Energous Corp
Form 10-K
February 28, 2019

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, 2018

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: 001-36379

ENERGOUS CORPORATION

(Exact Name of Registrant as Specified in Its Charter)

Delaware	46-1318953
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)
3590 North First Street, Suite 210, San Jose, CA	95134
(Address of Principal Executive Offices)	(Zip Code)

(408) 963-0200

(Registrant’s telephone number, including area code)

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

Securities registered pursuant to Section 12 (g) of the Act: Common Stock, par value $0.001 per share

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 if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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. See definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer
Non-accelerated filer	Smaller reporting company
	Emerging growth company

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold, or the average bid and asked price of such common equity, as of the last business day of the registrant's most recently completed second fiscal quarter was $364,922,818. Solely for the purposes of this calculation, shares held by directors, executive officers and 10% owners of the registrant have been excluded. Such exclusion should not be deemed a determination or an admission by the registrant that such individuals are, in fact, affiliates of the registrant.

As of February 22, 2019, there were 26,683,458 shares of the registrant's common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

The registrant intends to file a definitive proxy statement pursuant to Regulation 14A within 120 days after the end of the fiscal year ended December 31, 2018. Portions of such proxy statement are incorporated by reference into Part III of this Annual Report on Form 10-K.

ENERGOUS CORPORATION

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PART I

As used in this Annual Report on Form 10-K, unless the context otherwise requires the terms “we,” “us,” “our,” and “Energous” refer to Energous Corporation, a Delaware corporation.

FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K (“Report”) contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the “safe harbor” created by those sections. Forward-looking statements, which are based on certain assumptions and describe our future plans, strategies and expectations, can generally be identified by the use of forward-looking terms such as “believe,” “expect,” “may,” “will,” “should,” “could,” “seek,” “intend,” “plan,” “estimate or other comparable terms. All statements other than statements of historical facts included in this Report regarding our strategies, prospects, financial condition, operations, costs, plans and objectives are forward-looking statements. Examples of forward-looking statements include, among others, statements we make regarding proposed business strategy; market opportunities; regulatory approval; expectations for current and potential business relationships; expectations for revenues, cash flows and financial performance; and anticipated results of research and development efforts. These forward-looking statements are based on our current information and beliefs. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are unpredictable and many of which are outside of our control. Actual results may differ materially from what is anticipated, so you should not rely on these forward-looking statements. Important factors that could cause actual outcomes to differ materially from those indicated in the forward-looking statements include, among others, the following: our ability to develop a commercially feasible technology; receipt of necessary regulatory approval; our ability to find and maintain development partners, market acceptance of our technology; competition in our industry; protection of our intellectual property; and other risks and uncertainties described in the Risk Factors and in Management’s Discussion and Analysis of Financial Condition and Results of Operations sections of this Report and our subsequently filed Quarterly Reports on Form 10-Q. We undertake no obligation to update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.

Item 1. Business

Overview

We have developed our WattUp® wireless power technology, consisting of proprietary semiconductor chipsets, software controls, hardware designs and antennas, that enables radio frequency (“RF”) based charging for electronic devices. The WattUp technology has a broad spectrum of capabilities, including contact-based wireless charging and wireless charging at various distances, and in some use cases mobility charging. In November 2016 we entered into a Strategic Alliance Agreement with Dialog Semiconductor plc (“Dialog”), an industry leader in Bluetooth low energy semiconductors and power management semiconductors. In conjunction with the Strategic Alliance Agreement, Dialog manufactures and is the exclusive distributor of integrated circuit (“IC”) products of our design and provides sales and logistic support on a global basis. We believe our proprietary WattUp technology can be utilized in consumer electronics such as wearables, hearing aids, earbuds, Bluetooth headsets, Internet of Things (“IoT”) devices, smartphones, tablets, smartwatches, fitness bands, keyboards, mice, remote controls, rechargeable lights, batteries, medical devices, and other devices with charging requirements that would otherwise require battery replacement or an external power connection.

We believe our technology is innovative in its approach, in that we are developing solutions that charge electronic devices by surrounding them with a focused RF energy pocket. We are engineering solutions that we expect to enable

the wire-free transmission of energy, initially for contact-based charging applications, and potentially for non-contact charging at distances up to approximately three feet, and even low-power charging at up to 15 feet. For non-contact applications, our transmitter technology is able to mesh into a wire-free charging network that will allow users to charge their devices as they move about some space. To date, we have developed multiple transmitter prototypes and multiple receiver prototypes. The transmitters vary in terms of their form factor, power specification, and frequency. The receivers can be used in a variety of applications, such as smartphone battery cases, toys, fitness trackers, Bluetooth headsets, tracking devices, and stand-alone receivers. We are engaged in pre-

production and initial production activity with several consumer electronic, medical device and industrial companies to introduce our contact-based near field transmitters and receivers in products going to market in 2019. We are also in discussion with potential customers in the consumer and industrial spaces that are considering our solutions for low power distance charging for products that could enter the market in 2019.

When the company was founded in 2012, we recognized the need to design and build an enterprise-class network management and control software ("NMS") system that would be integral to the architecture and development of our wire-free charging technology. Our NMS system is robust enough to scale up to control thousands of devices across an enterprise, or scaled down to meet the needs of a home or IoT environment.

In December 2017, we announced Federal Communications Commission ("FCC") certification of our first-generation WattUp Mid Field transmitter, which simultaneously powers multiple devices at a distance of up to three feet. This transmitter underwent rigorous, multi-month testing to verify that it met consumer safety and regulatory requirements. We believe this was the first certification of a Part 18 FCC-approved non-contact wireless charging transmitter, and that it establishes engineering design precedents that can streamline future regulatory approvals for our technology and for our customers' end-products that employ our technology.

Our technology solution consists principally of transmitter controller ICs, power amplifier ICs and receiver ICs, as well as novel antenna designs and proprietary software algorithms. We submitted our first IC design for wafer fabrication in 2013 and have developed many generations of transmitter and receiver ICs, antenna designs, and software algorithms. We believe that these components optimize our technology by reducing size and cost, while increasing performance to enable our technology to be integrated into a broad spectrum of devices. We have developed a "building block" approach that allows us to scale our product implementations by combining multiple transmitter building blocks or multiple receiver building blocks to meet the the power, distance, size and cost requirements of customer applications requirements. Our technology is readily scalable because the same ICs that are used for contact based charging can be used for distance based charging solutions. We have developed two classes of chip solutions, a CMOS-based technology focused on low cost, small footprint and low power (less than 5 watts) and a GaAs/GAn-based technology capable of delivering higher power with greater efficiency. We intend to continue to invest in research and development with high power capabilities of 20 watts and beyond at high levels of efficiency. We intend to invest improving product performance, efficiency, cost-performance and miniaturization as required to reach multiple markets and expand the power-at-a-distrance ecosystem, while maintaining a technology lead on potential competitors.

In 2015, we entered into a Development and License Agreement with one of the top consumer electronics companies in the world based on total worldwide revenues. The agreement is milestone-based and while there are no guarantees that our WattUp technology will ever be integrated into this company's products, the relationship has helped to drive our innovation and provided financial benefits in the form of engineering services revenues. The relationship has also been beneficial to Energous because the consumer electronics company has provided insight and direction that accelerated our technology development and our regulatory initiatives. We expect this relationship to continue, and possibly to result in additional engineering services revenue. If our technology is ultimately incorporated into products sold by this consumer electonrics company, significant revenues is possible based on our WattUp® technology integrated into those products.

In February 2016, we began delivering evaluation kits to potential licensees of our technology, to allow their respective engineering and product management departments to test and evaluate the technology. Our customers' product development, technology integration and product introduction cycles occur over multiple quarters and generally more than a year elapses before first evaluation and final shipment of the customer's product. We expect this commercialization cycle to shorten over time as the technology matures.

