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

FORM 10-K

Annual report under Section 13 or 15(d) of the Securities Exchange Act of 1934

For the fiscal year ended December 31, 2015;

or

Transition report under Section 13 or 15(d) of the Securities Exchange Act of 1934

COMMISSION FILE NO. 1-11602

PEN Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State of Incorporation)

47-1598792
(IRS Employer Identification Number)

701 Brickell Ave., Suite 1550, Miami, Florida 33131
(Address of principal executive office, including Zip Code)

Registrant's telephone number, including area code: **(844) 273-6462**

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

Title of each class	Name of Each Exchange on Which Registered
Class A Common Stock, \$0.0001 par value	OTCQB

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

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

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

Indicate by check mark whether the registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the past 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 and posted on its corporate website, 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 No

Indicate by check mark if disclosure of delinquent filers in response to Item 405 of Regulation S-K is not contained in this form 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.

Large Accelerated Filer
Non-accelerated Filer

Accelerated Filer
Smaller Reporting Company

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

The aggregate market value of the Common Stock held by non-affiliates of the Registrant, based upon the average of the closing bid and asked price of the Common Stock on the OTCQB system on June 30, 2015 of \$0.032, was approximately \$7.2 million.

As of March 30, 2016, the registrant had 1,378,312 shares of Class A Common Stock, 1,396,302 shares of Class B Common Stock, and 262,631 shares of Class Z Common Stock issued and outstanding.

Documents Incorporated by Reference

No documents are incorporated by reference into this annual report on Form 10-K

PEN INC.
FORM 10-K
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PART I

Item 1. Business

PEN's primary business is the marketing and sale of products enabled by nanotechnology. We develop and sell products based on our portfolio of intellectual property. Our current products are a portfolio of nano-layer coatings, nano-based cleaners, printable inks and pastes, and thermal management materials. Additionally, we conduct research and development services for governmental and private customers.

Our principal operating segments coincide with our different business activities and types of products sold. This is consistent with our internal reporting structure. Our two reportable segments for the years ended December 31, 2015 and 2014 were (i) the Product Segment (which we formerly called the Nanofilm segment) and (ii) the Research and Development Segment.

Product Segment

Revenue is based on the successful development of specialty products utilizing nanotechnology to deliver unique performance attributes at the surfaces of a wide variety of substrates. Our products are sold in liquid form enabling application by a number of common commercial techniques and in some instances also as wet and dry towelettes. We rely on intellectual property and or trade secret formulations to protect our proprietary technology.

We have three broad product technology platforms that offer solutions to some common problems such as ease of cleaning, preventing fogging, preventing accumulation of dirt or grime, improving resistance to scuffing and wear. All our products have some "nano" characteristic about them – whether it is being active at the molecular level, incorporation of submicron-particles, or creating very thin, self-assembling coatings that are 20 nanometers or less in thickness.

One line of commercial products center on our customized optical and eyewear cleaning and de-fogging treatments. Another is a family of coating liquids that create very thin, strongly-bound, clear coatings on surfaces used for glass and ceramic surfaces. The third product family is series of clear coatings for plastics incorporating submicron size particles to improve abrasion resistance and wear resistance without sacrificing transparency. Our goal continues to be to create segment leading brands through sales of high quality consumer products, and by developing and producing customized formulas for sale to strategic, industrial partners to be incorporated into their customer's products. We manufacture our formulations internally to protect our technology and maintain the highest quality for the products that we and our commercial partners bring to the marketplace.

Our products encompass:

- Liquid and towelette formulations packaged in many formats for retail sale to consumers for eyeglass and sunglass lens cleaning and protection.
- Anti-fogging liquid and towelette formulations packaged for retail sale to consumers for safety glasses, protective eye wear including face shields, and sporting goggles.
- Anti-fogging towelettes for sale to the military for safety, anti-fogging and conditioning of lenses, masks, head gear and other applications such as head's up displays,
- Mar resistant and stain resistant coatings for high end vitreous china tableware used for heavy duty, usage situations such as restaurants, cruise ships, casinos.
- Clear protective coatings used on display panels and touch screens to make it easy to remove fingerprints. Applications include automotive and hand held devices.
- Protective and water repelling coatings on interior glass – decorated glass panels, shower doors to make it easy to clean and prevent scale and grime encrustation.
- Coatings for ceramic insulators used in transit and underground subways systems to prevent caking of metal dust and greases on surfaces to reduce maintenance and current leakage losses.

New products under development include products targeted to our current customer base in the optical, transportation, military, sports, and safety industries.

Separate from our historical business, we are also focused on creating products enabled by nanotechnology that tackle and solve big, global problems in growing markets. We have three primary areas of new product focus:

1. Health: Treating or printing of surfaces at the nano-scale to promote health, fight the spread of disease, and assist in the arms race against super bugs;
2. Safety: “Smelling” at the nano-scale level to identify hazardous condition, alert those in danger, and initiate steps to prevent catastrophe; and
3. Sustainability: Creating nano-scale devices and formulas using the minimal amounts of safe, natural ingredients and manufacturing methods, and avoiding using harsh chemicals and pesticides, whenever possible.

The first new product is expected to be part of a family of cleaning products that protect and fortify surfaces at the nanoscale-level. The patent-pending product is a spray that penetrates and fortifies the surface. This surface fortifier is safe for use on many surfaces, both natural and man-made. After application, the product continues to fortify and protect, creating a healthy surface.

Our product is made with safe ingredients and does not use harsh chemicals or disinfectants. We start with a natural mineral that is milled and engineered into a smaller shape and size. Then, the milled mineral is mixed with a proprietary cleaner solution to create our product. The mineral chosen is stable in air and water. No governmental approvals are required for sale of this product. The product:

- Rids surface of dust, dirt and debris;
- Leaves a healthy surface;
- Is safe to use;
- Will continue to work while on the surface;
- Is fast acting;
- Is non-corrosive;
- Is easy to apply;
- Is non-flammable;
- Is environmentally-friendly;
- Is odor-free; and
- Is stain-free.

We believe that our manufacturing capacity and contractors with whom we have established relationships will enable us to fill orders for the early sales. Ingredients and packaging materials are readily available from a number of suppliers. As sales increase, we will need to expand manufacturing, but we believe there are sufficient subcontractors that manufacturing will not be a problem.

Marketing and Distribution

We sell our current products directly to retailers in the United States and internationally, including manufacturers who utilize product formulations in their own branded products. For our new products to our traditional customer base, and for certain customers or market segments, we rely on outside sales agents or distributors.

Manufacturing Operations

Most of our manufacturing is done at our 50,000 square foot facility in Valley View, Ohio. Additional manufacturing, packaging and assembly is done by third-party contract manufacturers in the United States, India and Taiwan.

Intellectual Property and Proprietary Rights

Our nanotechnology expertise and related intellectual property used in our current products is specialized in the areas of surface science, molecular self-assembly, transparent composites, and surfactants. The intellectual property developed from this work is protected with a combination of selective patents and primarily by trade secrets. This intellectual property strategy is similar to that used by leading companies in the fragrance and flavors industry. We have twenty four issued patents and two pending patent applications. No single patent is significant to any of our products.

Competition

Products sold into the optical segment and the eyewear cleaning segments have a small number of significant competitors. Our products are known to be the “benchmark” products in these segments and generally outperform our competitors’. Some of our products in these segments do compete for certain customers or certain applications against lower priced, traditional materials. Most of the companies selling products into these market segments are privately-held, U.S. packaging or catalog companies. Examples in the U.S. are include Hilco Accessories, California Accessories, and Amcon Laboratories and, internationally, the catalog company, Prosbien, Inc., from the Peoples Republic of China. In the nano-coating products area or the anti-fog product line we are not aware of any competitive products that match our product performance or processing characteristics.

