COOL TECHNOLOGIES, INC.
Form 10-K
April 17, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

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

For the fiscal year ended **December 31, 2016**

¨ **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: **000-53443**

COOL TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Nevada	**75-3076597**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

8875 Hidden River Parkway, Suite 300

Tampa, Florida 33637

(Address of principal executive office)

Registrant's telephone number, including area code: **(813) 975-7467**

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

None

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

Common Stock, $0.001 par value

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

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 x

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 x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes x 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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	¨	Accelerated filer	¨
Non-accelerated filer	¨	Smaller reporting company	x

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

The aggregate market value of the shares of voting and non-voting common stock held by non-affiliates based upon the closing price of $0.08 per share of such common stock as of June 30, 2016, was $5,788,298.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date: 116,572,312 shares of common stock as of April 12, 2017.

TABLE OF CONTENTS

PART I

Item 1. Business

As used in this Annual Report on Form 10-K (this "Report"), references to the "Company," the "registrant," "we," "our" or "us" refer to Cool Technologies, Inc. and our 95% owned subsidiary, Ultimate Power Truck, LLC ("UPT"), unless the context otherwise indicates.

Forward-Looking Statements

This Report contains predictions, estimates and other forward-looking statements that relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continue" or the negative of these terms or other comparable terminology.

Forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performances or achievements expressed or implied by the forward-looking statements. Forward-looking statements represent our management's beliefs and assumptions only as of the date of this Annual Report. You should read this Report and the documents that we have filed as exhibits to this Report completely and with the understanding that our actual future results may be materially different from what we expect.

All forward-looking statements speak only as of the date on which they are made. We undertake no obligation to update such statements to reflect events that occur or circumstances that exist after the date on which they are made, except as required by federal securities and any other applicable law.

Corporate History

We were incorporated on July 22, 2002 in the State of Nevada under the name Bibb Corporation. On September 3, 2010, we changed our name to Z3 Enterprises, Inc. ("Z3"), and on April 5, 2012, to HPEV, Inc. ("HPEV") and on August 19. 2015 our stockholders voted to approve a name change to Cool Technologies, Inc. Our 95% owned

subsidiary, Ultimate Power Truck, LLC ("UPT"), was formed on April 17, 2014 in the State of Florida.

On March 29, 2011, we entered into a share exchange agreement (which was amended on June 14, 2011) with HPEV, Inc., a Delaware corporation ("the Share Exchange Agreement") to acquire 100 shares, constituting all of the issued and outstanding shares of HPEV, Inc. in consideration for the issuance of 22,000,000 shares of common stock. Upon closing of the share exchange on April 15, 2011, HPEV, Inc. became our wholly owned subsidiary. There was a change of control of our company on April 15, 2011 as a result of the issuance of 21,880,000 shares of our common stock to the original shareholders of HPEV, Inc. pursuant to the terms of the Share Exchange Agreement. An additional 120,000 shares were issued during the fourth quarter of 2011 which completed the issuance of 22,000,000 shares of common stock under the terms of the amended Share Exchange Agreement.

As of April 12, 2017, we have six patents and six patent applications pending in the area of composite heat structures, motors, and related structures, heat pipe architecture, (applications commonly referred to as 'thermal' or 'heat dispersion technology') and a parallel vehicle power platform. We also have a Patent Cooperation Treaty ("PCT") application filed for a heat pipe cooled brake system, a parallel power input gearing system (PPIG) and radial vent thermal technology. The Company intends to commercialize its patents by licensing its thermal technologies and applications to electric motor, pump and vehicle component manufacturers; by licensing or selling a mobile electric power system powered by the Company's proprietary gearing system to commercial vehicle and fleet owners; and by licensing a plug-in hybrid conversion system for heavy duty trucks, buses and tractor trailers to fleet owners and service centers.

Table of Contents

On October 7, 2016, our Board of Directors and the holders of all of the issued and outstanding shares of Series B Stock of the Company representing 66 2/3% of the voting stock of the Company adopted resolutions which authorized the Company to act on a proposal to effect a reverse stock split on the issued and outstanding shares of common stock of the Company on a 15:1 basis.

We filed an amendment to our Articles of Incorporation with the Secretary of State of the State of Nevada increasing our authorized shares of common stock, from 140,000,000 shares to 350,000,000 shares, effective March 22, 2017. We currently believe that the increase in authorized share capital eliminates the need for any other type of corporate action such as a reverse stock split.

Business Description

We have developed and are commercializing thermal dispersion technologies in various product platforms, and have developed and are commercializing a parallel power gearing system around which we have designed a vehicle retrofit system. In conjunction, we have applied for trademarks for one of our technologies and its acronym. The Company currently has one trademark: TEHPC which is an acronym for Totally Enclosed Heat Pipe Cooled. We believe that our proprietary technologies, including our patent portfolio and trade secrets, can help increase the efficiency and reduce manufacturing cost structure in several large industries beginning with motor/generator and fleet vehicles.

The markets for products utilizing our technology include consumer, industrial and military markets, both in the U.S. and worldwide. Our initial target markets include those involved in moving materials and moving people, such as:

- Motors/Generators,
- Mobile auxiliary power,
- Compressors,
- Turbines (Wind, Micro),
- Bearings,
- Electric Vehicles: rail, off-highway, mining, delivery, refuse,
- Brakes/rotors/calipers,
- Pumps/fans,
- Passenger vehicles: auto, RV, bus, train, aircraft,
- Commercial vehicles: SUV, light truck, tram, bucket truck
- Military: boats, Humvee, truck, aircraft, and
- Marine: boats ranging in size from 30 feet to 120 feet and beyond.

4

Table of Contents

Our Technologies

Our technologies are divided into two distinct but complementary categories: heat dispersion technology and mobile power generation (MG).