With the exception of our 2015 Development and Licensing Agreement with a top-tier consumer electronics company, we maintain exclusive rights to all intellectual property in our technology. Our intellectual property strategy includes pursuing patent protection for new innovations. As of February 19, 2019, we had more than 125 pending patent and provisional patent applications. As of that date, the U.S. Patent and Trademark Office and international patent offices had issued 176 patents and had notified us of the allowance of 26 additional patents. In addition to the inventions covered by these patents and patent applications, we have also identified specific inventions that we believe are novel and patentable. We intend to file for patent protection for the most valuable of

these, and for other inventions that we expect to develop. This is a significant annual expense and we continually monitor the costs and benefits of each patent application and pursue those that we believe are most protective for our business and expand the core value of the Company.

Our seasoned management team has both private and public company experience, as well as relevant industry experience. In addition, we have identified and hired key engineering resources in the areas of IC development, antenna development, hardware, software and firmware engineering as well as integration and testing, which will allow us to continue to expand our technology and intellectual property and to meet our licensees' support requirements.

Our common stock is quoted on The Nasdaq Stock Market under the symbol "WATT". As of February 14, 2019, we had 69 full-time employees, 60 of whom were engineers. We were incorporated in Delaware in 2012. Our corporate headquarters is located at 3590 North First Street, Suite 210, San Jose, CA 95134. Our website can be accessed at www.energous.com. The information contained on, or that may be obtained from our website, is not, and shall not be deemed to be, part of this Annual Report on Form 10-K.

Our Technology

The wire-free charging technology we are developing employs transmitter technology that creates a targeted RF energy pocket around a fixed or mobile receiving device.

Figure 1 below shows a basic conceptual design of a mid field wireless charging solution based on our technology. Today this technology is able to send RF energy from the transmitter to single receiving device, or to multiple receiving devices.

Figure 1: Concept of a Mid Field Wire-Free Charging Solution

First, our proprietary transmitter technology locates the target receivers using standard Bluetooth® communications and our proprietary technology. Our software controls then cause the transmitter to generate a controlled and focused RF-waveform that creates a RF energy pocket around the receivers. Receivers equipped with our antennas and ICs, and controlled by our software, are able to harvest power from the focused RF energy pocket. We believe that these receivers will be incorporated into future devices such as smartphones, wearables, fitness trackers, keyboards and mice, cameras, tablets, toys, IoT devices, sensors, remote controls, medical devices and other small electronics that contain embedded batteries. The transmitter uses proprietary software algorithms to dynamically direct, focus and control our RF waveform as it transmits energy to a moving object, such as a user holding a mobile device while walking around a room. Our small form factor antennas use the existing device's printed circuit board, eliminating the need for larger, more expensive coils. This enables broader adoption of wireless charging in a larger range of battery-powered devices, such as smartphones, tablets, IoT devices, small form factor wearables, gaming and Virtual Reality (VR)/Augmented Reality (AR) devices.

Our initial demonstration system was capable of transmitting energy to multiple devices within a radius of 15 feet. Our current generation ICs has significantly reduced the size and cost of both transmitters and our receivers, and products under development are designed to further reduce size and cost. In addition, our ICs are designed for lower-power and higher-power applications, efficiency and faster synchronization, while working within the constraints of multiple international regulatory environments.

In 2016, we introduced our WattUp Near Field Transmitter Technology and a small form factor receiver, which were developed as a result of our efforts to reduce cost and size. This contact-based charging solution, for which we have received FCC approval, allowed for low power charging at up to five millimeters. In 2017, we announced a higher-power version of our WattUp Near Field Transmitter technology, with the ability to charge on contact at levels of up to 10 watts. In February 2019, we announced that our latest WattUp Near Field High Power transmitter technology supports up to 20 watts of charging power. Due to its low cost and small size, the miniature transmitter can be bundled in-box with WattUp-enabled receiver devices, replacing alternative charging solutions like power adapters and charging cables. We expect accelerating adoption of our low cost, portable charging solution for receiver devices to accelerate.

Our Competition

Competing methods for charging battery-powered devices include wall plug-in charging, inductive charging, magnetic resonance charging, charging stations and more. To our knowledge, almost all consumer electronics equipped with a rechargeable battery come bundled with a charging method, such as a power cord. Studies indicate that consumers prefer wire-free, or untethered, charging solutions such as our WattUp technology. We believe the advantages of our WattUp technology include size, cost, mobility, foreign object detection and portability. Further, our technology allows us to target, track and charge a device as it moves, and it enables devices to be designed without removable batteries or the need to plug in to charge. Over time, charging at greater distances could become a further competitive advantage.

A variety of wireless charging technologies are on the market or under development today. These competitive technologies fall into the following categories:

Magnetic Induction. Magnetic induction uses a magnetic coil to create resonance, which can transmit energy over very short distances. Power is delivered as a function of coil size (the larger the coil, the more power), and coils must be directly paired (one receiver coil to one transmitter coil = directly coupled pair) within a typical distance of less than one inch. Products utilizing magnetic induction have been available for 10+ years in products such as rechargeable electronic toothbrushes.

Magnetic Resonance. Magnetic resonance is similar to magnetic induction, as it uses magnetic coils to transmit energy. This technology uses coils that range in size depending on the power levels being transmitted. It has the ability to transmit power at distances up to ~11 inches (30cm) which can be increased with the use of resonance repeaters.

Conductive. Conductive charging uses conductive power transfer to eliminate wires between the charger (often a charging mat) and the charging device. It requires the use of a charging board as the power transmitter to

deliver the power, and a charging device, with a built-in receiver, to receive the power. This technology requires direct metal contact between the charging board and the receiver. Once the charging board recognizes the receiver, the charging begins.

RF Harvesting. Harvesting RF energy is at the core of our WattUp technology. RF harvesting typically utilizes directional antennas to target and deliver energy. To our knowledge, there are two other companies attempting to utilize a directional pocket of energy similar to our WattUp technology.

Laser. Laser charging technology uses very short wavelengths of light to create a collimated beam that maintains its size over distance, using what is described as distributed resonance to deliver power to an optical receiver.

Ultrasound. Ultrasound charging technology converts electric energy into acoustic energy in the form of ultrasound waves. It then reconverts those waves through an “energy-harvesting” receiver.

Our Business Strategy

Pursuant to our Strategic Alliance Agreement, Dialog manufactures and distributes IC products incorporating our wire-free charging technology. Dialog is the exclusive supplier of these products, which we believe may be useful in several vertical markets with large volumes of potential annual sales. Our strategy is to support the development and proliferation of our WattUp® technology to form a ubiquitous wire-free charging ecosystem.

We believe that a large market opportunity lies in wire-free low-power charging at a distance, which might develop as the Wi-Fi ecosystem developed. The goal is to ensure interoperability between transmitters and receivers that are based on our technology, regardless of who made them, installed them into finished goods, or marketed them. The implementation of previous ubiquitous solutions, such as Wi-Fi and Bluetooth, illustrates our goal. For example, Wi-Fi routers, regardless of their designer or manufacturer, work with Wi-Fi receivers installed in consumer electronics, regardless of manufacturer. Accordingly, in partnership with Dialog, we endeavor to:

- Build multiple ICs to advance the technology;
- Partner with leading product companies;
- Develop reference designs to reduce early adopter risks and foster adoption;
- Provide game-changing benefits to the consumer in terms of utility and convenience;
- Design initial iterations of the technology to be small but scalable implementations that are compatible on both a local and enterprise scale;
- Invest in ease of use;
- Develop a strategy to build out the ecosystem starting with the consumer and expanding to enterprise, industrial and military;
- Implement a plan to initially sell ICs migrating to a combination of selling ICs and integrating our device libraries into third-party silicon such as Bluetooth Low Energy and Power Management Chips;
- Develop and execute on a strategy to gain global regulatory approval for both contact-based charging and distance charging; and
- Support the AirFuel™ Alliance (AFA) that is expected to lead to a qualification process to ensure compatibility of our WattUp technology across vendors and develop a common user experience at the application level.