Backlog

Sales are primarily pursuant to purchase orders for delivery of products. We do not believe that a backlog as of any particular date is indicative of future results. Some agreements give customers the right to purchase a specific quantity of products during a specified time period, but these agreements do not obligate the customers to purchase any minimum quantity. The quantities actually purchased by the customer, as well as the shipment schedules, are frequently revised during the agreement term to reflect changes in the customer’s needs. Because of our relatively small size, a customer’s delay of a product shipment can make a difference in the results for a particular accounting period. For these reasons we do not believe that these agreements are meaningful for determining backlog amounts.

Geographical Information

All long-lived assets are located in the United States.

Sources and availability of raw materials and the names of principal suppliers

We use third-party suppliers and contract manufacturers in the United States to obtain substantially all of our raw materials, components and packaging products. Over time, one unrelated third party has become our leading supplier in the United States. As is customary in our industry, historically we have not had long-term or exclusive agreements with third-party suppliers or contract manufacturers and have generally made purchases through purchase orders. We believe that we have good relationships with our suppliers and manufacturers and that there are alternative sources should one or more of these suppliers or manufacturers become unavailable. However, the disruption of our operations if a change becomes necessary and the likelihood of shipment delays means that the loss of, or a significant adverse change in our relationship with, any of our key suppliers or manufacturers, or any other supply change disruptions could have a material adverse effect on our business, prospects, results of operations, financial condition or cash flows.

Key Customers

A limited number of key customers account for a substantial portion of our commercial revenue. In particular, revenues from two customers constituted approximately 28% and 11% respectively, of 2015 total revenue. Revenues from three customers constituted approximately 24 %, 16% and 10% respectively, of 2014 total revenue. Many of our customers are significantly larger than we are and, therefore, may be able to exert a high degree of influence over us. The loss of one of the largest customers or the failure to attract new customers could have a material adverse effect on our business, results of operations and financial condition.

Research and Development Segment

We are a global leader in nanotechnology research and development and this segment focuses on generating revenues through performing research services. Our nanotechnology research is aimed at solving problems at the molecular level - working with the basic properties of matter to create new and improved materials and technologies. We do both research and development, including proof of concepts and prototypes, for proposed PEN products and research and development under contract for government and private entities. In our work on products for PEN we focus on using only the submicron size particles, not smaller nanoparticles that are subject to much greater government regulation. Our work generally falls under one of three technology platforms:

- Nanosensor technology;
- Nanoelectronics; and
- Submicron particle formulations and materials for health and safety products.

We continue to focus on stabilizing our financial situation and operating this segment at break-even or better based solely on revenues from our research activities.

Since development of intellectual property has been a critical part of our strategy, before starting on, or accepting, a project, we analyze the potential to develop intellectual property. Following the Combination, an additional filter has been added and we also consider how the proposed research may tie in to existing products and manufacturing expertise in our Product Segment or to other potential, new products that we may choose to develop.

Much of our contract research is done under government contracts. Government contracts frequently limit profit on work done. With private research contracts there is a relationship between revenues received under the contract and rights granted to the licensee under the contract. Since a critical component of any research contract is for us to retain intellectual property rights, we must contribute to the overall cost of the project. Our goal on private research contracts is, at a minimum, to cover all out of pocket costs and contribute to our overall overhead.

In commercializing our technology, because of limited resources, we historically focused on licensing our technology to others. Our research partners frequently have licensing rights as a result of the research that they funded, and upon completion of the work, they will license the technology for specific applications. Following the Combination we are more focused on developing products that we can sell. We expect that licensing considerations will be less important for new contract research in the future. If we conclude that we are not in a good position to commercialize products from a particular part of our intellectual property portfolio, we may seek to realize value for that intellectual property by license arrangements or the sale of that intellectual property.

We have had small scale success with commercial sales of conductive inks and pastes and from thermal management materials. We expect to work to increase sales of those products as our resources permit.

Nanoelectronics Applications – Inks and Pastes

Metallic Inks & Pastes

Copper Inks - As a result of the move towards flexible electronics, soldering is disappearing. New digital processes allow industries to move from the design process directly to the production line. We believe that at this time, only submicron particles are capable of producing inks that are compatible with the nozzles used in digital printing.

We have had a long-standing relationship with Ishihara Chemical Company, Ltd., a leading industrial chemical products company headquartered in Japan, to develop conductive inks that can be deposited using an additive process such as ink-jet printing, aerosol-jet printing or screen printing. Our work with Ishihara started in early 2006 and in past years, we received over \$2.5 million in research funding from Ishihara and a \$1.5 million up-front license payment. Because of Ishihara's heavy financial commitment to the project, all intellectual property generated by the project is jointly owned by ANI and Ishihara and the license agreement signed in 2009 gave Ishihara the exclusive right to use this technology. Ishihara can choose to give up this exclusivity at any time. Ishihara may introduce a product at some point in the future. We may at some point in the future receive royalties of up to 4% on Ishihara product sales. If, however, Ishihara chooses to give up its exclusivity, it will owe no future royalties.

Other metallic inks - After our initial work in copper, we expanded our work with conductive inks to include nickel, silver, aluminum, and other inks, as well as conductive pastes. In particular, we have developed aluminum and silver inks and pastes that can improve the production of solar cells. We have also developed a highly efficient aluminum paste that can be used in solar cell production.

In 2014 we amended, agreements with our former licensee Sichuan Anxian Yinhee Construction and Chemical Company ("YHCC"), transferring certain solar-ink-related patents to an affiliate of YHCC and receiving back a royalty free license to use the patents in fields other than solar applications.

There are silver inks on the market today, but because of the high cost of silver relative to copper, a successful copper ink is likely to be of greater commercial interest to potential customers. Most inks and pastes sold today are manufactured and sold by large multinational chemical companies. For example, the two largest suppliers of inks and pastes for solar cell production are DuPont and Ferro. We are unable to compete directly with companies of that size in established markets.

Technical Inks Printing Solution (TIPS)

Conductive inks have the potential to revolutionize many types of electronics manufacturing. Our strategy is to provide a comprehensive solution for end users not just by developing inks, but assisting in the process from start to finish. We call this our Technical Inks Printing Solution. We have done extensive research on the raw materials (submicron particles) and developed relationships with suppliers that allow us to supply a variety of submicron particles. In addition, we have studied a variety of potential end user products to help develop specifications for the inks. We have also formed relationships with hardware manufacturers with the goal of providing seamless integration into high volume manufacturing for companies wishing to use conductive inks in their manufacturing processes. In addition to traditional 2D printing applications, we developed a multifunctional copper ink for 3D printing applications, the fastest growing segment of printed electronics.

Numerous other companies are working with other technologies for the commercial use of conductive inks and pastes. The commercialization of products using our technology depends on the results of our research compared with results achieved by others, as well as other factors including raw material costs, marketing, resources, and production capabilities.

Sensors

Our approach to sensor technology offers the unique advantage of recognizing and sometimes measuring materials at the molecular level. We are pursuing multiple technology platforms to address specific market needs. Our competition in the sensor area will come from a variety of technologies and companies depending on the purpose and use of the sensor. The areas where we are currently active are:

Ion Mobility Sensors. We are currently developing sensors based on Ion Mobility Sensor (“IMS”) technology focusing on Differential Mobility Spectroscopy (“DMS”). These sensors are ideal for use when both high sensitivity and high selectivity (low false positives) are required. We have also improved on existing IMS and DMS technology by developing our proprietary nonradioactive gas ionization sources to replace the radioactive isotopes that are currently used in these tools. We are currently involved in projects to develop highly sensitive Mercaptan and Methane sensors for use in the natural gas industry under funding from the Northeast Gas Association, and sensors for detection of citrus greening disease under funding from the California Citrus Research Board and the U.S. Department of Agriculture (“USDA”).