Heat Dispersion Technology

Heat is an undesirable byproduct of anything that moves, especially motors and generators. Historically, a large percentage of the cost of manufacturing any motor has been in the technology necessary to remove heat during its operation to prevent failure and increase power. Heat can destroy motors, generators and many other types of machinery, and the energy necessary to remove heat can limit output.

Our patented thermal dispersion technology removes heat via composite heat structures and heat pipe architecture. Heat pipes have been utilized for more than 50 years, but we have a proprietary process and design technology that makes our heat pipes usable in many applications that have previously not been effective. The key is that our heat pipes move heat in any direction in a system that requires little or no maintenance and can be applied to almost any motor, generator or industrial product. We believe that this allows for more efficient, smaller, and higher output machines, resulting in cooler motors and a longer operating life.

Our patent portfolio covers the application and integration of our heat pipes into various cooling schemes for enhanced heat removal in motors, generators and numerous other industrial applications including marine, aviation and military. We believe that our technologies have the potential to deliver power output increases and cost reductions, depending on the machine type or motor/generator size, as follows:

1. Increase power density of current motor platforms by 20% to 40%,
2. Reduce total product cost by 12.5% to 25%,
3. Increase motor and generator efficiency by 1% to 2%, and
4. Increase motor and generator life.

We also believe that products produced with our technologies have the potential to deliver operational savings as well, including savings from:

- reduced maintenance costs,
- the standardization of multiple platforms down to a single platform,
- the standardization of drawings and data around existing platforms,
- the ability to use standard designs and standard insulation systems versus customization, and
- the ability to integrate and produce on existing production lines with no retooling and no additional, or minimal, capital investment.

Recent tests by independent laboratories showed a 200% increase in horsepower capability for a dry pit submersible pump and a 25 to 35% increase in power density for a 650 kVA alternator.

On December 6, 2013, ESSCO Pumps and Controls, a member of the Hydraulic Institute, conducted the tests in accordance with standards set forth by the Institute. The tests examined the tolerances of an industrial electric motor in an extreme situation. The tolerances determine the amount of power that can be driven through pumps run by the motor and are a strong predictor of the maintenance and other service downtime the pump will require. The original pump motor is rated to run, without submersion, for up to 15 minutes before the pump's protective circuits will turn it off to prevent overheating. This heat limitation restricts the output of the motor. The test pump used the same industrial electric motor, except with Cool Tech's thermal dispersion technology incorporated. The result: the test pump ran without submersion for more than two hours at or above full power without reaching critical temperatures that would have caused an automatic shutdown.

Table of Contents

On December 13, 2013, Mohler Technology, Inc. of Boonville, Indiana completed tests of an alternator enhanced with our thermal technology. A 650kVA alternator (generator) was run at full load to test its operational limits. The heat produced by generators of that size must be removed or controlled in order for the alternator to operate effectively. Manufacturers' current best practice is to add either a liquid cooling system or an extra large frame around the motor to provide additional surface area to help dissipate the heat. Both practices increase the cost and complexity of the generators.

The alternator tested used our thermal technology with no other cooling of any kind. The results showed a minimum of 25% improvement in power density over the manufacturer's rating for the alternator when operating without water cooling. In fact, the alternator achieved power densities comparable to a liquid-cooled or over-framed one.

The tests confirmed our belief that our heat pipe cooling system equals the effectiveness of a more complex water-cooled system. Extrapolating the results leads us to believe that simple designs incorporating our thermal technology combined with the increase in potential output will result in lower costs to manufacture by reducing the amount of material needed to produce a product with a specific output.

In October 2015, Kato Engineering, a business unit of Nidec, conducted two heat run tests. The tests were performed at a 0.8 power factor and tested rated load temperature using the Emerson LS 625KVA generator with and without the our heat dispersion system. Our results were then compared with results of tests performed at a 0.8 power factor using the generator's standard-issue, totally enclosed water-to-air cooled (TEWAC) system.

A comparison of all test results produced by the various testing agencies revealed a minor variance in some readings. A plan has been designed to optimize our technology to produce consistent results within a specific parameter. We believe this should enable an OEM (original equipment manufacturer) to offer our technology as an option.

The successful testing also represents a significant advance in our product development agreements with manufacturing partners. We anticipate that we will begin to enter into license agreements upon completion of the required design refinements and field testing to industry or governmental standards. At this point, the product will be ready to be manufactured on the licensee's regular production line. Any additional field tests will be at the discretion of the licensee.

6

Table of Contents

We also plan to incorporate heat pipes in vehicle components which generate heat such as brake calipers, resistors and rotors. The new brake components should be incorporated in conversion vehicles when revenues justify their testing and production.

Our revenue model for the heat dispersion technology is to license the technology in exchange for royalties.

Thermal Technology Target Markets: Generators

Large kilowatt:	prime power
Stationary:	emergency back-up
Commercial Mobile:	construction, utilities, mining, drilling
Consumer:	home standby, recreation
Rental:	mobile + light towers, pumps, compressors

Mobile Power Generation (MG)

The Company has a proprietary gearing system, which is used to power an on-board generator, eliminating the need for some commercial vehicles to tow a mobile generator to a work site. Management believes that there is a need for on-board, continuous generation of up to 200 kilowatts (kW) of power to remote jobsites, as well as mobile generation of emergency power in the event of an outage or disaster. We intend to offer an on-board generator installation kit as a stand-alone (Mobile Generator) for third parties and as part of an in-house brand (Ultimate Work Truck).

Company management, along with key directors and members of the Board of Advisors have utilized 2016 to do extensive market research, interview prospective customers, hold up-fitter meetings and perform channel-to market evaluation. They have put the plans in place for coverage for upfront sales, specification influence, full up-fitting capabilities with aftermarket parts and service as we currently intend to launch our MG30-MG80 products in the first half of 2017. In the fourth quarter of 2016, we demonstrated the Mobile Generation system to associates of the Company and potential customers. In the first quarter of 2017, we provided the first public demonstration of a 30 kilovolt amp (kVA) MG system at the North American International Auto Show in Detroit, Michigan.