In order for our technology to become an ubiquitous solution for charging at a distance, we intend to pursue an ecosystem strategy for our technology, engaging not only potential licensees for our transmitter and receiver technologies, but also their upstream and downstream value chain partners. We intend to capitalize on our first-to-market advantage and prioritize protection of our intellectual property portfolio, as we believe this strategy will

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make it less likely that a competing platform will be able to gain a solid foothold in the RF-based wireless charging market and compete with our technology in a meaningful way.

We believe our strategic relationship with Dialog will enable us to reap the benefits of our technology faster and with greater penetration than by manufacturing and distributing products ourselves. We believe this relationship allows us to resolve supply chain problems for consumer electronics and IoT companies as well as leverage Dialog's sales force while we concentrate our efforts and resources on engineering, development and commercialization projects to accelerate the introduction and adoption of WattUp solutions.

To engage with potential licensees of the WattUp technology, we have developed evaluation kits consisting of a transmitter and a receiver along with the enabling software to allow potential strategic partners to test the technology in their labs. The kits form a base "building block" component that is scalable to meet the needs of specific applications. We are developing processes and support capabilities to assist potential customers as they evaluate the technology and develop specific designs to incorporate it.

To validate our technology, we originally sought out customers that were smaller, more nimble early adopters with relatively short product cycles and the ability to ship fully integrated WattUp enabled devices to the consumer as quickly as possible. At the same time, we began to engage with larger, top tier customers with the ability to ship WattUp enabled consumer and IoT devices in mass quantities. We are also engaged with companies that have much longer product cycles, such as medical and mobile device companies. As our partnership with Dialog enters its third year, the majority of new customer introductions are made through Dialog and comprise companies diverse in size and end markets.

Since we are developing a new electronics charging paradigm for consumers, we expect many operational details of our strategy to continue to evolve as our technology matures, engineering breakthroughs occur and our engagements with our strategic partner Dialog and our top tier customers advance and mature.

Our Target Markets

We categorize our target markets as transmitter markets and receiver markets.

Transmitter Target Markets

Transmitters are devices that broadcast RF energy pockets that can be accessed by WattUp-enabled receivers in consumer electronics. We believe our transmitter technology will be developed and released in three basic categories:

- Stand-alone transmitters that are either sold independently or bundled as part of a pairing with WattUp-enabled receiver devices;
- Transmitters that are integrated into third party devices such as smartspeakers, televisions, computer monitors, sound bars, refrigerator doors; and
- Transmitters that are integrated into Wi-Fi routers to form a single device that provides both connectivity and wire-free power for a particular area.

We plan to release stand-alone and integrated transmitter technology in three categories:

WattUp Near Field Transmitters:

Because of its advantages over other forms of contact-based wireless charging, including ease of manufacturing and relative ease of regulatory approval, we expect transmitters using our WattUp Near Field technology to be the first WattUp enabled transmitter products on the market. These contact-based charging solutions are ideally suited for

many electronic devices, such as wearables, IoT devices and other small electronics that require a small form factor receiver and a low-cost charging solution. They are also suitable for larger, more power-hungry devices such as smartphones, smart watches and tablets. Initially these transmitters will be one-to-one (one transmitter to one receiver), with future versions being single transmitters for multiple receivers.

WattUp Mid Field Transmitters:

We expect that transmitters using our WattUp Mid Field technology will be geared to desktop and automotive markets and for charging at a range of a few centimeters to one meter. We also intend for the Mid Field transmitters to have tracking ability to support mobile applications and multiple receiving devices. WattUp Mid Field transmitters may include small desktop and nightstand transmitters designed to power consumer electronics and IoT devices. The same technology may also be integrated into third party devices such as computer monitors, nightstand consumer electronics, accessories such as low voltage portable battery chargers and integrated automotive applications.

WattUp Far Field Transmitters:

Transmitters based on WattUp Far Field technology are expected to provide low power charging for multiple devices within a radius of up to 15 feet. We expect that Far Field WattUp transmitters will have the ability to “pair” with other Far Field WattUp transmitters, creaging a mesh of charging that could be used for different rooms or large spaces while seamlessly providing charging to mobile devices that move through the space. Far Field WattUp transmitters may play a significant role in the charging low power IoT devices in fixed locations – such as security cameras and sensors.

Transmitters Integrated into Third Party Devices:

The “building block” core architecture developed for the WattUp technology is suited to a broad spectrum of third party devices like smartspeakers, televisions and refrigerator doors. The flexibility of the architecture in terms of size, power, distance, and cost affords Energous licensees the opportunity to match our technology with specific requirements and limitations typically found with complex integrations. For example, the WattUp transmit technology could be integrated into the door of a small refrigerator typically found in college dorm rooms, to provide charging capabilities to mobile devices anywhere in the room.

Wi-Fi Routers

We see the combination of the wire-free power router and the Wi-Fi router as a natural integration point and a synergistic application of both technologies. AWattUp transmitter shares a number of technical characteristics with Wi-Fi routers in that both devices operate in the airwaves in the unlicensed industrial, scientific and medical bands, both devices owe their success to the utility and convenience they bring to the consumer, both devices rely on antennas, and both devices “pair” or provide hand off capabilities which allow for mesh networks to provision large sites. We believe that our technology is applicable to both the commercial and residential Wi-Fi router markets.

As part of our go-to-market strategy under the Strategic Alliance Agreement, we are currently working with Dialog to identify potential customers to offer consumer and commercial applications of our transmitter technology.

Receiver Target Markets

We believe there are many potential uses for our receiver technology, including:

- Wearables
- Hearing aids
- IOT devices
- Smartphones
- Tablets
- E-book Readers

- Peripheral devices such as computer mice and keyboards
- Remote controls

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- Rechargeable lights
- Gaming consoles and controllers
- Sensors (such as thermostats)
- Toys
- Rechargeable batteries
- Automotive accessories
- Personal care products (such as toothbrushes and shavers)
- Retail inventory management (such as RFID tags)
- Hand-held industrial devices (such as scanners and keypads)
- Medical devices

This list is meant to be illustrative only; we cannot guarantee that we will address any of these markets, and we may decide to address a market that is not on the list. We intend to continue to evaluate our target markets and choose new markets based on factors including (but not limited to) time-to-market, market size and growth, and the strength of our value proposition for a specific application.

As part of our go-to-market strategy under the Strategic Alliance Agreement, we are currently working with Dialog to enhance solutions for our current customers and to identify new customers for our technology.

Key Customer Relationship

In January 2015, we entered into a Development and License Agreement with one of the top consumer electronics companies in the world based on total worldwide revenues, to explore application of our WattUp wire-free charging receiver technology in various products.

This Development and License Agreement, as amended, specifies invention and development milestones, achievement of which entitles us to receive development payments under the agreement. These milestones are dynamic and modified from time to time by our customer to suit its evolving product application requirements. Development payments do not necessarily fully recoup our upfront investment in materials and financial and human resources, and our work on this relationship involves opportunity costs for us due to our limited resources.

Under this agreement, during the development phase and until one year after the customer's first shipment of any WattUp-enabled product within the customer's portfolio of products, we will afford this customer a time to market advantage in the licensed product categories. We believe this relationship has helped to drive our innovation and provided financial benefits in the form of engineering services revenues. The relationship has also been beneficial to Energous because the consumer electronics company has provided insight and direction that accelerated our technology development and our regulatory initiatives. We also believe partners are the key to adoption and critical mass distribution of transmitters and receivers in other consumer electronics products.