We have also applied this technology to other applications including other agricultural pathology areas, wound care, and breath analysis. For example, we have received National Institute of Health (“NIH”) funding to develop technology for early detection of pressure ulcers (aka bed sores) in collaboration with the University of California – Davis. We are also funded by the NIH to develop a breath analyzer for detecting alcoholic hepatitis in collaboration with Cleveland Clinic. The U.S. Army funded work to identify pollen based on odor analysis for forensic applications. We also received funding from the USDA for developing rapid tests for food safety.

Hydrogen Sensors. These sensors were initially targeted for use in fuel cells for automobiles and for remote monitoring of large power transformers. We developed a hydrogen sensor for use in the measurement of hydrogen in power transformer products. We may explore options to realize the value of this sensor technology by sale or license to third parties.

Carbon Monoxide Sensors. We have developed a low-power carbon monoxide sensor that can last for 10,000 hours on a single battery. The sensor will be specific to carbon monoxide with no cross sensitivity to other gases and elements and is also easily portable and highly sensitive.

Submicron Particle Formulations and Materials for Health and Safety Applications

Our work in the health and safety area builds on our understanding of certain compounds from our extensive work related to inks and pastes. The understanding of the chemistry of these particles and their interaction with surfactants and other solutions was combined with research and development work done for products already sold commercially resulted in new product concepts and materials with superior properties for applications in the field of health and safety. Using our experience with metallic inks and our prior work with carbon nanotube composites we developed a new thin carbon foil made of layers of graphene for use in cyclotron accelerators that produce nuclear pharmaceuticals used by the medical field in Positron Emission Tomography(PET) imaging

Intellectual Property Rights

An important part of our overall business and product development strategy is to protect our intellectual property and we seek, when appropriate, protection for our products and proprietary technology through the use of patents. Historically, we made filings in the United States and selected foreign jurisdictions. Beginning in 2014, as a cost saving measure, we became much more selective in filing patents and in the jurisdictions where we act to protect our rights with respect to work that is less likely to result in products that we can sell ourselves. Still, our patent portfolio consists of approximately 75 patents, including issued patents and patent applications pending before foreign and United States Patent and Trademark Offices. Trade secret protection is also important to our products.

The patenting of technology-related products and processes involves uncertain and complex legal and factual questions. The legal standards change from time to time, and administrative and court interpretations are not always consistent in one jurisdiction, or across different jurisdictions. Therefore, there is no assurance that our pending United States and foreign applications will issue, or what scope of protection any issued patents will provide, or whether any such patents ultimately will be upheld as valid by a court of competent jurisdiction in the event of a legal challenge. Interference proceedings, to determine priority of invention, also could arise in any of our pending patent applications. The costs of such proceedings would be significant and an unfavorable outcome could result in the loss of rights to the invention at issue in the proceedings. If we fail to obtain patents, and are required to rely on unpatented proprietary technology, there is no assurance that we can protect our rights in such unpatented proprietary technology, or that others will not independently develop substantially equivalent proprietary products and techniques, or otherwise gain access to our proprietary technology.

Competitors have filed applications for, or have been issued patents, and may obtain additional patents and proprietary rights relating to products or processes used in, necessary to, competitive with, or otherwise related to, our patents. The scope and validity of these patents, and the extent to which we may be required to obtain licenses under these patents or under other proprietary rights and the cost and availability of licenses is unknown. This may limit our ability to use and to license our technology. Litigation concerning these or other patents could be protracted and expensive. If suit were brought against us for patent infringement, a challenge in the suit by us as to the validity of the other patent would have to overcome a legal presumption of validity. There can be no assurance that the validity of the patent would not be upheld by the court or that, in such event, a license of the patent to us would be available. Moreover, even if a license were available, the payments that would be required are unknown and could materially reduce the value of our interest in the affected products. We do, however, consider our patents to be very strong and defensible in any action that may be brought against us.

We also rely upon unpatented trade secrets. No assurance can be given that others will not independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets or disclose such technology or that we can meaningfully protect our rights to our unpatented trade secrets.

We require our employees, directors, consultants, outside scientific collaborators, sponsored researchers, and other advisors to execute confidentiality agreements upon the commencement of employment or consulting relationships with us. These agreements provide that all confidential information developed or made known to the individual during the course of the relationship is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and some consultants, the agreements provide that all inventions conceived by the individual while working for us will be our property. There is no assurance, however, that these agreements will provide sufficient protection for our trade secrets in the event of unauthorized use or disclosure of such information.

Government Contracts

A portion of our revenue consists of reimbursement of expenditures under U.S. government contracts. We recognized \$1,187,994 of revenue from government contracts during the year ended December 31, 2015. These reimbursements represent all or a portion of the costs associated with such contracts. As of December 31, 2015, we have several government contracts in process that have approximately \$928,200 of revenue yet to be recognized. Government contracts are subject to delays and risk of cancellation. Also, government contractors generally are subject to various kinds of audits and investigations by government agencies. These audits and investigations involve review of a contractor's performance on its contracts, as well as its pricing practices, the costs it incurs and its compliance with all applicable laws, regulations and standards. We have been audited by the government, with no material changes, and in the future we expect to be audited by the government; however we expect the results of any government audits to have an insignificant effect on our operations and our financial statements.

Research and Development

Research and development activity is the driver of our new product development and improvement of existing products. For the years ended December 31, 2015 and 2014 research and development costs incurred in the development of the Company's products were \$ 744,346 and \$607,049 respectively. This represents approximately 15% and 13% of our total operating costs in each of those years (prior to an impairment loss in 2015 and 2014). The ability to engineer product performance using nanotechnology is one of the ways we distinguish our products in marketing and sales of our products. Research and development work includes development and refinement of formulas, engineering of liquid formulas that can be applied both by hand and by machine, optimization for a variety of performance characteristics, testing and characterization, and work on manufacturing processes and techniques both for producing the product, and for a customer's use of the product. As we continued to reduce our costs in 2015, we eliminated some unfunded research and development cost.

Much of our intellectual property and contract research relates to potential next-generation technologies. Significant additional development work is required before products can be commercialized using these technologies. Since the Combination we have started to analyze which areas in our intellectual property portfolio have a greater, near term potential to be commercialized and whether we, or others, are best suited to do so. That analysis is ongoing.

Compliance with Environmental Laws

Our products and manufacturing and research operations must satisfy governmental safety standards. Applicable safety standards are established by the U.S. Occupational Safety and Health Administration (“OSHA”), pollution control standards by the U.S. Environmental Protection Agency (“EPA”) and other state and local regulations, including foreign regulation for products manufactured or shipped outside the U.S. Some of our research work, and products developed may also be subject to regulation under the Radiation Control for Health and Safety Act administered by the Center for Devices and Radiological Health (“CDRH”) of the U.S. Food and Drug Administration. We take these requirements into account in product development. Cost of compliance with these regulations has not been significant in the past and we do not expect it to be material in the future.

OSHA, the EPA, the CDRH and other governmental agencies, both in the United States, the states where we or our customers sell products, and foreign countries, may adopt additional rules and regulations that may affect us and products using our technology. The cost of compliance with these regulations has not been significant to us in the past and is not expected to be material in the future. Changing regulations can affect our customers, and we have in the past, and may be required in the future, to reformulate or change packaging to address regulatory issues. This can affect timing of sales which may be significant in a particular accounting period.

Employees

As of December 31, 2015 we had 38 full-time employees, plus 3 executive officers. At the present time, we do not anticipate the need to hire significant additional employees to support our existing business. If product sales increase, or we begin to see commercial sales of new products, we may hire additional employees. We are not subject to any collective bargaining agreements, and we consider our relations with our employees to be good.