Our revenue model for Mobile Generation will be driven by the efforts of partner up-fitters and truck body builders along with regional sales teams and independent representatives.

We believe that in head-to-head competition with tow behind generators, our mobile generation technology should prove very disruptive. Operators in such markets as utility, telecom and tree service, to name a few, will be able to work in remote locations without having to tow or drop in a generator. We believe that the reduction in overall weight and size should also deliver significant operating efficiencies and savings to work truck fleets.

Table of Contents

Weight of 55 kW tow behind: 6,367 lbs.

Weight of Cool Tech 55 kW MG System: 1,005 lbs.

Competition

Heat Dispersion Technology

Cooling solutions to remove or control heat produced by industrial electric motors, generators and alternators are provided by the manufacturers. Their current best practices are based on technology that's over 50 years old. They either add a liquid cooling system to the motor or build an extra large frame around the motor to provide additional surface area to help dissipate the heat. Both practices increase the cost and complexity of their products.

The Company is not aware of any new alternatives on the market.

Mobile Electric Power (MG30-MG200)

Management believes that the Company can compete in the mobile electric power market because there is a need for on-board generators, as opposed to trailer-mounted generators towed behind a vehicle. A primary benefit will be that the under-chassis installation will allow a truck to tow other trailers and equipment, however, we anticipate that the greatest selling point will be value. In comparison to the purchase price of a new Doosan towable generator, we believe we can provide up to 200 kilowatts ("kW") of auxiliary mobile power to any location for less than half the production cost of a towable, trailer-mounted generator, which may weigh over 10,000 pounds. We intend to deliver the same power at under 3,000 pounds. Our Mobile Generation system will also offer the same features of a tow behind generator including single and three phase outputs as well as a full function generator panel with enhanced capabilities including a touchscreen, digital controls and optional telematics.

Our target markets will initially center on industries and entities that rarely or never unhook their tow-behind generators from their work trucks. In industry parlance, they are always plugged in.

Mobile Generation System Target Markets	**Markets by Size Target**
Truck Up-fitters & Service Centers	Asia
Global Construction	North America
Global Energy	Africa
Utilities	Latin America
Military	Middle East

Table of Contents

We believe our competition in the mobile generator market will be from well-established companies such as Cummins, Caterpillar, Doosan, Wacker Neuson, Multi Quip and Generac. All of them offer towable, trailer-mounted generators. Only Cummins Onan offers an onboard generator and it is specifically engineered for mobile emergency vehicle use.

Portable generators also address a need for mobile electric power in the commercial, leisure and residential markets. As outputs tend to range from 1 to 20 kilowatts, the competition they provide is only at the lowest end of our power output spectrum and only from the higher power, higher quality and higher price commercial level units. Onan, Honda and Kohler are among the well-established brand names in the market. There are more than 40-manufacturing companies in the U.S that produce portable generators.

A standard option that is usually ordered from the manufacturer when purchasing a truck is a power take-off or PTO. PTOs are mounted to a truck's drivetrain and redirect engine power to operate onboard equipment. Integrated power systems use the PTO to run an alternating current generator.

Real Power from Contour Hardening, Inc. offers one and three phase AC power systems driven by a PTO. According to their website, system voltages range from 10 to 200 kW. Systems under 100 kW retrofit under the beds of diesel trucks as small as Ford F-250s. Systems larger than 100 kW require Class 6 diesel trucks and a side mount. The retrofits integrate with the fuel system and generator speed is controlled automatically by the vehicle's engine.

Modular integrated systems offer varying combinations of air compressors, welders, hydraulics and generators. Vanair Manufacturing, Inc's Underdeck uses a PTO to power air compressors, hydraulics and either 6.6 or 9.6 kW generators, according to the company's website. Their truck-mounted Air 'n' Arc All in One Power system adds welding and battery charger/booster capabilities and exports 4.2 to 7 kW from generators run by a second separate engine.

HIPPO Multipower packages hydraulic, air, electric and welding into a single unit. The company website showcases two models, one which connects to a truck's PTO. The other is powered by a separate diesel engine. Power exported ranges from 5.2 to 9 kW. Units are traditionally mounted on the side or in the bed of a work truck.

The Miller Enpak from Miller Electric Manufacturing Company which is owned by Illinois Tool Works, Inc. offers the same package powered by a separate diesel engine that exports 6 kW of power, according to Miller's website.

Many electric vehicles (“EV”) and plug-in hybrid electric vehicles (“PHEV”) can use excess battery capacity to provide exportable power with no idling. Most can be recharged from either the electrical grid or the vehicle’s engine.

According to the VIA Motors Inc. website, the company is converting Chevrolet Silverado pick-up trucks into hybrids with a panel to provide AC power through 115 and 240 volt electrical plugs. The optional power export module provides 14.4 kW at 60 amps. The company is also working on a utility-grade output module to deliver 50 kW. VIA Motors is producing crew-cab versions with prices in the $65,000 range, according to a January 2015 article in Bloomberg.com.

Workhouse Group, Inc. has announced on their website plans to offer 7.2 Kilowatts of exportable power with an option for 14.4 kilowatts from their Plug-in Electric Pickup Truck. The company is taking pre-orders.

Odyne Systems, LLC, is a manufacturer of hybrid systems for medium and heavy-duty work trucks over 14,000 pounds. According to their website, the systems are capable of exporting 6 to 18 kW of AC power.

Another way EV and PHEV can power onboard equipment is through an ePTO or electric power take-off which is essentially a battery-powered version of a PTO.

Table of Contents

Terex’s Corporation’s hybrid-electric system, HyPower, targets the utility industry, specifically aerial lift, bucket truck and digger derrick applications. According to the company’s website, it features a plug-in ePTO that harnesses stored energy from rechargeable batteries to power onboard equipment and export up to 3.8 kW of power for up to six hours before needing to be recharged.