Key Strategic Relationship

In November 2016, we entered into a Strategic Alliance Agreement with Dialog for the manufacture and distribution of IC products incorporating our wire-free charging technology. Dialog is our exclusive supplier of these products for specified fields of use. Our WattUp chipsets are ordered through and manufactured by Dialog, carry the Dialog brand and are shipped and supported by Dialog. Dialog agreed to not distribute, sell or work with any third party to develop any competing products without our approval. Energous and Dialog agreed on a revenue sharing arrangement and will collaborate on the commercialization of licensed products based on a mutually-agreed upon plan.

Our WattUp technology uses Bluetooth solutions, including Dialog's SmartBond® Bluetooth low energy solution, as the out-of-band communications channel between the wireless transmitter and receiver. Dialog's power

management technology is used to distribute power from the WattUp receiver IC to the rest of the device while Dialog's AC/DC Rapid Charge™ power conversion technology delivers power to the wireless transmitter.

Research and Development

Research and development costs accounted for approximately 64% and 66% of our total operating expenses for 2018 and 2017, respectively. Our total research and development expenses were $32.9 million and $33.2 million for 2018 and 2017, respectively. Research and development expenses are expected to increase in the future as we concentrate our efforts and resources on the commercialization of our technology. While our current prototypes and products focus on near-field and mid-field charging solutions, we continue to make R&D investments into far-field innovations that we anticipate will lead to products that provide low power charging for multiple devices within a radius of up to 15 feet.

Our Intellectual Property

As a company primarily focused on licensing, we expect that our most valuable asset will be our intellectual property. This includes U.S. and foreign patents, patent applications and know-how. We have implemented an aggressive intellectual property strategy and are continuing to pursue patent protection for new innovations. As of February 19, 2019, we had more than 125 pending patent applications in the U.S. and abroad. Additionally, the U.S. Patent and Trademark Office and international patent offices have issued 176 patents and notified us of the allowance of 26 additional patents applications. In addition to the inventions covered by these patents and patent applications, we have identified a significant number of additional specific inventions we believe are novel and patentable. We intend to file for patent protection for the most valuable of these, as well as for other new inventions that we expect to develop. Our strategy is to continually monitor the costs and benefits of each patent application and pursue those that will best protect our business and expand the core value of the Company.

Government Regulation

Our wire-free charging technology involves the transmission of power using RF energy, which is subject to regulation by the Federal Communications Commission ("FCC"), international regulators and may be subject to regulation by other federal, state, local and international agencies. Our technology has been tested against U.S. and international safety requirements which has consistently demonstrated that our technology is safe. We continue to work with regulatory bodies to establish processes, standards and spectrum allocation to ensure devices incorporating WattUp® technology can secure required domestic and international approvals.

As part of the regulatory approval process, devices incorporating the WattUp® technology must obtain approvals under both FCC Part 15 and/or FCC Part 18 in the U.S., depending on the specific application. Energous has received Part 15 and Part 18 FCC approvals for WattUp enabled products, and has received regulatory approvals from many international agencies.

Current FCC Approvals for WattUp Technology

FCC ID	Description	Grant Date
2ADNG-MLA1599	Digital Transmission System Bluetooth Accessory 2.4GHz	12/30/2014
2ADNG-MT100	Close Coupled 5.8 GHz Charger Pad	05/24/2016
2ADNG-NF130	RF Wireless Charger and Receiver 5.8 GHz	05/02/2017
2ADNG-NF130	Digital Transmission System for Bluetooth 2.4 GHz	05/02/2017

2ADNG-MS300	Wireless Charger 913 MHz	12/26/2017
2ADNG-MS300	Digital Transmission System for Bluetooth 2.4 GHz	12/26/2017
2ADNG-MS300A	WPT Client Device 913 MHz	01/05/2018
2ADNG-MS300A	Digital Transmission System WPT Client Device with BLE 2.4 GHz	01/05/2018
2ADNG-NF230	RF Wireless Charger 918 MHz	04/09/2018
2ADNG-NF230	Digital Transmission System for Bluetooth 2.4 GHz	04/09/2018

Current FCC Approvals for
Customer Products

FCC ID Description Grant Date

Current FCC Approvals for Customer Products

FCC ID	Description	Grant Date
VAW-NF910	SK Telesys Co., Ltd, based on Energous ID: 2ADNG-NF230	12/27/2018

As of December 31, 2018, products integrating WattUp® technology had received international regulatory approvals and were approved to ship into 111 countries.

Employees

As of February 14, 2019, we had 69 full-time employees. None of these employees are covered by a collective bargaining agreement, and we believe our relationship with our employees is good. We also employ consultants, including technical advisors, on an as-needed basis to supplement existing staff. Consultants and technical advisors provide us with expertise in electrical engineering, software development and other specialized areas of engineering and science.

Item 1A. Risk Factors

We are subject to many risks that may harm our business, prospects, results of operations and financial condition. This discussion highlights some of the risks that might adversely affect our future operating results in material ways. We believe these are the risks and uncertainties that are the most important ones we face. We cannot be certain that we will successfully address these risks, and if we are unable to address them, our business may not grow, our stock price may suffer and you could lose the value of your investment in our company. Other risks and uncertainties that we do not currently recognize as material risks, or that are similar to risks faced by other companies in our industry, may also impair our business, prospects, results of operations and financial condition. The risks discussed below include forward-looking statements, and our actual results may differ substantially from what is in these forward-looking statements.

Risks Related to Our Business

We have no history of generating meaningful product revenue, and we may never achieve or maintain profitability.

We have a limited operating history upon which investors may rely in evaluating our business and prospects. We have generated limited revenues to date, and as of December 31, 2018, we had an accumulated deficit of approximately $225 million. Our ability to generate revenues more reliably and on a larger scale, and to achieve profitability, will depend on our ability to execute our business plan, complete the development and approval of our technology, incorporate the technology into products that customers wish to buy, and, to secure financing to enable us to do all this. There can be no assurance that our technology will be adopted widely, that we will ever earn revenues sufficient to support our operations, or that we will ever be profitable. Furthermore, there can be no assurance that we will be able to raise capital as and when we need it to continue our operations. If we are unable to raise sufficient additional capital, we may be required to delay, reduce or severely curtail our research and development or other operations, which could have a material adverse effect on our business, operating results, financial condition, long-term prospects and ability to continue as a viable business. If we are unable to generate revenues of significant scale to cover our costs of doing business, our losses will continue and we may not achieve profitability, which could negatively impact the value of your investment in our securities.

Terms of our Development and License Agreement with a tier-one consumer electronics company could inhibit potential licensees from working with us in specific markets.

We have entered into a Development and License Agreement with a tier-one consumer electronics company to embed our WattUp wire-free charging transmitter and receiver technology in various products. There is no assurance our technology will be adopted by this company for use in any of its products, and our investment in research and development in connection with this relationship may not be fruitful. This agreement provides the consumer electronics company with a time-to-market advantage during the development and until one year after the first customer shipment for specified WattUp-enabled consumer products. This may inhibit other potential licensees

of our technology from engaging with us on some consumer products and may cause them to seek solutions offered by other companies, which could have a negative impact on our revenue opportunities and financial results.

We may be unable to demonstrate the feasibility of our technology.