ITEM 1A. RISK FACTORS

Risks relating to our Business

The timeline for commercial sales of new products, the profit margins that new products can command and customer acceptance of new products, are all key to our success and all are unpredictable.

We plan to create new products using our intellectual property. To implement this plan, we must identify products that can benefit from our intellectual property, take the products from concept to prototype, and make and sell the new product commercially. Many factors affect a customer’s acceptance of new products and many new product ideas are never realized. Many others never achieve commercial success. If we cannot develop and commercialize new products it will adversely impact our business and results of operations.

We may be unable to continue as a going concern if we do not successfully raise additional capital.

We may need to raise additional funds through public or private debt or equity financings, as well as obtain credit from vendors to be able to fully execute our business plan. If we are unable to successfully raise the capital we need, we may need to reduce the scope of our business to fully satisfy our future short-term liquidity requirements. If we cannot raise additional capital or reduce the scope of our business, we may be otherwise unable to achieve our goals or continue our operations. While we believe that we will be able to adjust our operations or raise the capital we need to continue our operations, there can be no assurances that we will be successful in these efforts or will be able to resolve our liquidity issues or eliminate our operating losses. In addition, any additional capital raised through the sale of equity may dilute your ownership interest. We may not be able to raise additional funds on favorable terms, or at all. If we are unable to obtain additional funds or credit from our vendors, we will be unable to execute our business plan and you could lose your investment.

Our strategy to commercialize new products from our intellectual property may be more difficult, costly or time-consuming than expected, any of which could adversely affect our results and negatively affect the value of our common stock.

Few companies have been able to develop commercial products based on nanotechnology. Nanofilm, our subsidiary, under the leadership of our Chairman and Chief Executive Officer, Scott Rickert, has been successful with products of limited scope. Identifying new products that can be manufactured, marketed and sold at margins that justify the investment and then taking those products to market will take time. If we cannot successfully develop and sell products enhanced by nanotechnology, or if the process drags on, the value of PEN common stock may be affected adversely.

The failure to manage successfully our existing businesses while new products are under development until they can generate commercial sales may adversely affect our future results.

Our management team must continue to manage current operations to give us time to accomplish our growth plans. At the same time, we must fund product development, create or contract for manufacturing capability, and establish sales, marketing and distribution for the new products. Disruptions or the failure to address changes in our current businesses could adversely affect our results, financial condition and stock price.

Our increased focus on commercializing products from our intellectual property library may affect our ability to attract funding for private research as we may be perceived as a potential competitor. At the same time, to support our research staff we need sufficient research projects to pay the expenses of the research segment and related salaries. The inability to obtain research funding could adversely affect our results of operations.

We have limited resources.

We are a small company with limited human and financial resources. Most of our competitors are larger than us with greater financial strength. Our limited resources will require that we limit the potential new products that we work on at any time and may limit our ability to tackle issues that arise in development, manufacturing, regulatory approvals or marketing. Our limited resources and potential constraints on our ability to take advantage of opportunities, may give competitors time to challenge our products in the marketplace and to bring pressure on us by devoting more resources to marketing and distribution that may make it harder for us to be successful with new products.

New products directed at new market sectors or to consumers are expected to require expenditures for sales and marketing greater than revenues from sales of new products. Some new products may also require patent protection in order to protect our technology and patent protection requires significant up-front cost before the marketplace success of the product can be known. To fund these expenses we will require additional financing and our results of operations and the value of our stock may be adversely affected if we cannot obtain additional funding when needed or on reasonable terms. In addition, delay in obtaining financing may adversely affect acceptance of the new products and may afford competitors the opportunity to respond or challenge our products that may also adversely affect our results of operations.

Our business plan contemplates the acquisition of businesses that have distribution channels and who know the customers for our new products to help us with marketing, sales and distribution, but our ability to negotiate those deals, the time required to close the deals, and the costs to accomplish these acquisitions are unknown.

To understand the potential market for new products, to better understand target customers, and to augment our resources to market and distribute new products, we expect to identify businesses that are already knowledgeable about the marketing, sales and distribution to target customers to accelerate sales of new products. Identifying those companies, negotiating the acquisition and integrating new personnel into the product development team must all happen for PEN's new products to benefit from these acquisitions. If we cannot identify, or cannot successfully negotiate or finance the acquisition of a product company, our ability to implement our business plan will be delayed either until an acquisition can be identified and consummated, until we can obtain the funding to create and grow our own marketing and distribution, or until a different product opportunity is identified where such an acquisition can be accomplished.

Our marketing and acquisition strategy is expected to require additional capital, and our failure to raise capital when needed could prevent it from growing.

To fund acquisitions of product companies, to acquire technology to complete the development of new products, or to pay for sales and marketing of new products, PEN expects that it will be required to raise capital through public or private financings. If financing is not available on acceptable terms, or at all, PEN's failure to raise capital when needed could harm its business. Moreover, because there will not be earnings from new products for some period of time, financings are expected to be equity financings that will dilute the holders of PEN common stock.

Our executive team has not previously worked together to lead a public company, and any inability of members of the executive team to work together effectively or the loss of any of them could adversely affect its performance.

While the executive officers have significant experience, some do not have any experience working for a public company, and they have not worked together. None of the executives has experience as a manager of a public holding company with several operating subsidiaries. Moreover, our acquisition strategy will also mean that new key players will be expected to join the management team to accomplish the development, marketing, sales and distribution of new products. Our success will depend, in part, on the ability of our executives to work effectively as a team in this new environment. Any inability of our executive team to work together effectively or the loss of any of them, could impair PEN's ability to execute its strategy.

PEN is disadvantaged by its relatively small size in selling into the optical industry, and its size also limits its ability to introduce its existing products to customers outside the optical industry.

PEN is smaller in size than other companies that sell products into the optical industry. Larger companies may have a broader product line to offer customers and have the resources to put products into more distribution channels than we have the resources to pursue. Our size also means we have fewer resources to hire people to pursue sales and marketing opportunities for products to those and to other customers which inhibits our growth.

Sales to industrial customers that incorporate PEN products into their own product offerings make us dependent on our industrial customer's commitment and on its success.

Some of our existing products are, and potential new products may also be, sold to industrial customers that incorporate our product into their own products for their customers. This means the success of our product is dependent on the level of support, marketing and customer assistance provided by our industrial customer, and we cannot control timing, marketing or introduction of our products or improved products, the timing or methods used to address customer concerns, and we cannot directly affect marketing or distribution of the products or services that incorporate our products. If our industrial customer has other priorities or is unsuccessful in its marketing or its customer service, the sales of our products and our results of operations will be adversely affected.

Terms of secured debt make PEN vulnerable if operational issues adversely impact its working capital.

Nanofilm redeemed a majority in number of its members in 2012 and took on secured debt in 2013 to pay notes issued to some former members in the redemption. That debt was refinanced in April 2014. PEN must comply with the terms of the debt agreements in order to borrow for its regular working capital needs. Customer decisions to delay shipments, disruption in the supply chain or other operating difficulties that increase the inventory on hand or that delay collection of accounts receivable could mean that the lender will no longer advance funds and PEN could need different terms from its lender or might need to curtail its business.

PEN's products may infringe the intellectual property rights of others, which may subject it to claims, or prevent or delay its product development efforts and stop it from selling or increase the costs of its products.

Our commercial success depends in part on our ability to operate without infringing the patents and other intellectual property rights of third parties. If claims are made that we are using third party technology without authorization or that any third-party patents cover our products or their use, the holders of any of these patents or other intellectual property may be able to block the sale of our products unless we obtain a license or changes the products so as not to use the third-party's intellectual property. We could incur significant costs defending against any claim, and, if we is liable, we may not be able to enter into licensing arrangements or redesign the products at a reasonable cost or on reasonable terms.

We may be unable to adequately prevent disclosure of trade secrets and other proprietary information.

