incorporation”), our certificate of designation of preferences, rights and limitations of Series A convertible preferred stock (our “certificate of designation”), our bylaws, as amended to date (our “bylaws”), and applicable provisions of the General Corporation Law of the State of Delaware (the “DGCL”). This summary is not complete. You should read our certificate of incorporation (including the certificate of amendment thereto), our certificate of designation and our bylaws, which are incorporated by reference as exhibits to this Annual Report on Form 10-K, for the provisions that are important to you.*

**Authorized Capital Stock**

Our certificate of incorporation provides that we may issue up to 50,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share. 3,000,000 shares of our authorized preferred stock have been designated as Series A Convertible Preferred Stock, par value \$0.001 per share (the “Series A Preferred Stock”).

**Common Stock**

Each holder of our common stock is entitled to one vote for each such share outstanding in the holder’s name. No holder of common stock is entitled to cumulate votes in voting for directors, which means that the holders of a majority of the outstanding shares of our common stock will be entitled to elect all of the directors standing for election.

Holders of our common stock are entitled to such dividends as may be declared by our board of directors (our “Board”) out of funds legally available for such purpose, subject to any preferential dividend rights of any then outstanding preferred stock.

In the event of our liquidation, dissolution or winding up, the holders of our common stock are entitled to receive pro rata our assets, which are legally available for distribution, after payments of all debts and other liabilities and subject to the prior rights of any holders of preferred stock then outstanding.

The shares of common stock are neither redeemable nor convertible. Holders of common stock have no preemptive or subscription rights to purchase any of our securities. The shares of common stock are not subject to further calls or assessment by us. There are no redemption or sinking fund provisions applicable to the common stock. All of the outstanding shares of our common stock are fully paid and non-assessable.

**Preferred Stock****General**

Our certificate of incorporation provides that our Board has the authority, without any further action by our stockholders, to designate and issue up to 10,000,000 shares of preferred stock in one or more classes or series and to fix the powers, rights, preferences, and privileges of each class or series of preferred stock, including dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences and the number of shares constituting any class or series, which may be greater than the rights of the holders of the common stock.

The purpose of authorizing our Board to issue preferred stock and determine its rights and preferences is to eliminate delays associated with a shareholder vote on specific issuances. The issuance of preferred stock, while providing flexibility in connection with possible acquisitions, future financings and other corporate purposes, could have the effect of making it more difficult for a third party to acquire, or could discourage a third party from seeking to acquire, a majority of our outstanding voting stock. Additionally, the issuance of preferred stock may adversely affect the holders of our common stock by restricting dividends on our common stock, diluting the voting power of our common stock or subordinating the liquidation rights of our common stock. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock.

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### ***Series A Preferred Stock***

On February 23, 2017, we filed our certificate of designation with the Secretary of State of the State of Delaware creating our Series A Preferred Stock and establishing the designations, preferences, and other rights of the Series A Preferred Stock, which became effective upon filing.

On February 24, 2017, we entered into a purchase agreement with the institutional and other accredited investors identified therein, relating to a private placement of our common stock and warrants to purchase shares of common stock (the "2017 Private Placement"). We also agreed to sell to investors whose purchase of common stock would have resulted in such investor, together with its affiliates and certain related parties, beneficially owning more than 9.99% of our outstanding common stock immediately following the consummation of the offering, an aggregate of 708,430 shares of our Series A Preferred Stock. As a result of the reverse stock split of the outstanding shares of our common stock by a ratio of one-for-ten, which was effected on August 15, 2019 (the "Reverse Stock Split"), each share of Series A Preferred Stock was convertible, subject to certain beneficial ownership limitations described below, into shares of common stock on a ten-for-one basis (the "Conversion Shares"). The 708,430 shares of Series A Preferred Stock were converted into 70,843 shares of common stock in February 2019.

In addition, on February 24, 2017, we entered into an exchange agreement (the "Exchange Agreement") with certain affiliates of AWM Investment Company (the "Exchanging Stockholders"), pursuant to which we effected the exchange of 810,000 shares of common stock held by the Exchanging Stockholders for 810,000 shares of Series A Preferred Stock. Pursuant to the terms of the Series A Preferred Stock and as a result of the Reverse Stock Split, the Exchanging Stockholders had the right to convert the Series A Preferred Stock into shares of common stock on a ten-for-one basis, subject to adjustment in the event of stock splits, recapitalizations and other similar events; provided, however, that the Series A Preferred Stock could not be converted by the Exchanging Stockholders if, after giving effect thereto, the Exchanging Stockholders would beneficially own more than 9.99% of our common stock (the "Conversion Limitation"). The Conversion Limitation could have been increased or decreased by the Exchanging Stockholders, but in no event would it exceed 9.99%, in each case calculated as provided in the certificate of designation establishing the Series A Preferred Stock.

Our Series A Preferred Stock ranks senior to our common stock with respect to dividend rights and rights on liquidation, winding-up and dissolution. Our Series A Preferred Stock has a stated value of \$2.535. Holders of Series A Preferred Stock are entitled to receive dividends declared or paid on our common stock. The holders of the Series A Preferred Stock do not have the right to vote on any matter except to the extent required by Delaware law.

The 810,000 shares of Series A Preferred Stock were converted into 81,000 shares of common stock in December 2019.