We have developed working prototypes of products using our technology, but additional research and development is required to commercialize our technology for applications that can be successfully integrated into commercial products. Research and development of new technologies is, by its nature, unpredictable. We could encounter unanticipated technical problems, the inability to identify products utilizing our technology that will be in demand with customers, getting our technology designed in to those products, designing new products for manufacturability, and achieving acceptable price points for final products. Although we intend to undertake development efforts with commercially reasonable diligence, there can be no assurance that our available resources will be sufficient to enable us to develop our technology to the extent needed to create future revenues to sustain our operations.

Our technology must also satisfy customer expectations and be suitable for them to use in consumer applications. Any delays in developing our technology that arise from factors of this sort would aggravate our exposure to the risk of having inadequate capital to fund the research and development needed to complete development of these products. Technical problems causing delays would cause us to incur additional expenses that would increase our operating losses. If we experience significant delays in developing our technology and products based on it for use in potential commercial applications, particularly after incurring significant expenditures, our business may fail, and you could lose the value of your investment in our company. If we fail to develop practical and economical commercial products based on our technology, our business may fail and you could lose the value of your investment in our stock.

Domestic and international regulators may deny approval for our technology, and future legislative or regulatory changes may impair our business.

Our charging technology involves power transmission using radio frequency (RF) energy, which is subject to regulation by the Federal Communications Commission in the United States and by comparable regulatory agencies worldwide. It may also be subject to regulation by other agencies. Regulatory concerns include whether human exposure to radio frequency emissions are below specified thresholds. Higher levels of exposure require separate approval. For example, transmitting more power over a certain distance or transmitting power over a greater distance may require separate regulatory approvals. In addition, we design our technology to operate in a RF band that is also used for Wi-Fi routers and other wireless consumer electronics, and we also design it to operate at different frequencies as demanded for some customer applications. Applications at different frequencies may require separate regulatory approvals. Efforts to obtain regulatory approval for devices using our technology is costly and time consuming, and there can be no assurance that requisite regulatory approvals will be forthcoming. If approvals are not obtained in a timely and cost-efficient manner, our business and operating results could be materially adversely affected. In addition, legal or regulatory developments could impose additional restrictions or costs on us that could require us to redesign our technology or future products, or that are difficult or impracticable to comply with, all of which would adversely affect our revenues and financial results.

We depend upon our strategic relationship with Dialog Semiconductor, a provider of electronics products, and there can be no assurance that we will achieve the expected benefits of this relationship.

We have entered into a strategic cooperation agreement with Dialog Semiconductor, a provider of electronics products, pursuant to which we licensed our WattUp technology to Dialog and it became the exclusive provider of our technology. We intend to leverage Dialog’s sales and distribution channels and its operational capabilities to accelerate market adoption of our technology, while we focus our resources on research and development of our technology. There can be no assurance that Dialog will promote our technology successfully, or that it will be successful in

producing and distributing related products to our customers' specifications. Dialog may have other priorities or may encounter difficulties in its own business that interfere with the success of our relationship. If this strategic relationship does not work as we intend, then we may be required to seek an arrangement with another strategic partner, or to develop internal capabilities, which will require a commitment of management time and our financial resources to identify a replacement strategic partner, or to develop our own production and distribution

capabilities. As a result, we may be unable without undue expense to replace this agreement with one or more new strategic relationships to promote and provide our technology.

The majority of our revenues are associated with a single customer.

One customer currently accounts for the majority of our revenues, and our current business strategy focuses on developing our technology to meet the specific requirements of this customer. While our technology development efforts are in process, there is no assurance that they will be successful or that any revenues we may receive from this or other customers will offset the expenses associated with our development efforts. There is also no assurance that our efforts to develop our technology for this customer will result in revenues from other customers.

We may require additional financing in order to achieve our business plans, and there is no guarantee that it will be available on acceptable terms, or at all.

We may not have sufficient funds to fully implement our business plans. We may need to raise additional capital through new financings, even if we begin to generate meaningful commercial revenue. For example, new product development for business partners may require considerable expense in advance of substantial revenue for such products. Such financings could include equity financing, which may be dilutive to stockholders, or debt financing, which could restrict our ability to borrow from other sources. In addition, such securities may contain rights, preferences or privileges senior to those of current stockholders. As a result of economic conditions, general global economic uncertainty, political change, and other factors, we do not know whether additional capital will be available when needed, or that, if available, we will be able to obtain additional capital on reasonable terms. If we are unable to raise additional capital due to the volatile global financial markets, general economic uncertainty or other factors, we may be required to curtail development of our technology or reduce operations as a result, or to sell or dispose of assets. Any inability to raise adequate funds on commercially reasonable terms could have a material adverse effect on our business, results of operations and financial condition, including the possibility that a lack of funds could cause our business to fail and liquidate with little or no return to investors.

Expanding our business operations as we intend will impose new demands on our financial, technical, operational and management resources.

To date we have operated primarily in the research and development phase of our business. If we are successful, we will need to expand our business operations, which will impose new demands on our financial, technical, operational and management resources. If we do not upgrade our technical, administrative, operating and financial control systems, or the unexpected expansion difficulties arise, including issues relating to our research and development activities and retention of experienced scientists, managers and engineers, could have a material adverse effect on our business, results of operations and financial condition, and our ability to timely execute our business plan. If we are unable to implement these actions in a timely manner, our results may be adversely affected.

If products incorporating our technology are launched commercially but do not achieve widespread market acceptance, we will not be able to generate the revenue necessary to support our business.

Market acceptance of a RF-based charging system as a preferred method for charging electronic devices will be crucial to our success. The following factors, among others, may affect the level of market acceptance of products in our industry:

- the price of products incorporating our technology relative to other products or competing technologies;
- user perceptions of the convenience, safety, efficiency and benefits of our technology;
- the effectiveness of sales and marketing efforts of our commercialization partners;

- the support and rate of acceptance of our technology and solutions with our development partners;
- press and blog coverage, social media coverage, and other publicity factors that are not within our control; and
- regulatory developments.

If we are unable to achieve or maintain market acceptance of our technology, and if related products do not win widespread market acceptance, our business will be significantly harmed.

If products incorporating our technology are commercially launched, we may experience seasonality or other unevenness in our financial results in consumer markets or a long and variable sales cycle in enterprise markets.

Our strategy depends on our customers developing successful commercial products usins our technology and selling them into the consumer, enterprise and commercial markets. We will need to understand procurement and buying cycles to be successful in licensing our technology. We anticipate it is possible that demand for our technology may vary in different segments of the consumer electronics market, such as hearing aids, wearables, toys, watches, accessories, laptops, tablet, mobile phones and gaming systems. Such consumer markets are often seasonal, with peaks in and around the December holiday season and the August-September back-to-school season. Enterprises and commercial customers may have annual or other budgeting and buying cycles that could affect us, and, particularly if we are designated as a capital improvement project, we may have a long or unpredictable sales cycle.

We may not be able to achieve all the features we seek to include in our technology.

We have developed working prototypes of commercial products that utilize our technology. Additional features and performance specifications we seek to include in our technology have not yet been developed. For example, some customer applications may require specific combinations of cost, footprint, efficiencies and capabilities at various frequencies, charging power levels and distances. We believe our research and development efforts will yield additional functionality and capabilities over time. However, there can be no assurance that we will be successful in achieving all the features we are targeting and our inability to do so may limit the appeal of our technology to consumers.

Future products based on our technology may require the user to purchase additional products to use with existing devices. To the extent these additional purchases are inconvenient, the adoption of our technology under development or other future products could be slowed, which would harm our business.