PEN relies on trade secrets to protect its proprietary know-how and technology, especially where PEN does not believe patent protection is appropriate or obtainable. Others may independently develop the same or similar technology, or otherwise obtain access to our proprietary technology. We rely in part on confidentiality agreements with our employees and consultants to protect our trade secrets and other proprietary information. These agreements may not effectively prevent disclosure of confidential information and may not provide an adequate remedy in the event of unauthorized disclosure. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights. Failure to obtain or maintain trade secret protection could enable competitors to use our proprietary information and to develop products that better compete with our products.

Any lawsuits relating to infringement of intellectual property rights necessary to defend PEN or enforce its rights will be costly and time consuming.

Our ability to defend our intellectual property may require litigation to enforce our rights or to defend litigation brought by a third-party. Any of these lawsuits, regardless of their success, could be time consuming and expensive to defend and resolve and may require delay or suspension of commercial sales while they are pending. The cost could cause us to forego litigation or to settle on terms that are disadvantageous. If litigation is undertaken or defended, that attendant cost or delay could have a material, adverse impact on PEN's results of operations.

We have limited experience in sales and marketing and may be unable to successfully commercialize new products, and it will take time and may be difficult to build brand loyalty.

Our marketing, sales and distribution experience and capabilities are limited. Our ability to achieve success with new products depends on successfully marketing products and attracting customers and building brand loyalty. To successfully perform sales, marketing, distribution and customer support functions we have strengthened our management team and plan to make strategic acquisitions, but if we cannot accomplish that, may be forced to endeavor to accomplish this ourselves. If that occurs, we will face a number of risks, including:

- The time and cost of creating a sales and marketing team and sales force;
- The time and cost of creating a sales and marketing program for a new product;
- The risk that competitors react to challenge new products that we introduce with increased sales and marketing, promotions and advertising;
- The time and cost to identify and convince customers to purchase a new product; and
- The time and cost to create brand awareness and loyalty for new products.

Even if we are successful in acquiring a product company with relevant sales, marketing and distribution capability, the expertise will need to be applied to our products, and methods may need to be changed to be successful with our products.

Some of our technology development is in its early stages and the viability of commercial products is uncertain

Some of our applications of our intellectual property, and certain products that use these technologies, will require significant additional development, engineering, testing and investment prior to commercialization. We are exploring the use of our technology in several different types of products. We have developed proof of concepts of potential products based on some of our technologies, others are not that far in the process. It is uncertain whether commercially viable products can be developed from a number of our technologies, the size of the potential customer base, and the resources that will be required to develop, test, standardize, manufacture, market, distribute and sell these potential products. Evaluating the potential commercial uses of a product under development is a matter of judgment, and mistakes would reduce the resources available for other potential products and delay commercialization which would adversely affect our results of operations and may require us to seek additional capital that may not be available on acceptable terms, if at all.

Our development partners have certain rights to jointly developed property and to license our technology.

In several cases involving our sensor technologies, we have committed to license our technology to our development partners in designated fields of use upon completion of certain development projects that are in process. Whether we can be the development partner, and the terms of these licenses have not yet been finalized. Our development partners usually also have rights to jointly developed intellectual property; however, any such jointly developed property would likely be based, at least in part, on our underlying technology which would require our partners to enter into a license agreement with us.

Some health effects of nanotechnology are unknown.

There is scientific debate on the health effects of nanomaterials, but some scientists believe that certain nanomaterials may be hazardous to human health or the environment. The science of nanotechnology is engineering at the molecular level to modify or build materials. Many nanomaterials are found in nature, others are not naturally occurring. The health effect of new materials is unknown, and can depend on how they are incorporated and bonded to other materials. We carefully evaluate potential health effects of our products on our customers and the effects of handling materials on our employees and those who manufacture for us. We are very mindful of the risks of materials we use and focus on health and safety. However, the ongoing debate about the health effects of nanoparticles and nanotechnology and increasing government regulation for some nano materials may adversely affect market acceptance of our products and adversely affect our financial performance.

Risks Related to Ownership of Our Common Stock

There has been little trading of our common stock, and an active trading market for our common stock may not develop.

Although our Class A common stock is listed on the OTCQB; volume has been small. An active trading market for shares of our common stock may never develop or be sustained. If no trading market develops, securities analysts may not initiate or maintain research coverage of our company, which could further depress the market for our common stock. As a result, investors may not be able to sell their shares of our common stock at the time that they would like to sell. The limited market for our shares may also impair our ability to raise capital by selling additional shares and our ability to acquire other companies or technologies by using our common stock as consideration.

The market price of our common stock may be volatile and fluctuate significantly, which could result in substantial losses for investors and subject us to securities class action litigation.

If an active market for our stock develops and continues, our stock price nevertheless may be volatile. Among the factors that may cause the market price of our common stock to fluctuate are the risks described in this “Risk Factors” section and other factors, including:

- Fluctuation in our quarterly operating results or the operating results of our competitors;
- Changes in estimates of our financial results or recommendations by securities analysts;
- Variance in our financial performance from the expectations of investors or securities analysts;
- Changes in the estimation of the future size and growth rate of our markets;
- Changes in accounting principles or changes in interpretations of existing principles, which could affect our financial results;
- Failure of our products to achieve or maintain market acceptance or commercial success;
- Conditions and trends in the markets we serve
- Changes in general economic, industry and market conditions;
- Success of competitive products and services;
- Changes in market valuations or earnings of our competitors;
- Changes in our pricing policies or the pricing policies of our competitors;
- Announcements of significant new products, contracts, acquisitions or strategic alliances by us or our competitors;
- Changes in legislation or regulatory policies, practices, or actions;
- The commencement or outcome of litigation involving our company, our general industry or both;
- Recruitment or departure of key personnel;
- Changes in our capital structure, such as future issuances of securities or the incurrence of additional debt;
- Actual or expected sales of our common stock by our stockholders; and
- The trading volume of our common stock.

In addition, the stock market in general, the OTCQB and the market for nanotechnology companies in particular, may experience a loss of investor confidence. Such loss of investor confidence may result in extreme price and volume fluctuations in our common stock that are unrelated or disproportionate to the operating performance of our business, financial condition or results of operations. These broad market and industry factors may materially harm the market price of our common stock and expose us to securities class action litigation. Such litigation, even if unsuccessful, could be costly to defend and divert management's attention and resources, which could further materially harm our financial condition and results of operations.

If equity research analysts do not publish research or reports about our business or if they issue unfavorable commentary or downgrade our common stock, the price of our common stock could decline.

The liquidity of the trading market for our common stock may be affected in part by the research and reports that equity research analysts publish about us and our business. At present, no analysts follow our stock. If that should change, the price of our stock could decline if one or more equity analysts downgrade our stock or if those analysts issue other unfavorable commentary or cease publishing reports about us or our business.

PEN does not intend to pay dividends for the foreseeable future.

We intend to retain all of our earnings for the foreseeable future to finance the operation and expansion of our business and we do not anticipate paying cash dividends. As a result, stockholders can expect to receive a return on our Class A common stock only if the market price of the stock increases.

Our Chairman and CEO has control over key decision making as a result of his control of a majority of our voting stock.

Scott Rickert, our Chairman and CEO has the power to vote all the Class B common stock of PEN, representing approximately 46% of the outstanding PEN common stock and approximately 99% of the voting power of our outstanding common stock. As a result, Mr. Rickert has the ability to control the outcome of matters submitted to PEN stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of its assets. Under the terms of the Rickert Family, Limited Partnership, at the time of his death, control will transfer to his wife Jeanne Rickert. As a board member and officer, Mr. Rickert owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. As a stockholder, even a controlling stockholder, Mr. Rickert is entitled to vote as the general partner of Rickert Family, Limited Partnership in the interest of the Rickert family, which may not always be in the interests of our stockholders generally.