### **Anti-Takeover Effects of Certain Provisions of Delaware Law and Our Charter Documents**

Provisions of Delaware law and our charter documents could have the effect of delaying or preventing a third party from acquiring us, even if the acquisition would benefit our stockholders. These provisions may delay, defer or prevent a tender offer or takeover attempt of our Company that a stockholder might consider in his, her or its best interest, including those attempts that might result in a premium over the market price for the shares held by our stockholders. These provisions are intended to enhance the likelihood of continuity and stability in the composition of our Board and in the policies formulated by the Board and to discourage types of transactions that may involve our actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited proposal for a takeover that does not contemplate the acquisition of all of our outstanding shares, or an unsolicited proposal for the restructuring or sale of all or part of us.

***Effect of Delaware Anti-Takeover Statute.*** We are subject to Section 203 of the DGCL, an anti-takeover law. In general, Section 203 prohibits a Delaware corporation from engaging in any business combination (as defined below) with any interested stockholder (as defined below) for a period of three years following the date that the stockholder became an interested stockholder, unless:

- prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;
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- upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares of voting stock outstanding (but not the voting stock owned by the interested stockholder) those shares owned by persons who are directors and officers and by excluding employee stock plans in which employee participants do not have the right to determine whether shares held subject to the plan will be tendered in a tender or exchange offer; or
- on or subsequent to that date, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66 2/3% of the outstanding voting stock that is not owned by the interested stockholder.

Section 203 defines “business combination” to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, lease, exchange, mortgage, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder;
- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to limited exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an “interested stockholder” as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation, or who beneficially owns 15% or more of the outstanding voting stock of the corporation at any time within a three-year period immediately prior to the date of determining whether such person is an interested stockholder, and any entity or person affiliated with or controlling or controlled by any of these entities or persons.

#### ***Our Charter Documents.***

*Effects of authorized but unissued common stock and blank check preferred stock.* One of the effects of the existence of authorized but unissued common stock and undesignated preferred stock may be to enable our Board to make more difficult or to discourage an attempt to obtain control of our Company by means of a merger, tender offer, proxy contest or otherwise, and thereby to protect the continuity of management. If, in the due exercise of its fiduciary obligations, the Board were to determine that a takeover proposal was not in our best interest, such shares could be issued by the Board without stockholder approval in one or more transactions that might prevent or render more difficult or costly the completion of the takeover transaction by diluting the voting or other rights of the proposed acquirer or insurgent stockholder group, by putting a substantial voting block in institutional or other hands that might undertake to support the position of the incumbent Board, by effecting an acquisition that might complicate or preclude the takeover, or otherwise.

In addition, our certificate of incorporation grants our Board broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of additional shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance also may adversely affect the rights and powers, including voting rights, of those holders and may have the effect of delaying, deterring or preventing a change in control of our Company.

*Cumulative Voting.* Our certificate of incorporation does not provide for cumulative voting in the election of directors, which would allow holders of less than a majority of the stock to elect some directors.

*No Stockholder Action by Written Consent.* Our certificate of incorporation expressly prohibits stockholders from acting by written consent. This means that stockholders may only act at annual or special meetings.

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*Vacancies.* Our certificate of incorporation provides that all vacancies may be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum.

*Special Meeting of Stockholders.* A special meeting of stockholders may only be called by the chairman of the Board, the chief executive officer, or the Board at any time and for any purpose or purposes as shall be stated in the notice of the meeting, and shall be called by the secretary upon the written request of the holders of record of at least 25% of the outstanding shares of common stock. This provision could prevent stockholders from calling a special meeting because, unless certain significant stockholders were to join with them, they might not obtain the percentage necessary to request the meeting. Therefore, stockholders holding less than 25% of the issued and outstanding common stock, without the assistance of management, may be unable to propose a vote on any transaction that would delay, defer or prevent a change of control, even if the transaction were in the best interests of our stockholders.

*Requirements for Advance Notification of Stockholder Nominations and Proposals.* Our certificate of incorporation and bylaws have advance notice procedures with respect to stockholder proposals and nominations of candidates for election as directors, other than nominations made by or at the direction of our Board or a committee of our Board. The business to be conducted at a meeting will be limited to business properly brought before the meeting, in accordance with our certificate of incorporation and bylaws. Failure to follow the procedures set forth in our certificate of incorporation and bylaws will result in the chairman of the meeting disregarding the nomination or declaring that the proposed business will not be transacted.

**Transfer Agent and Registrar**

Our transfer agent and registrar for our common stock is Corporate Stock Transfer, Inc.

**Listing**

Our common stock is listed on The Nasdaq Capital Market under the symbol "IPWR."

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**Subsidiaries of Ideal Power Inc.**

None

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## CERTIFICATION

I, Lon Bell, 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 30, 2020

/s/ Lon Bell

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Lon Bell  
Chief Executive Officer (Principal Executive Officer)

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## CERTIFICATION

I, Timothy 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 30, 2020

/s/ Timothy Burns

Timothy Burns

Chief Financial Officer

(Principal Financial and Accounting Officer)

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**CERTIFICATION**

In connection with the periodic report of Ideal Power Inc. (the "Company") on Form 10-K for the year ending December 31, 2019 as filed with the Securities and Exchange Commission (the "Report"), we, Lon Bell, Chief Executive Officer (Principal Executive Officer) and Timothy 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 30, 2020

/s/ Lon Bell

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Lon Bell  
Chief Executive Officer  
(Principal Executive Officer)

/s/ Timothy Burns

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Timothy Burns  
Chief Financial Officer  
(Principal Financial and Accounting Officer)

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