For rechargeable devices that utilize our receiver technology, the technology may be embedded in a sleeve, case or other enclosure. For example, products such as remote controls or toys equipped with replaceable AA size or other batteries would need to be outfitted with enhanced batteries and other hardware enabling the devices to be rechargeable by our system. In each case, an end user would be required to retrofit the device with a receiver and may be required to upgrade the battery technology used with the device (unless, for example, compatible battery technology and a receiver are built into the device). These additional steps and expenses may offset the convenience for users and discourage customers from licensing our technology. Such factors may inhibit adoption of our technology, which could harm our business. We have not developed an enhanced battery for use in devices with our technology, and our ability to enable use of our technology with devices that require an enhanced battery will depend on our ability to develop a commercial version of such a battery that could be manufactured at a reasonable cost. If a commercially practicable enhanced battery of this nature is not developed, our business could be harmed, and we may need to change our strategy and target markets.

Laboratory conditions differ from field conditions, which could affect the effectiveness of our technology under development or other future products. Failures to move from laboratory to the field effectively would harm our business.

When used in the field, our technology may not perform as expected based on performance under controlled laboratory conditions. For example, in the case of distance charging, a laboratory configuration of transmission obstructions will be arranged for testing, but in the field receivers may be obstructed in many different and

unpredictable ways. These conditions may significantly diminish the power received at the receiver or the effective range of the transmitter. The failure of products using our technology to meet the expectations of users in the field could harm our business.

Safety concerns and legal action by private parties may affect our business.

We believe that our technology is safe. However, it is possible that we could discover safety issues with our technology or that some people may be concerned with RF-based charging in a manner that has occurred with some other wireless technologies as they were put into residential and commercial use, such as the safety concerns that were raised by some regarding the use of cellular telephones and other devices to transmit data wirelessly in close proximity to the human body. In addition, while we believe our technology is safe, users of our technology under development or other future products who suffer medical ailments may blame the use of products incorporating our technology, as occurred with a small number of users of cellular telephones. A discovery of safety issues relating to our technology could have a material adverse effect on our business and any legal action against us claiming our technology caused harm could be expensive, divert management and adversely affect us or cause our business to fail, whether or not such legal actions were ultimately successful.

Our industry is subject to intense competition and rapid technological change, which may result in technology that is superior to ours. If we do not keep pace with changes in the marketplace and the direction of technological innovation and customer demands, our technology and products may become less useful or obsolete and our operating results will suffer.

The consumer electronics industry in general, and the charging segments in particular, are subject to intense and increasing competition and rapidly evolving technologies. Because products incorporating our technology are expected to have long development cycles, we must anticipate changes in the marketplace and the direction of technological innovation and customer demands. To compete successfully, we will need to demonstrate the advantages of our products and technologies over established alternatives, and other emerging methods of power delivery. Traditional wall plug-in recharging remains an inexpensive alternative to our technology. Directly competing technologies such as inductive charging, magnetic resonance charging, conductive charging, ultrasound and other yet unidentified solutions may have greater consumer acceptance than the technology we have developed. Furthermore, some competitors may have greater resources than we have and may be better established in the market than we are. We cannot be certain which other companies may have already decided to or may in the future choose to enter our markets. For example, consumer electronics products companies may invest substantial resources in wireless power or other recharging technologies and may decide to enter our target markets. Successful developments of competitors that result in new approaches for recharging could reduce the attractiveness of our products and technologies or render them obsolete.

Our future success will depend in large part on our ability to establish and maintain a competitive position in current and future technologies. Rapid technological development may render our technology or future products based on our technology obsolete. Many of our competitors have greater corporate, financial, operational, sales and marketing resources than we have, as well as more experience in research and development. We cannot assure you that our competitors will not develop or market technologies that are more effective or commercially attractive than our products or that would render our technologies and products obsolete. We may not have or the financial resources, technical expertise, marketing, distribution or support capabilities to compete successfully in the future. Our success will depend in large part on our ability to maintain a competitive position with our technologies.

Our competitive position also depends on our ability to:

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generate widespread awareness, acceptance and adoption by the consumer and enterprise markets of our technology under development and future products;

- design a product that may be sold at an acceptable price point;
- develop new or enhanced technologies or features that improve the convenience, efficiency, safety or perceived safety, and productivity of our technology under development and future products;
- properly identify customer needs and deliver new products or product enhancements to address those needs;
- limit the time required from proof of feasibility to routine production;
- limit the timing and cost of regulatory approvals;
- attract and retain qualified personnel;

- protect our inventions with patents or otherwise develop proprietary products and processes; and
- secure sufficient capital resources to expand both our continued research and development, and sales and marketing efforts.

If our technology does not compete well based on these or other factors, our business could be harmed.

It is difficult and costly to protect our intellectual property and our proprietary technologies, and we may not be able to ensure their protection.

Our success depends significantly on our ability to obtain, maintain and protect our proprietary rights to the technologies used in products incorporating our technologies. Patents and other proprietary rights provide uncertain protections, and we may be unable to protect our intellectual property. For example, we may be unsuccessful in defending our patents and other proprietary rights against third party challenges. If we do not have the resources to defend our intellectual property, the value of our intellectual property and our licensed technology will decline, threatening our potential revenue and results of operations.

We depend upon a combination of patent, trade secrets, copyright and trademark laws to protect our intellectual property and technology.

We rely on a combination of patents, trade secrets, copyright and trademark laws, nondisclosure agreements and other contractual provisions and technical security measures to protect our intellectual property rights. These measures may not be adequate to safeguard our technology. If they do not protect our rights adequately, third parties could use our technology, and our ability to compete in the market would be reduced. Although we are attempting to obtain patent coverage for our technology where available and where we believe appropriate, there are aspects of the technology for which patent coverage may never be sought or received. We may not possess the resources to or may not choose to pursue patent protection outside the United States or any or every country other than the United States where we may eventually decide to sell our future products. Our ability to prevent others from making or selling duplicate or similar technologies will be impaired in those countries in which we have no patent protection. Although we have a number of patent applications on file in the United States, the patents may not issue, may issue only with limited coverage or may issue and be subsequently successfully challenged by others and held invalid or unenforceable.

Similarly, even if patents are issued based on our applications or future applications, any issued patents may not provide us with any competitive advantages. Competitors may be able to design around our patents or develop products that provide outcomes comparable or superior to ours. Our patents may be held invalid or unenforceable as a result of legal challenges by third parties, and others may challenge the inventorship or ownership of our patents and pending patent applications. In addition, if we secure protection in countries outside the United States, the laws of some foreign countries may not protect our intellectual property rights to the same extent as do the laws of the United States. In the event a competitor infringes upon our patent or other intellectual property rights, enforcing those rights may be difficult and time consuming. Even if successful, litigation to enforce our intellectual property rights or to defend our patents against challenge could be expensive and time consuming and could divert our management’s attention. We may not have sufficient resources to enforce our intellectual property rights or to defend our patents against a challenge.

Our strategy is to deploy our technology into the market by licensing patent and other proprietary rights to third parties and customers. Disputes with our licensors may arise regarding the scope and content of these licenses. Further, our ability to expand into additional fields with our technologies may be restricted by existing licenses or licenses we may grant to third parties in the future.

The policies we use to protect our trade secrets may not be effective in preventing misappropriation of our trade secrets by others. In addition, confidentiality agreements executed by our employees, consultants and advisors may

not be enforceable or may not provide meaningful protection for our trade secrets or other proprietary information in the event of unauthorized use or disclosure. Litigating a trade secret claim is expensive and time consuming, and the outcome is unpredictable. Moreover, our competitors may independently develop equivalent knowledge methods and know-how. If we are unable to protect our intellectual property rights, we may be unable to

prevent competitors from using our own inventions and intellectual property to compete against us, and our business may be harmed.

We may be subject to patent infringement or other intellectual property lawsuits that could be costly to defend.