Efficient Drivetrains, Inc. (“EDI”) develops and markets a range of PHEV and EV drivetrain systems. The drivetrain integrates with light, medium, or heavy duty vehicle designs. Their exportable power options provide 50 up to 120 kW of power for up to 12 hours. As noted in their website, the company recently introduced a Class 6 plug-in hybrid electric truck that exports as much as 160 kW of power.

We believe that EDI is one of the few companies that offers an option to export synchronized power that enables the vehicle to connect directly to the utility power grid.

According to their website, Electric Vehicles International, LLC, is developing a plug-in series hybrid truck that will have a 100 kW exportable power option.

Other companies use a vehicle's engine to charge on-board batteries, which then run the generator when the vehicle is stopped. While this eliminates idling, output tends to be less than 50 kilowatts (kW) and lithium-ion batteries typically power the system. The batteries have limited runtimes and a shorter lifespan than acid batteries. In addition, they must be cooled to operate properly.

Altec Inc. JEMS (Jobsite Energy Management System) is an integrated plug-in system that uses stored electrical energy to power equipment and provide up to 18.3 kW of exportable power, according to the company’s website.

Two companies dominate belt driven systems: Aura Systems, Inc. and Mobile Electric Power Solutions, Inc. ("MEPS"). Both systems use a vehicle's engine to power a generator and produce electricity whenever the engine is running. The interface to the vehicle is under the hood via a separate belt system. Both are very efficient, capable of delivering the rated power at or near the engine's idle revolutions per minute ("RPM").

MEPS uses the alternator to power a belt-driven system that provides up to 15 kW. Both companies provide clean power to operate sophisticated electronic equipment. MEPS delivers alternating current ("AC") power, whereas Aura Systems outputs both AC and direct current ("DC").

A variety of MEPS engine or transmission-based electrical power take-off systems also provide exportable power. They tend to output small amounts in the range of 7 kW of 110/220 volt power. MEPS is able to align two generators to double the output to 15 kW.

Our Mobile Generation system can also be used as a Level 2 charging unit for electric vehicles. ‘Levels’ indicate the charging power. The higher the level, the higher the power. More power equals shorter charging times. Level 2 is typically 240 volt AC current. It is compatible with most electric and plug-in hybrid vehicles. Depending on the battery technology, it takes about 4 to 6 hours to fully charge an electric vehicle. By utilizing the system’s telematics capability and its associated connection to the Internet, an MG retrofitted truck can be alerted by either the driver or the electric vehicle itself.

We currently intend to offer Level 3 charging which relies on 480 volt DC (direct current) power within a year. Most Level 3 chargers provide an 80% charge in 30 minutes. At that point, we believe that the system should become a viable and cost effective substitute for a standard charging station.

The only competition for mobile electric vehicle charging of which we are aware is Real Power, a division of Contour Hardening, Inc. Their self-contained system allows for Level 3 DC fast charging of compatible electric vehicles and uses a PTO driven generator.

Table of Contents

Some of our potential competitors are significantly larger than we are, have been in business much longer than we have, and have significantly more resources at their disposal and may be able to respond more quickly and efficiently to changes in the marketplace, whether as a result of technological, economic or customer requirements or preferences.

This also enhances their ability to obtain top engineering talent as well as sales representatives with strong industry ties. Plus, their greater market clout could effectively overwhelm our promotional and marketing efforts.

Equipment

As a company that intends to commercialize or license its proprietary technology for others to install, manufacture and/or distribute, our equipment needs are project specific and temporary. We do not intend to purchase any production equipment to implement our business operations, but instead we will rent, lease or outsource as needed.

Manufacturing

We do not plan to manufacture in-house. The Company plans to partner with manufacturers utilizing their assets and system integrators to up-fit our Mobile Generation technology. For our thermal technologies, the Company plans to rely on product development agreements with manufacturers who will then pay a license or royalty per unit. We anticipate that such agreements will delineate the respective intellectual property owned by both companies, describe the goal of the testing to verify the savings and value to a particular company, the equipment to be modified, the criteria that constitute successful testing, how and where the tests will be conducted and the next steps to be taken in the event of successful testing.

Suppliers

For mobile power generation, the required software and its vehicle integration will be supplied by Inverom Corporation along with partner truck up-fitters.

Production level quantities will be handled by KATO Engineering, a business unit of Nidec Corporation, with a backup of multiple other sources, if needed, such as Regal Beloit, Generac, etc. As for a supplier of our PPIG gearing

system, we have identified and are working with both North American and Asian partners. We hope to obtain the balance of the components from a number of other suppliers.

For the thermal technology applications in electric motors, Thermacore, Inc. will supply the heat pipes and mechanical structure, which combine to make the heat exchangers. We will coordinate with Thermacore to combine our thermal technology with Thermacore technology in the creation of heat exchangers.

For dry pit submersibles, we intend to purchase the wound stator and the rotor-shaft from Nidec Motor Corporation or other partner sources such as Baldor Electric, Regal Beloit and others. We intend to purchase the fully-machined castings from the Quality Castings Company, located in Orville, Ohio. We intend that these components will then be assembled and tested by Consulting Point, Inc. located in Brownsville, Texas or another partner assembler in the USA.

Intellectual Property

Our success depends in part on our ability to protect our technology and intellectual property. To accomplish this, we rely on a combination of patents, patent applications, trade secrets, copyright laws, trademarks, intellectual property licenses and other contractual rights to establish and protect our proprietary rights. Currently, we have no licenses or contractual rights in place to protect our technology and intellectual property, only patents or patents pending.