Certain provisions of our corporate governing documents could make an acquisition of our company more difficult.

Certain provisions of our organizational documents could discourage potential acquisition proposals, delay or prevent a change in control of us or limit the price that investors may be willing to pay in the future for shares of our common stock. For example, our amended and restated certificate of incorporation and amended and restated by-laws will:

- authorize the issuance of preferred stock that can be created and issued by our board of directors without prior stockholder approval, commonly referred to as “blank check” preferred stock, with rights senior to those of our common stock;
- limit the persons who can call special stockholder meetings;
- permit written action by voting stockholders, permitting Scott Rickert acting alone to accomplish most stockholder actions;
- establish advance notice requirements to nominate persons for election to our board of directors or to propose matters that can be acted on by stockholders at stockholder meetings;
- not provide for cumulative voting in the election of directors; and
- provide for the filling of vacancies on our board of directors by action of a majority of the directors and not by the stockholders.

These and other provisions in our organizational documents could allow our board of directors to affect your rights as a stockholder in a number of ways, including making it more difficult for stockholders to replace members of the board of directors. Because our board of directors is responsible for approving the appointment of members of our management team, these provisions could in turn affect any attempt to replace the current management team. These provisions could also limit the price that investors would be willing to pay in the future for shares of our common stock.

Future sales of our common stock may depress our share price.

Sales of substantial shares of our common stock in the public market following a capital raise, or the perception that these sales may occur, could cause the market price of our common stock to decline.

Our common stock has in the past been a “penny stock” under SEC rules and it may be more difficult to resell securities classified as “penny stock.”

In the past, our common stock was a “penny stock” under applicable SEC rules (generally defined as non-exchange traded stock with a per-share price below \$5.00). Unless we maintain a per-share price above \$5.00, these rules impose additional sales practice and disclosure requirements on broker-dealers that recommend the purchase or sale of penny stocks to persons other than those who qualify as “established customers” or “accredited investors.” The additional burdens imposed upon broker-dealers by such requirements may discourage broker-dealers from effecting transactions in our securities, which could severely limit the market price and liquidity of our securities. These requirements may also affect your ability to resell our common stock.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENT

This document contains forward-looking statements about us and our industry that involve substantial risks and uncertainties. All statements, other than statements of historical facts, included in this prospectus regarding our strategy, future operations, future financial position, future net sales, projected expenses, prospects and plans and objectives of management are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievement to be materially different from those expressed or implied by the forward-looking statements.

In some cases, you can identify forward-looking statements by terms such as “anticipate,” “believe,” “estimate,” “expect,” “intend,” “may,” “might,” “plan,” “project,” “will,” “would,” “should,” “could,” “can,” “predict,” “potential,” “continue,” “objective,” or the negative of these terms, and similar expressions intended to identify forward-looking statements. However, not all forward-looking statements contain these identifying words. These forward-looking statements reflect our current views about future events and are based on assumptions and subject to risks and uncertainties. Given these uncertainties, you should not place undue reliance on these forward-looking statements. Actual events or results could differ materially from those expressed or implied by these forward-looking statements as a result of various factors, including the risk factors described in greater detail in the section entitled “Risk Factors.”

These forward-looking statements represent our estimates and assumptions only as of the date of this prospectus. Unless required by U.S. federal securities laws, we do not intend to update any of these forward-looking statements to reflect circumstances or events that occur after the statement is made or to conform these statements to actual results.

Item 1B. Unresolved Staff Comments

Not applicable.

Item 2. Properties.

We lease facilities in three locations. Our headquarters is in leased space in Miami, Florida. Our leased space in Austin, Texas is used primarily by our Research and development segment. Leased office, manufacturing and laboratory space in Valley View, Ohio is used by our Product segment. These facilities are adequate for our current needs.

Item 3. Legal Proceedings.

We are a defendant in the matter of Dongsheng Mao v. PEN Inc., Cause No. D-1-GN-16-00065 in the 345th Judicial District Court of Travis County, Texas. The plaintiff is a former employee of Applied Nanotech Inc. His employment was terminated in 2015 and he seeks payment of deferred compensation allegedly due to him. We will contest the case vigorously. The claim is for \$83,000, but the loss in the event of an unfavorable outcome could include other fees and expenses such as statutory interest, attorney’s fees and other costs.

Item 4. Mine Safety Disclosures.

Not Applicable

PART II

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

Our Class A common stock, \$0.0001 par value, trades on the OTCQB system under the symbol “PENC”. The following table sets forth, on a per share basis for the periods indicated, the high and low sale prices for the common stock as reported by that system. These quotations reflect inter-dealer prices, without retail mark-up, mark-down or commission and may not represent actual transactions. None of the prices shown reflect the 180 to 1 reverse stock split that was effective on January 26, 2016.

		<u>High</u>	<u>Low</u>
2014	First Quarter	\$ 0.11	\$ 0.03
	Second Quarter	\$ 0.09	\$ 0.04
	Third Quarter	\$ 0.10	\$ 0.04
	Fourth Quarter	\$ 0.06	\$ 0.04
2015	First Quarter	\$ 0.065	\$ 0.035
	Second Quarter	\$ 0.08	\$ 0.0272
	Third Quarter	\$ 0.04	\$ 0.0187
	Fourth Quarter	\$ 0.036	\$ 0.0ii

As of March 29, 2016, the closing sale price for our Class A common stock as reported on the OTCQB system was \$3.20. As of that date, there were approximately 354 shareholders of record for our Class A common stock, three holders of record of our Class B common stock and one holder of record of our Class Z common stock. This does not include beneficial owners holding Class A common stock in street name in brokerage accounts. As of our last record of total shareholders, including those holding stock in street name, there were approximately 5,115 shareholders.

Cash Dividends

We have never paid cash dividends on our common stock, have no plans to pay any dividends, and it is unlikely that we will pay any dividends in the foreseeable future. We currently intend to invest future earnings, if any, to finance expansion of our business. Any payment of cash dividends in the future will be dependent upon our earnings, financial condition, capital requirements, and other factors deemed relevant by our board of directors.

Recent Sales of Unregistered Securities

On November 30, 2015, we issued an aggregate of 1,048 shares of Class A common stock and 524 shares of Class B common stock to our directors as partial compensation for their Board service. Additionally, on February 17, 2016, we issued 1,248 shares of Class A common stock and 624 shares of Class B common stock to our directors as partial compensation for their Board service. The issuances of these shares were exempt from registration under the Securities Act of 1933, as amended, in reliance on Section 4(a)(2) and 3(a)(9).

Equity Compensation Plan Information

The table below sets out as of December 31, 2015 the number of securities to be issued upon the exercise of outstanding options, warrants and rights (column (a)), the weighted average exercise price of those options, warrants and rights (column (b)), and other than the securities to be issued upon the exercise of the outstanding options, warrants and rights, the number of securities remaining available for future issuance under the plan (column (c)).

Not reflected in the chart below are rights in the Stock Appreciation Rights Plan of Nanofilm that was assumed by us in the Combination. The number of rights that will be issued under that Plan will be determined at the time of our first registered offering based on the price of the shares and therefore the number of shares to be issued is not calculable at this time. No further Stock Appreciation Rights are issuable under that Plan. For further information about that Plan see Note 17 to our Consolidated Financial Statements.