Because our industry is characterized by competing intellectual property, we may become involved in litigation based on claims that we have violated the intellectual property rights of others. Determining whether a product infringes a patent involves complex legal and factual issues, and the outcome of patent litigation actions is often uncertain. No assurance can be given that third party patents containing claims covering our products, parts of our products, technology or methods do not exist, have not been filed, or could not be filed or issued. Because of the number of patents issued and patent applications filed in our technical areas or fields (including some pertaining specifically to wireless charging technologies), our competitors or other third parties may assert that our products and technology and the methods we employ in the use of our products and technology are covered by United States or foreign patents held by them. In addition, because patent applications can take many years to issue and because publication schedules for pending applications vary by jurisdiction, there may be applications now pending which may result in issued patents that our technology under development or other future products would infringe. Also, because the claims of published patent applications can change between publication and patent grant, there may be published patent applications that may ultimately issue with claims that we infringe. There could also be existing patents that one or more of our technologies, products or parts may infringe and of which we are unaware. As the number of competitors in the market for wire-free power and alternative recharging solutions increases, and as the number of patents issued in this area grows, the possibility of patent infringement claims against us increases. Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

In the event that we become subject to a patent infringement or other intellectual property lawsuit and if the relevant patents or other intellectual property were upheld as valid and enforceable and we were found to infringe or violate the terms of a license to which we are a party, we could be prevented from selling any infringing products of ours unless we could obtain a license or were able to redesign the product to avoid infringement. If we were unable to obtain a license or successfully redesign, we might be prevented from selling our technology under development or other future products. If there is a determination that we have infringed the intellectual property rights of a competitor or other person, we may be required to pay damages, pay a settlement, or pay ongoing royalties, or be enjoined. In these circumstances, we may be unable to sell our products or license our technology at competitive prices or at all, and our business and operating results could be harmed.

We could become subject to product liability claims, product recalls, and warranty claims that could be expensive, divert management’s attention and harm our business.

Our business exposes us to potential liability risks that are inherent in the marketing and sale of products used by consumers. We may be held liable if our technology causes injury or death or is found otherwise unsuitable. While we believe our technology is safe, users could allege or possibly prove defects (some of which could be alleged or proved to cause harm to users or others) because we design our technology to perform complex functions involving RF energy, possibly in close proximity to users. A product liability claim, regardless of its merit or eventual outcome, could result in significant legal defense costs. The coverage limits of our insurance policies we may choose to purchase to cover related risks may not be adequate to cover future claims. If sales of products incorporating our

technology increase or we suffer future product liability claims, we may be unable to maintain product liability insurance in the future at satisfactory rates or with adequate amounts. A product liability claim, any product recalls or excessive warranty claims, whether arising from defects in design or manufacture or otherwise, could negatively affect our sales or require a change in the design or manufacturing process, any of which could harm our reputation and business, harm our relationship with licensors of our products, result in a decline in revenue and harm our business.

In addition, if a product that we or a strategic partner design is defective, whether due to design or manufacturing defects, improper use of the product or other reasons, we or our strategic partner may be required to

notify regulatory authorities and/or to recall the product. A required notification to a regulatory authority or recall could result in an investigation by regulatory authorities of products incorporating our technology, which could in turn result in required recalls, restrictions on the sale of such products or other penalties. The adverse publicity resulting from any of these actions could adversely affect the perception of our customers and potential customers. These investigations or recalls, especially if accompanied by unfavorable publicity, could result in our incurring substantial costs, losing revenues and damaging our reputation, each of which would harm our business.

We are subject to risks associated with our utilization of consultants.

To improve productivity and accelerate our development efforts while we build out our own engineering team, we may use experienced consultants to assist in selected development projects. We take steps to monitor and regulate the performance of these independent third parties. However, arrangements with third party service providers may make our operations vulnerable if these consultants fail to satisfy their obligations to us as a result of their performance, changes in their own operations, financial condition, or other matters outside of our control. Effective management of our consultants is important to our business and strategy. The failure of our consultants to perform as anticipated could result in substantial costs, divert management’s attention from other strategic activities, or create other operational or financial problems for us. Terminating or transitioning arrangements with key consultants could result in additional costs and a risk of operational delays, potential errors and possible control issues as a result of the termination or during the transition.

If we are not able to secure advantageous license agreements for our technology, our business and results of operations will be adversely affected.

We pursue the licensing of our technology as a primary means of revenue generation. We believe there are many companies that would be interested in implementing our technology into their devices. We have entered into one product development and license agreement with a tier-one consumer electronics company that has the potential to yield license revenue. We have also entered into a number of evaluation and joint development agreements with potential strategic partners. However, these agreements do not commit either party to a long-term relationship and any of these parties may disengage with us at any time. Creating a licensing business relationship often takes a substantial effort, as we expect to have to convince the counterparty of the efficacy of our technology, meet design and manufacturing requirements, satisfy marketing and product needs, and comply with selection, review and contracting requirements. There can be no assurance that we will be able to gain access to potential licensing partners, or that they will ultimately decide to integrate our technology with their products. We may not be able to secure license agreements with customers on advantageous terms, and the timing and volume of revenue earned from license agreements will be outside of our control. If the license agreements we enter into do not prove to be advantageous to us, our business and results of operations will be adversely affected.

Our business is subject to data security risks, including security breaches.

We, or our third-party vendors on our behalf, collect, process, store and transmit substantial amounts of information, including information about our customers. We take steps to protect the security and integrity of the information we collect, process, store or transmit, but there is no guarantee that inadvertent or unauthorized use or disclosure will not occur or that third parties will not gain unauthorized access to this information despite such efforts. Security breaches, computer malware, computer hacking attacks and other compromises of information security measures have become more prevalent in the business world and may occur on our systems or those of our vendors in the future. Large Internet companies and websites have from time to time disclosed sophisticated

and targeted attacks on portions of their websites, and an increasing number have reported such attacks resulting in breaches of their information security. We and our third-party vendors are at risk of suffering from similar attacks and breaches. Although we take steps to maintain confidential and proprietary information on our information systems, these measures and technology may not adequately prevent security breaches and we rely on our third-party vendors to take appropriate measures to protect the security and integrity of the information on those information systems. Because techniques used to obtain unauthorized access to or to sabotage information systems change frequently and may not be known until launched against us, we may be unable to anticipate or prevent these attacks. In addition, a party who is able to illicitly obtain a customer's identification and password credentials may be able to access the customer's account and certain account data.

Any actual or suspected security breach or other compromise of our security measures or those of our third-party vendors, whether as a result of hacking efforts, denial-of-service attacks, viruses, malicious software, break-ins, phishing attacks, social engineering or otherwise, could harm our reputation and business, damage our brand and make it harder to retain existing customers or acquire new ones, require us to expend significant capital and other resources to address the breach, and result in a violation of applicable laws, regulations or other legal obligations. Our insurance policies may not be adequate to reimburse us for direct losses caused by any such security breach or indirect losses due to resulting customer attrition.

We rely on email and other messaging services to connect with our existing and potential customers. Our customers may be targeted by parties using fraudulent spoofing and phishing emails to misappropriate passwords, payment information or other personal information or to introduce viruses through Trojan horse programs or otherwise through our customers' computers, smartphones, tablets or other devices. Despite our efforts to mitigate the effectiveness of such malicious email campaigns through product improvements, spoofing and phishing may damage our brand and increase our costs. Any of these events or circumstances could materially adversely affect our business, financial condition and operating results.

We are highly dependent on key members of our executive management team. 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 a very small number of key executives. If we lose the services of any of these persons, we could be required to expend significant time and money in the pursuit of replacements, which may result in a delay in the implementation of our business plan and plan of operations. If necessary, 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 any key-person life insurance that would help us recoup our costs in the event of the death or disability of any of these executives.

Our success and growth depend on our ability to attract, integrate and retain high-level engineering talent.