As of April 12, 2017, we own six US patents and have six patent applications pending in the area of composite heat structures, motors, and related structures, heat pipe architecture, applications and a parallel vehicle platform We also have a PCT application filed for a heat pipe-cooled brake system. In addition, we have applied for and received a trademark for an acronym for one of our technologies: "TEHPC".

Table of Contents

Our success will likely depend upon our ability to preserve our proprietary technologies and operate without infringing the proprietary rights of other parties. However, we may also rely on certain proprietary technologies and know-how that are not patentable.

We strive to protect such proprietary information, in part, by the use of confidentiality agreements with our employees, consultants and contractors. The Company has a policy of not disclosing its patent applications in order to protect the underlying technology.

The following table sets forth the patents we own or license which we believe support our technology.

Number		**Filing**	**Issue**	**Expiration**	
Patent	**Country**	**Date**	**Date**	**Date**	**Title**
8,283,818 B2	US	February 4, 2010	October 9, 2012	October 9, 2032	Electric Motor with Heat Pipes
8,134,260 B2	US	July 31, 2009	March 13, 2012	March 13, 2032	Electric Motor with Heat Pipes
8,148,858 B2	US	August 6, 2009	April 3, 2012	April 3, 2032	Totally Enclosed Heat Pipe Cooled Motor
8,198,770 B2	US	April 3, 2009	June 12, 2012	June 12, 2032	Heat Pipe Bearing Cooler Systems and Methods
7,569,955 B2	US	June 19, 2007	August 4, 2009	August 4, 2029	Electric Motor with Heat Pipes
9,543,809	US	February 25, 2014	January 10, 2017	January 10, 2017	Radial Vent Heat Pipes

Government and Industry Regulation

We intend to conduct business worldwide and, therefore, we must comply with local, state, federal, and international regulations, both in operations and for our products.

As a company, we do not plan to manufacture any of our products. Therefore, the government regulations we will be subject to will be limited to storage and involve rotating the shafts of stored electric motors on a regular basis.

Applicable laws and regulations include those governing, among other things, the handling, storage and transportation of materials and products as well as noise and employee safety.

In addition, some of our products are subject to various laws and regulations relating to, among other things, emissions and fuel requirements.

Accordingly, we may be required or may voluntarily determine to obtain approval of our products from one or more of the organizations engaged in regulating product or environmental safety. These approvals could require significant time and resources from our technical staff and, if redesign were necessary, could result in a delay in the introduction of our products in various markets and applications.

Although we believe that our operations and products are in material compliance with current applicable regulations noted within this section, there can be no assurance that changes in such laws and regulations will not impose costly compliance requirements on us or otherwise subject us to future liabilities. New regulations could also require our licensees to redesign their products which could cause us to redesign our technologies which, consequently, could affect market growth for our products.

As our thermal technologies are incorporated in existing motors, generators and other manufactured products that are already subject to regulation. The regulatory burden will fall on the original equipment manufacturers that license our technology.

Table of Contents

The Company intends to add a mobile power generation system to Class 3-5 work trucks. In addition to an existing generator incorporating our thermal technology, the stand-alone version of our auxiliary mobile power system will include a specialized gearing package, which connects the drive train to a generator that will be added on-board. We believe that the vehicle and drive train will operate normally in accordance with manufacturer's specifications and that no regulations will be violated or exceeded as well. Nonetheless, in some markets, the Company will have to certify that it meets federal, state or local noise and emission regulations.

Our designs comply with current EPA emission standards and we believe they will comply with future requirements.

No original vehicle parts will be significantly modified in the retrofitting process. There will be some additional parts (generator, gearing system, touchscreens, software, sensors and controls) added, but these parts will not change how the vehicle operates in any way. Although we will be adding a gearing package to connect the drive train to the generator, the rest of the drive train will operate according to the manufacturer's specifications. Therefore, we believe that the original warranty will remain in effect and we do not believe that the conversion will violate the Magnuson-Moss Act.

The Magnuson-Moss Warranty Act is a federal law that protects consumers by barring a vehicle manufacturer from voiding the warranty on a vehicle due to an aftermarket part unless the manufacturer can prove that the aftermarket part caused or contributed to the failure in the vehicle. It’s is likely the Company will warranty the Parallel Power Input Gearbox it has designed and commissioned . All of our other components (generator, human machine interface, software, controller/sensors) will be warranted by their respective manufacturers.

The Department of Transportation, National Highway Traffic Safety Administration ("NHTSA") is charged with writing and enforcing safety and fuel economy standards for motor vehicles through their Federal Motor Vehicle Safety Standards. These standards require manufacturers to design their electrically powered vehicles so that, in the event of a crash, the electrical energy storage, conversion, and traction systems are either electrically isolated from the vehicle's chassis or their voltage is below specified levels considered safe from electric shock hazards. Our planned no-idle version of our Mobile Generation system will be designed to meet or exceed these requirements.

In addition, the total weight of the additional components should remain within the vehicle's gross vehicle weight rating. As a result, we believe that our conversions will be in compliance with federal and state transportation regulations.

Most of our other components (motor, drive, controller/sensors) will be warranted by their respective manufacturers.

While we do not create and market our products around government subsidies and tax incentives, an MG truck equipped with a charger can provide a Level II charge to one or more electric vehicles. Our 200 kVA truck will enable Level III DC fast charging capability. Assuming the MG truck qualifies as a charging station.at least 26 states and a number of municipalities offer tax credits or rebates for electric vehicle charging stations.

If we fulfill all elements of our business plan, we will have to prepare for, understand and ultimately meet emerging product environmental regulations around the world. Our products will have to comply with the current emission standards that went into effect in the European Union in 2015. as well as the standards in other international markets, including Japan, Mexico, Australia, Brazil, Russia, India and China that are becoming more stringent.

Employees

As of April 12, 2017, we had three full time employees and no part time employees. We hope to hire additional employees, on an as-needed basis, subject to sufficient funding, as products and services are developed.