<u>Plan Category</u>	<u>Plan</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u> (a)	<u>Weighted-average exercise price of outstanding options, warrants and rights</u> (b)	<u>Number of securities remaining available for future issuance under equity compensation plans</u> (c)
Approved by stockholders	Restricted Stock Agreement with Mr. Yaniv (1)	37,778	-	-0-
Not approved by stockholders	2002 and 2012 Equity Compensation Plans (2)	12,397	\$ 0.50	15,380
	2015 Equity Incentive Plan (3)	0		93,827
	Equity Credit Program and Stock Appreciation Rights Plan (4)		-	-0-

- (1) The Restricted Stock Agreement with Mr. Yaniv was approved by an advisory vote of the stockholders on August 22, 2014. Under the Restricted Stock Agreement as adjusted for the reverse stock split that was effective in January 2016, he holds 37,778 shares of our Class A common stock, subject to forfeiture (the "Forfeiture Restrictions") which expire upon the first to occur of (i) a change in control of the company, (ii) the death of Mr. Yaniv, or (iii) if more than 180 days after closing the average trading price of the shares during a measurement period of ten consecutive trading days reaches certain price thresholds. At a \$18 price, 5,554 shares vest, with additional tranches of 5,556 shares vesting if the price reaches \$27, \$36, \$45, \$54. The last 10,000 shares vest at a \$63 price threshold. Any shares with respect to which the Forfeiture Restrictions have not expired by the fifth anniversary of the date of award will be forfeited.
- (2) The 2002 Equity Compensation Plan was approved by a wide majority of the shareholders actually casting votes at each of the 2010, 2008, and 2007 annual meetings of shareholders. However, since less than 50% of the shares eligible to vote actually cast votes at each meeting, the plan does not fall into the category of plans approved by shareholders under SEC rules. The 2002 Equity Compensation Plan expired in March 2012 and no future options can be granted under the plan. In April 2012, the Company's Board of Directors established the 2012 Equity Compensation Plan. All options granted under both plans were priced at the fair market value of our common stock, or greater, on the date of grant and have a life of up to ten (10) years from their date of grant, subject to earlier termination as set forth in the plan. Adjusted for the reverse stock split that was effective January 26, 2016, a total of 27,778 options were authorized under the 2012 plan.
- (3) The 2015 Equity Incentive Plan was adopted by the Board on November 30, 2015. The Plan permits stock awards as well as option grants. Under this Plan we can make stock grants or option grants. If awards expire unexercised, or restricted shares are forfeited, those shares are again available for grant under the Plan. See the further description of this Plan in Note 12 to the Consolidated Financial Statements.
- (4) There are 77,700 equity credits outstanding on December 31, 2015 that entitle the holders to receive shares of our Common Stock under certain circumstances, but the number is not determinable at this time. See the description of the Equity Credit Program in Note 16 to the Consolidated Financial Statements. No further Equity Credits are issuable under the Program. The Nanofilm Stock Appreciation Rights Plan will, under certain circumstances, result in the issuance of shares of our common stock, but that number is not determinable at this time. See the description of that Plan in Note 17 to the Consolidated Financial Statements.

Item 6. Selected Financial Data

Not applicable.

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

The following is management's discussion and analysis of certain significant factors that have affected our financial position and operating results during the periods included in the accompanying consolidated financial statements. PEN is the result of a business combination (the "Combination"), that closed at the end of August, 2014 (and disclosed elsewhere in this annual report).

OVERVIEW

PEN's business is the marketing and sale of products enabled by nanotechnology. We develop and sell products based on our strong portfolio of intellectual property. Our current products are a portfolio of nano-layer coatings, nano-based cleaners, printable inks and pastes, gas detectors and thermal management materials.

PEN applies knowledge derived from our ongoing nanotechnology research and development to control and manipulate materials at the molecular level to solve everyday problems for customers in the optical, transportation, military, sports, and safety industries. Our primary commercial products center on our customized eye care glass cleaning and de-fogging products, precision mold release treatments, stay-clean surface treatments for ceramic surfaces, and scuff-resistant treatments for commercial dinnerware. These products are marketed globally. We are also engaged in research and development under contract with the government and others with the goal of developing new and improved products using our proprietary technology, and also sell printable inks and pastes, gas detectors, and thermal management materials.

Our principal operating segments coincide with the types of products to be sold. The products from which revenues are derived are consistent with the reporting structure of the Company's internal organization. The Company's two reportable segments for the year ended December 31, 2015 and for the 2014 period were (i) the Product Segment and (ii) the Research and Development Segment.

Product segment

Revenue is based on the successful development of products and technologies using proprietary intellectual property and the sale of liquid products, and wet and dry towelettes, based on these technologies. Our goal continues to be to create segment leading brands through sales of high quality consumer products, and by developing and producing customized formulas for sale to strategic, industrial partners to be incorporated into their customer's products. Whenever feasible, we seek to be actively involved in the manufacture of formulas in order to produce reliable, consistent quality for the products that we and our commercial partners bring to the marketplace.

Our main products are:

- packaged products for retail sale to consumers for eyeglass and sunglass lens cleaning and conditioning,
- packaged products for retail sale to consumers for anti-fog and conditioning of masks and goggles,
- packaged products for sale to the military for safety anti-fogging and conditioning of lenses, masks, head gear and other applications such as head's up displays,
- liquids for sale to industrial customers who resell to those who need porcelain coatings for restaurant dinnerware, and
- liquids for sale to suppliers to local governments and agencies for coatings for porcelain and other applications in mass transportation.

In addition, we have developed a series of formulations used in the manufacture of precision casting and decorative architectural glass products which provides a barrier to soiling, helping keep decorative art-glass clean longer and making it easier to clean.

Separate from our historical business, we are also focused on creating products enabled by nanotechnology that tackle and solve big, global problems in growing markets. We have three primary areas of new product focus:

1. Health;
2. Safety; and
3. Sustainability.

The first new product is expected to be part of a family of cleaning products that clean and fortify surfaces at the nanoscale-level. This fortifier and protector can clean and protect many surfaces, both natural and man-made. After application, the product continues to fortify and protect, creating a healthy surface

Research and development segment

This segment focuses its efforts on research and development of proof of concepts and prototypes for proposed PEN products and on performing research and development services to government and private entities. We are developing technologies that generally fall under one of three technology platforms. These platforms are:

- Nanosensor technology;
- Nanoelectronics; and
- Submicron particle formulations for health and safety products.

Our research and development efforts are currently focused in these and emerging areas.

RECENT DEVELOPMENTS

PEN is focused on the development of new products using the strong intellectual property portfolio acquired in the Combination. The Product segment will continue to grow its product sales and develop its product offerings. The Research and Development segment is working on product prototypes for new product offerings and is also continues to perform research and development for a fee from government and private customers. Currently, our research and development segment includes research and development activities of our newly formed subsidiary, Pen Technology, LLC.

Effective January 26, 2016 we effected a 180 to 1 reverse split of our outstanding common stock. At the same time we reduced the number of our authorized shares of common stock to a total of 10,000,000 shares comprised of 7,200,000 shares of Class A common stock, 2,500,000 shares of Class B common stock, and 300,000 shares of Class Z common stock and set a par value of \$0.0001 per share of all classes of our common stock upon the effectiveness of the reverse stock split. All share and per share data in this report have been retroactively restated to reflect the effect of the reverse split and authorized shares.

RESULTS OF OPERATIONS

The following comparative analysis on results of operations was based primarily on the comparative consolidated financial statements, footnotes and related information for the periods identified below and should be read in conjunction with the consolidated financial statements and the notes to those statements that are included elsewhere in this report. The results discussed below are for the years ended December 31, 2015 and 2014.

For the 2014 period, substantially all of our results of operations relate to our Product segment since the results of operations related to our research and development segment are only included in our results of operations for the period from August 27, 2014, (the effective date of the merger) to December 31, 2014.

The acquired research and development segment has a history of net losses and negative cash flow from operations. Since the Combination, we have made efforts to cut costs and have subleased excess space in order to reduce net losses and cash used in operations. We continue to monitor costs and to reduce costs in order to achieve positive or break-even cash flow from operations in this segment.