Because of the highly specialized and complex nature of our business, our success depends on our ability to attract, hire, train, integrate and retain high-level engineering talent. Competition for such personnel is intense because we compete for talent against many large profitable companies and our inability to adequately staff our operations with highly qualified and well-trained engineers could render us less efficient and impede our ability to develop and deliver a commercial product. Such a competitive market could put upward pressure on labor costs for engineering talent. We may incur significant costs to attract and retain highly qualified talent, and we may lose new employees

to our competitors or other technology companies before we realize the benefit of our investment in recruiting and training them. Volatility or lack of performance in our stock price may also affect our ability to attract and retain qualified personnel.

Risks Related to Ownership of Our Common Stock

You may lose all of your investment.

Investing in our common stock involves a high degree of risk. As an investor, you might lose all or part of your investment in our common stock, and you might never realize any return on your investment. You must be prepared to lose all of your investment.

Our stock price is likely to continue to be volatile.

The market price of the common stock has fluctuated significantly since our initial public offering in 2014. Our common stock has experienced an intra-day trading high of $26.88 per share and a low of $4.41 per share on The Nasdaq Stock Market over the last 52 weeks. The price of our common stock is likely to continue to fluctuate significantly in response to many factors that are beyond our control, including:

- regulatory announcements, such as the recent Federal Communications Commission approval of our Mid-Field range transmitter and receiver technology;
- actual or anticipated variations in operating results;
- the limited number of holders of the common stock;
- changes in the economic performance and/or market valuations of other technology companies;
- our announcements of significant strategic partnerships, regulatory developments and other events;
- announcements by other companies in the wire-free charging space;
- articles published or rumors circulated by third parties regarding our business, technology or development partners;
- additions or departures of key personnel; and
- sales or other transactions involving our capital stock.

We are an “emerging growth company,” and can take advantage of reduced disclosure requirements, which could make our common stock less attractive to investors.

We are an “emerging growth company,” and, for as long as we continue to be an emerging growth company, we intend to take advantage of exemptions from various reporting requirements, including, but not limited to, not being required to provide auditor attestation of our internal controls, reduced disclosure about executive compensation, and exemption from the requirement to hold a nonbinding advisory vote on executive compensation. However, we chose not to delay compliance with new or revised financial accounting standards. We will be an emerging growth company until December 31, 2018. For fiscal year 2019, we will be subject to auditor attestation of our internal controls and other Sarbanes-Oxley requirements. If investors find our common stock less attractive as a result of reduced disclosure of this sort, there may be a less active trading market for our common stock and our stock price may decline.

If we are unable to maintain effective internal control over financial reporting, investors may lose confidence in the accuracy of our financial reports.

As a public company, we are required to maintain internal control over financial reporting and to report any material weaknesses in such internal controls. Although our management has determined that our internal control over financial reporting was effective as of December 31, 2018, we cannot assure you that we will not identify a material weakness in our internal control in the future.

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If we have a material weakness in our internal controls, we may fail to detect errors in our financial accounting, which may require a financial restatement or otherwise harm our operating results, cause us to fail to meet our SEC reporting obligations or Nasdaq listing requirements, adversely affect our reputation, cause our stock price to decline or result in inaccurate financial reporting or material misstatements in our annual or interim financial statements. Further, if there are material weaknesses or failures in our ability to meet any of the requirements related to the maintenance and reporting of our internal controls such as Section 404 of the Sarbanes-Oxley Act, investors may lose confidence in the accuracy and completeness of our financial reports and that could cause the price of our common stock to decline. We could become subject to investigations by Nasdaq, the SEC or other regulatory authorities, which could require additional management attention and which could adversely affect our business.

In addition, our internal control over financial reporting will not prevent or detect all errors and fraud. 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 will be detected.

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 technology 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. 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.

Concentration of ownership among our existing executive officers, directors and significant stockholders may prevent new investors from influencing significant corporate decisions.

All decisions with respect to the management of our company are made by our board of directors and our officers, who beneficially own approximately 7.7% of our common stock collectively. In addition, our greater than 5% stockholders such as Dialog Semiconductor plc, Emily and Malcolm Fairbairn, DvineWave Holdings LLC and BlackRock Inc. beneficially owned approximately 11.3%, 6.6%, 5.9% and 5.6%, respectively, of our common stock as of December 31, 2018. As a result, these stockholders will be able to exercise a significant level of control over all matters requiring stockholder approval, including the election of directors, amendment of our certificate of incorporation and approval of significant corporate transactions. This control could have the effect of delaying or preventing a change of control of our company or changes in management and will make the approval of certain transactions difficult or impossible without the support of these stockholders.

We expect to continue to incur significant costs as a result of being a public reporting company and our management will be required to devote substantial time to meet our compliance obligations.

As a public reporting company, we incur significant legal, accounting and other expenses. We are subject to reporting requirements of the Securities Exchange Act of 1934 and rules subsequently implemented by the Securities and Exchange Commission (“SEC”) that require us to establish and maintain effective disclosure controls and financial controls, as well as some specific corporate governance practices. Our management and other personnel are expected to devote a substantial amount of time to compliance initiatives associated with our public reporting company status.

We may be subject to securities litigation, which is expensive and could divert management attention.

Our stock price has fluctuated in the past, most recently following our announcement of FCC approval of our Mid-Field transmitter technology, and it may be volatile in the future. In the past, companies that have experienced volatility in the market price of their securities have been subject to securities class action litigation, and we may be the target of litigation of this sort in the future. Securities litigation is costly and can divert management attention from other business concerns, which could seriously harm our business and the value of your investment in our company.

An active trading market for our common stock may not be maintained.

Our stock is currently traded on The Nasdaq Stock Market, but we can provide no assurance that we will be able to maintain an active trading market on this or any other exchange in the future. If an active market for our common stock is not maintained, it may be difficult for our stockholders to sell or purchase shares. An inactive market may also impair our ability to raise capital to continue to fund operations by selling shares and impair our ability to acquire other companies or technologies using our shares as consideration.

If securities or industry analysts do not publish research or reports about our business, or publish negative reports about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend in part on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. There can be no assurance that analysts will continue to cover us or provide favorable coverage. If one or more of the analysts who cover us downgrade our stock or change their opinion of our stock, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to regularly publish reports on us, we could lose visibility in the financial markets, which could cause our stock price or trading volume to decline.

Our ability to use net operating loss carry forwards to reduce future tax payments may be limited if our taxable income does not reach sufficient levels.

As of December 31, 2018, we had a Federal net operating loss ("NOL") carryforward of approximately $130,590,000. Under the U.S. Tax Code, NOL can generally be carried forward to offset future taxable income for a period of 20 years. Our ability to use our NOL during this period will be dependent on our ability to generate taxable income, and the NOL could expire before we generate sufficient taxable income. As of December 31, 2018, based on our history of operating losses it is possible that a portion of our NOL is not fully realizable.

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

Provisions of our certificate of incorporation and bylaws, and applicable 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 of incorporation 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.

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Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

In 2014, we entered into a lease agreement for our corporate headquarters located at Northpointe Business Center, 3590 North First Street in San Jose, California. The lease will expire in August 2019. This space is used for our headquarters and for research and development efforts. In 2015, we entered into two sub-lease agreements for additional laboratory space in San Jose, CA, both of which expire in June 2019. In May 2017, we entered into a lease agreement for office space in Costa Mesa, CA which is utilized by our engineers residing in Southern California, which will expire in September 2019. We are currently negotiating renewals of our main operating leases.

Item 3. Legal Proceedings

We are not currently a party to any pending legal proceedings that we believe will have a material adverse effect on our business or financial conditions. We may, however, be subject to various claims and legal actions arising in the ordinary course of business from time to time.

Item 4. Mine Safety Disclosures

Not applicable.

PART II