Research and Development

During the years 2016 and 2015, we incurred research and development costs of $251,722 and $824,711, respectively. Such costs were not borne directly by customers.

Table of Contents

Item 1A: Risk Factors

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

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties

The Company rents a virtual office, which it uses as its corporate headquarters for a monthly rent of $300. The office is located at 8875 Hidden River Parkway, Suite 300, Tampa, Florida 33637. We believe that currently this space is adequate. The Company rents a standalone commercial building located at 13800 US Highway 19 North, Clearwater, Florida 33764, which it uses as the headquarters for UPT, under a 36 month lease commencing July 1, 2014 for a monthly rent of $2,568. The lease is renewable by the Company for two additional 36- month terms, subject to rental adjustment.

Item 3. Legal Proceedings

U.S. District Court Action, District of Nevada

Effective May 1, 2015, we executed a First Amendment to Settlement Agreement (the "Amendment") with Spirit Bear and the parties identified as the assignees of Spirit Bear who are signatories to the Amendment, which amends certain provisions of the Settlement Agreement. In accordance with the terms of the Amendment, Jay Palmer, Carrie Dwyer and Donica Holt, the Spirit Bear holdover directors, tendered their resignations from the Board of Directors of the Company. Spirit Bear also agreed that it will no longer have any rights to appoint nominees to the Board of Directors. Pursuant to the Amendment, the Company agreed to file a registration statement on Form S-1 covering an aggregate of 14,845,072 shares of common stock, preferred stock and warrants on behalf of Spirit Bear and its assignees no later than July 15, 2015, which was filed with the SEC on July 15, 2015. A representative of Spirit Bear agreed that the obligation to register the shares on a Form S-1 need only include shares of common stock and shares of common stock issuable upon conversion of the Series A Stock and exercise of the warrants held by Spirit Bear and its assignees. The

Company agreed to issue replacement warrants for certain previously-issued warrants, which will be canceled in connection with the replacement issuance. Within 10 business days of June 1, 2015, the parties agreed to dismiss all of the pending litigation between and among them.

On August 28, 2015, the parties filed a Stipulation to dismiss the direct claims of the Company against Spirit Bear and of Spirit Bear against the Company in the Nevada Lawsuit. By Order dated September 1, 2015 and filed September 2, 2015, the Court ordered dismissal of all direct claims in the Nevada Lawsuit.

Additionally, on February 20, 2015, the Court issued its preliminary approval to the derivative action settlement agreement (the "DASA") which would lead to the ultimate dismissal of the derivative suit also filed by Spirit Bear in the same action. The Court scheduled a fairness hearing for November 20, 2015 to consider giving its final approval to the DASA. No shareholder filed any objections to the DASA by April 30, 2015 which was the deadline established by the Court for filing objections. However, on October 22, 2015, Peak Finance, LLC (“Peak”) filed a Motion to Intervene in the action seeking, among other things, approval to file a new derivative complaint in this matter. The Company opposed this Motion.

At the November 20, 2015 fairness hearing, the Court denied Peak’s Motion to Intervene. However, the Court did allow Peak Finance to formally argue its objections to the DASA. The Court ordered additional briefing on certain issues. The Court ordered another hearing to consider the DASA on April 1, 2016.

On April 1, 2016, Peak and the Company advised the Court that they had agreed in principle to a settlement that would include withdrawal of Peak’s objection to the DASA. On April 20, 2016, the parties filed a Stipulation and Proposed Order for Withdrawal of Objection to DASA which was granted by the Court on April 21, 2016. On May 3, 2016, the Court issued an Order which fully and finally approved the DASA and dismissed the case, with prejudice.

Table of Contents

Spirit Bear Ltd.

Effective May 1, 2015, we executed a First Amendment to Settlement Agreement (the "Amendment") with Spirit Bear and the parties identified as the assignees of Spirit Bear who are signatories to the Amendment, which amends certain provisions of the Settlement Agreement. In accordance with the terms of the Amendment, Jay Palmer, Carrie Dwyer and Donica Holt, the Spirit Bear holdover directors, tendered their resignation from the Board of Directors of the Company. Spirit Bear also agreed that it will no longer have any rights to appoint nominees to the Board of Directors. Pursuant to the Amendment, the Company agreed to file a registration statement on Form S-1 covering an aggregate of 14,845,072 shares of common stock, preferred stock and warrants on behalf of Spirit Bear and its assignees no later than July 15, 2015, which was filed with the SEC on July 15, 2015. A representative of Spirit Bear agreed that the obligation to register the shares on a Form S-1 need only include shares of common stock and shares of common stock issuable upon conversion of the Series A Stock and exercise of the warrants held by Spirit Bear and its assignees. The Company agreed to issue replacement warrants for certain previously-issued warrants, which will be canceled in connection with the replacement issuance. Within 10 business days of June 1, 2015, the parties agreed to dismiss all of the pending litigation between and among them.

On August 28, 2015, the parties filed a stipulation to dismiss the direct claims of the Company against Spirit Bear and of Spirit Bear against the Company in the Nevada Lawsuit. By order dated September 1, 2015, and filed September 2, 2015, the court ordered dismissal of all direct claims in the Nevada Lawsuit.

Additionally, on February 20, 2015, the Court issued its preliminary approval to the derivative action settlement agreement (the “DASA’), which would lead to the ultimate dismissal of the derivative suit also filed by Spirit Bear in the same action. The Court has scheduled a fairness hearing for November 20, 2015, to consider giving its final approval to the DASA. No shareholder filed any objections to the DASA by April 30, 2015, which was the deadline established by the Court for filing objections. On October 22, 2015, however, Peak Finance, LLC (“Peak Finance”) filed a Motion to Intervene in the action seeking, among other things, approval to file a new derivative Complaint in this matter. The Company has opposed this Motion.

At the November 20, 2015 fairness hearing, the Court denied Peak Finance’s Motion to Intervene. However, the Court did allow Peak Finance to formally argue its objections to the DASA. The Court ordered additional briefing on certain issues which has now been completed. The Court further ordered another hearing to consider the DASA on April 1, 2016.

On April 1, 2016, Peak Finance and the Company advised the Court that they had agreed in principle to a settlement that would include withdrawal of Peak Finance’s objection to the DASA. On April 20, 2016, the parties filed a Stipulation and Proposed Order for Withdrawal of Objection to DASA which was granted by the Court on April 21, 2016. On May 3, 2016, the Court issued an Order which fully and finally approved the DASA and dismissed the case,

with prejudice.

On November 4, 2016, Spirit Bear agreed to the withdrawal of the registration statement in exchange for confirmation that the warrants owned by Spirit Bear and its associate which were subject to a separate court action shall not expire even if the court action continued beyond the warrants' initial expiration date. The registration had not been declared effective by the SEC and the Company filed a request to withdraw the Registration Statement on November 14, 2016.

SEC Subpoena

On September 18, 2013, separate and distinct from the settlement of the lawsuit discussed above, the Securities and Exchange Commission served the Company with a subpoena entitled In the Matter of HPEV, Inc. The subpoena requested documents relating to several matters, including Spirit Bear, Robert Olins and all of their respective affiliates. The company has not heard anything further concerning the investigation.

Table of Contents

U.S. District Court, District of Nevada

On August 31, 2015, the Company received notice of a summons in the matter styled Peak Finance, LLC, Derivatively on Behalf of Nominal Defendant, HPEV, Inc. v. Hassett, et al., No. 2:15-cv-01590-GMN-CWH, filed in the United States District Court for the District of Nevada (the "Peak Finance Claim"). Plaintiff Peak Finance, LLC ("Peak Finance") alleges that certain members of the Company's Board of Directors and officers caused a misleading proxy statement to issue and breached alleged fiduciary duties from and after June 18, 2013. Peak Finance further alleges that its claim is related to the Spirit Bear Lawsuit described above. The Company has not determined that there is any merit to the allegations, and has decided to submit the claims to an Independent Director Committee consisting of Directors Christopher McKee, Richard J. "Dick" Schul, and Donald Bowman for their review and consideration. Additionally, on September 28, 2015, the Company filed a motion to dismiss the initial Complaint filed by Peak Finance. On October 22, 2015, rather than oppose the motion to dismiss, Peak Finance filed an amended complaint in this case in addition to the Motion to Intervene in the pending Spirit Bear litigation set forth above. On November 9, 2015, the Company filed a new motion to dismiss the first amended complaint filed by Peak Finance on October 22, 2015. No hearing is presently scheduled on this motion to dismiss.

On April 20, 2016, the parties filed a Stipulation and [Proposed] Order Regarding Settlement. This Stipulation sought the Court's preliminary approval of a settlement agreement negotiated between the parties ("Settlement Agreement") which, if fully and finally approved by the Court, would lead to the dismissal of this action. By Order dated May 18, 2016, the Court, subject to receipt and consideration of any objections filed by non-party shareholders, preliminarily approved the proposed Settlement Agreement. The Court further set a deadline of July 29, 2016 for filing objections to the Settlement Agreement. No objections to the Settlement Agreement were filed by July 29, 2016. The parties intend on filing a stipulation seeking final approval of the Settlement Agreement and dismissal of the case as soon as practicable.

On October 11, 2016, the United States District Court, District of Nevada orally approved the derivative action settlement agreement ("Peak Settlement Agreement") reached in Peak Finance, LLC v. Timothy J. Hassett et. al., Case No. 2:15-cv-01590-GMN-CWH. Noting that no non-party shareholder filed any objections to the Peak Settlement Agreement, the District Court specifically found that it is "fundamentally fair, reasonable and adequate" and serves the best interest of the Company. The Court further directed that counsel for the parties prepare a proposed formal written order finally approving the Peak Settlement Agreement and dismissing the case.

On October 20, 2016, the Derivative Action Settlement Agreement was formally approved and the case was formally dismissed with prejudice.

Subsequent to the dismissal, an Independent Directors Committee consisting of directors Christopher McKee, Richard J. "Dick" Schul and Donald Bowman reviewed the allegations made by Peak Finance, LLC to determine a proper

corporate response. On December 6, 2016, a quorum of the members of the Independent Directors Committee met with Peak Finance, LLC in New York City, in order to fulfill the judges' final orders. No further action is required by the Company in this matter.

On October 7, 2016, the Company received a complaint, Wang et al v. Cool Technologies, Inc. et al, filed on July 28, 2016 in the U.S. District Court for the Eastern District of New York (Brooklyn) Civil docket #1:16CV04101RRMPK against the Company and Timothy Hassett, the Company's Chief Executive Office alleging damages of $1,100,000 for breach of contract for failing to register shares sold to the Plaintiffs in February and March 2014. The Company is contesting the suit and has filed motions to dismiss.

Item 4. Mine Safety Disclosures

Not applicable.

Table of Contents

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Market Information

Our common stock was quoted on the OTC Bulletin Board from July 30, 2009 to March 26, 2010 under the symbol BIBB. Prior to September 2010, there was no active market for our common stock. Our common stock is currently quoted on the OTCQB under the trading symbol WARM.

The following table sets forth the high and low sales prices as reported on the OTCQB. The quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission, and may not represent actual transactions.

Quarter Ended	High	Low
March 31, 2016	$ 0.53	$ 0.16
June 30, 2016	$ 0.30	$ 0.08
September 30, 2016	$ 0.18	$ 0.02
December 31, 2016	$ 0.17	$ 0.09
March 31, 2015	$ 0.74	$ 0.46
June 30, 2015	$ 0.58	$ 0.37
September 30, 2015	$ 0.43	$ 0.17
December 31, 2015	$ 0.30	$ 0.10

The last reported sales price of our common stock on the OTCQB on April 12, 2017, was $0.24.

As of April 12, 2017, there were 212 stockholders of record of our common stock..

Dividend Policy

The Company has never paid dividends on its common stock and does not anticipate that it will pay dividends in the foreseeable future. It intends to use any future earnings for the expansion of its business. Any future determination of applicable dividends will be made at the discretion of the board of directors and will depend on the results of operations, financial condition, capital requirements and other factors deemed relevant.

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides information regarding our equity compensation plans as of December 31, 2016:

Equity Compensation Plan Information

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	--	--	--
Equity compensation plans not approved by security holders	7,474,090(1)	$ 1.28	--

(1) Represents (i) options to purchase 1,000,000 shares of common stock at $2.00 per share to each of Timothy Hassett and Mark Hodowanec; (ii) options to purchase 2,000,000 shares of common stock at $2.00 per share to Judson Bibb; and (iii) warrants to purchase 3,474,090 shares of common stock as set forth in Note 7 to the financial statements under Item 8 of this Annual Report on Form 10-K.

Table of Contents

Recent Sales of Unregistered Securities

On October 7, 2016, we issued 4,304,229 shares of our common stock upon partial conversion of a warrant originally issued in connection with $400,000 of principal and interest of convertible debt.

On October 7, 2016, we issued 5,469,113 shares of our common stock upon partial conversion of a warrant originally issued in connection with $400,000 of principal and interest of convertible debt

On November 7, 2016, we sold 100,000 shares and a three-year warrant to purchase 100,000 shares of our common stock at an exercise price of $0.07, to an accredited investor in a private offering. We received $5,500 as consideration for the sale of such securities. The warrant may be exercised on a cashless basis.

On November 10, 2016, we issued 800,000 shares of common stock to Gemini Master Fund, Ltd and 200,000 shares of common stock to Black Mountain Equities, Inc. in connection with the sale of promissory notes in the principal amounts of $180,000 and $45,000, respectively.

On November 14, 2016, pursuant to the issuance of a convertible promissory note for $110,000, we issued 350,000 shares of common stock as inducement shares to Lucas Hoppel.

On November 30, 2016, we issued 147,393 shares of our common stock upon conversion of principal and interest of convertible debt of $10,490.73 to Tangiers Global, LLC..

On November 7, 2016, we issued 300,000 shares of our common stock to Spirit Bear upon conversion of 6 shares of our Series A convertible preferred stock (“Series A Stock”)

On December 23, 2016, we sold 650,000 shares of our common stock and a five-year warrant to purchase 650,000 shares of our common stock at an exercise price of $0.12 and a five-year warrant to purchase 650,000 shares of our common stock at an exercise price of $0.15 to an accredited investor in a private offering. We received $65,000 as consideration for the sale.

On December 30, 2016, we issued 50,000 shares of our common stock and a five-year warrant to purchase 50,000 shares of our common stock at an exercise price of $0.16 to Christian Pacetti in exchange for partial payment of an outstanding invoice for services provided to the Company.

On December 30, 2016, we issued a three- year warrant to purchase 100,000 shares of our common stock at an exercise price of $0.01 per share to a consultant for accounting services provided to the Company.

On January 17, 2017, we issued 800,000 shares of common stock to Sprit Bear upon the conversion of 16 shares of our Series A Stock.

On February 8, 2017, we issued 34,076 shares of our common stock upon conversion of interest on convertible debt of $54,650 by Tangiers Global, LLC.

On February 9, 2017, pursuant to the issuance of a convertible promissory note for $110,000, we issued 200,000 shares of common stock as inducement shares to Lucas Hoppel.

On February 16, 2017, we issued 1,250,000 shares of our common stock to Bellridge Capital LP as a commitment fee for a $5,000,000 Equity Line of Credit.

On March 14, 2017, we issued 200,000 shares of our common stock to Bellridge Capital LP as a commitment fee for a 5% Convertible Note.

On March 20, 2017, we issued 750,000 shares of common stock to Spirit Bear upon the conversion of 15 shares of our Series A Stock .

Table of Contents

On April 6, 2017, we issued 600,000 shares of common stock to Sprit Bear upon the conversion of 12 shares of our Series A Stock.

On April 6, 2017, pursuant to the issuance of a convertible promissory note for $165,000, we issued 300,000 shares of common stock as inducement shares to Lucas Hoppel.

None of the above issuances involved any underwriters, underwriting discounts or commissions, or any public offering and we believe are exempt from the registration requirements of the Securities Act of 1933 by virtue of Section 4(2) thereof and/or Regulation D promulgated thereunder.

Item 6. Selected Financial Data

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

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Our Management's Discussion and Analysis contains not only statements that are historical facts, but also statements that are forward-looking. Forward-looking statements are, by their very nature, uncertain and risky. These risks and uncertainties include international, national and local general economic and market conditions; demographic changes; our ability to sustain, manage, or forecast growth; our ability to successfully make and integrate acquisitions; raw material costs and availability; new product development and introduction; existing government regulations and changes in, or the failure to comply with, government regulations; adverse publicity; competition; the loss of significant customers or suppliers; fluctuations and difficulty in forecasting operating results; changes in business strategy or development plans; business disruptions; the ability to attract and retain qualified personnel; the ability to protect technology; and other risks that might be detailed from time to time in our filings with the SEC.

Because forward-looking statements are inherently subject to risks and uncertainties, the actual results and outcomes may differ materially from the results and outcomes discussed in the forward-looking statements. The following discussion and analysis of financial condition and results of operations of the Company is based upon, and should be read in conjunction with, the audited financial statements and related notes elsewhere in this Annual Report on Form 10-K.

We opened our UPT headquarters in Largo, Florida in May 2014. We use the facility to perform research and development for our mobile generator business and it will serve as a