Comparison of Results of Operations for the Year Ended December 31, 2015 and 2014

Revenues:

For the years ended December 31, 2015 and 2014, revenues consisted of the following:

	Year Ended December 31,	
	2015	2014
Sales:		
Product segment	\$ 7,920,148	\$ 9,177,568
Research and development segment	1,764,924	772,909
Total segment and consolidated sales	<u>\$ 9,685,072</u>	<u>\$ 9,950,477</u>

For the year ended December 31, 2015, sales from the Product segment decreased by \$1,257,420 or 13.7% as compared to the year ended December 31, 2014 and was primarily attributable to lower sales of anti-fog products. In 2013, we experienced delays in the production of anti-fog cloths which resulted in heavier than normal sales in the first half of 2014.

For the year ended December 31, 2015, sales from our research and development segment totaled \$1,764,924. For the year ended December 31, 2014, we reported sales of this segment of \$772,909 representing sales from August 27, 2014 (the date of Combination) to December 31, 2014.

Cost of revenues.

Cost of revenues includes inventory costs, materials and supplies costs, internal labor and related benefits, subcontractor costs, depreciation, overhead and shipping and handling costs incurred including research and development costs related to government and private research contracts in our Research and Development segment.

For the year ended December 31, 2015, cost of revenues amounted to \$6,344,133 as compared to \$5,650,116 for the year ended December 31, 2014, an increase of \$694,017 or 12.3% in large part attributable to the inclusion of the results of the Research and development segment operation for the entire 2015 period. These consisted of the following:

	Year Ended December 31,	
	2015	2014
Cost of revenues:		
Product segment	\$ 4,561,506	\$ 5,014,296
Research and development segment	\$ 1,782,627	635,820
Total segment and consolidated cost of revenues	\$ 6,344,133	\$ 5,650,116

Gross profit and gross margin.

For the year ended December 31, 2015, gross profit amounted to \$3,340,939 as compared to \$4,300,361 for the year ended December 31, 2014, a decrease of \$959,422 or 22.3%. The reduction was due to a combination of the lower revenue in the Product segment which reduced its margins and the inclusion of the Research and development segment for the entire 2015 period. For the years ended December 31, 2015 and 2014, gross margins were 34.5% and 43.2%, respectively.

Gross profit and gross margin by segment is as follows:

	Year Ended December 31,			
	2015	%	2014	%
Gross profit:				
Product segment *	3,359,734	42.4%	4,163,272	45.4%
Research and development segment *	(19,425)	(1.00)	137,089	17.7
Total gross profit	3,340,939	34.5%	4,300,361	43.2%

* Gross margin % based on respective segments sales.

Operating expenses:

For the year ended December 31, 2015, operating expenses amounted to \$5,081,142 as compared to \$6,590,179 for the year ended December 31, 2014, a decrease of \$1,509,037 or 22.9%. For the years ended December 31, 2015 and 2014, operating expenses consisted of the following:

	Year Ended December 31,	
	2015	2014
Selling and marketing expenses	\$ 280,173	\$ 235,234
Salaries, wages and contract labor	2,214,956	2,003,996
Research and development	744,346	607,049
Professional fees	660,584	814,518
General and administrative expenses	993,032	996,238
Impairment loss	188,051	1,933,144
Total	\$ 5,081,142	\$ 6,590,179

- For the year ended December 31, 2015, selling and marketing expenses increased by \$44,939 or 19.1% as compared to the year ended December 31, 2014. The increase was primarily attributable to an increase in commissions of approximately \$19,900 and an increase in trade show expenses of \$24,300.
- For the year ended December 31, 2015, salaries, wages and contract services increased by \$210,960, or 10.5%, as compared to the year ended December 31, 2014. These increases were primarily attributable to an increase in stock-based compensation of approximately \$70,000, an increase in salaries of approximately \$64,000 related to the inclusion of salaries of Applied Nanotech from the date of Combination to December 31, 2014 as compared to the entire year of 2015, and increases in executive, marketing and other administrative salaries and related benefits in our product segment of approximately \$113,000 relating to market development activities, offset by a decrease in executive compensation of approximately \$36,000 due to cost cutting measures. We expect that salaries, wages and contract services will remain consistent with 2015 or decrease in 2016 as we continue to analyze staffing needs and monitor cost-cutting activities.
- For the year ended December 31, 2015, research and development costs increased by \$137,297 or 22.6%, as compared to the year ended December 31, 2014. The increase during the period was attributable to increase in development costs related to HALO product of approximately \$178,000 offset by a decrease of approximately \$41,000 related to the development of gel and foam lens cleaner in our product segment that occurred in 2014.
- For the year ended December 31, 2015, professional fees decreased by \$153,934 or 18.9%, as compared to the year ended December 31, 2014. The 2014 period included professional fees related to the combination that closed in August 2014.
- For the year ended December 31, 2015, general and administrative expenses decreased by \$3,206 or less than 1% as compared to the year ended December 31, 2014.
- In December 2015 and December 2014, we assessed our long-lived assets for any impairment and concluded that there were indicators of impairment as of December 31, 2015 and 2014. We recorded an impairment charge of \$188,051 and \$1,933,144 for the years ended December 31, 2015 and 2014, respectively, related to our intangible assets.

Income (loss) from operations.

As a result of the factors described above, for the year ended December 31, 2015, loss from operations amounted to \$1,740,203 as compared to a loss from operations of \$2,289,818 for the year ended December 31, 2014, a decrease of \$549,615 or 24.0%.

Other income (expense).

Other income (expense) includes interest expense, other income, net and interest income. For the year ended December 31, 2015, total other expense amounted to \$105,324 as compared to total other income of \$57,165 for the year ended December 31, 2014, a difference of \$162,489 or 284.2%. The increase in other expenses in 2015 was primarily attributable to an increase in interest expense of approximately \$89,000 due to an increase in borrowings, and a decrease in other income of approximately \$74,000.

Income taxes

For the year ended December 31, 2015, income tax expense amounted to \$23,720 as compared to \$84,183 for the year ended December 31, 2014. Beginning at the end of February 2014, Nano became subject to federal and state corporate income taxes and the expense for the year ended December 31, 2014 represents the period from the end of February 2014 date through the date of the Combination on August 27, 2014.

Net income (loss) and net income (loss) attributable to PEN Inc

As a result of the foregoing, for the year ended December 31, 2015, net loss amounted to \$1,869,247 as compared to a net loss of \$2,316,836 for the year ended December 31, 2014, a decrease of \$447,589 or 19.3%.

Our historical results of operations include an allocation of the net loss of Nanofilm, Ltd. to the 14.5% non-controlling interest of Nanofilm, Ltd. up to the effective date of the Combination when the holder of that non-controlling interest exchanged its membership interest for shares of PEN Inc. resulting in Nanofilm, Ltd. becoming a wholly-owned subsidiary of the Company. For the year ended December 31, 2014, net income attributable to former non-controlling interest amounted to \$53,418.

For the years ended December 31, 2015 and 2014, net loss attributable to PEN Inc. amounted to \$1,869,247 or \$(0.63) per share (basic and diluted), and \$2,370,254 or \$(1.08) per shares (basic and diluted), respectively.

LIQUIDITY AND CAPITAL RESOURCES

Liquidity is the ability of an enterprise to generate adequate amounts of cash to meet its needs for cash requirements. We had working capital deficit of \$(889,657) and \$262,519 of cash as of December 31, 2015 and working capital of \$86,636 and \$464,735 of cash as of December 31, 2014.

The following table sets forth a summary of changes in our working capital from December 31, 2014 to December 31, 2015:

	December 31, 2015	December 31, 2014	December 31, 2014 to December 31, 2015	
			Change	Percentage Change
Working capital (deficit):				
Total current assets	\$ 2,653,190	\$ 3,293,155	\$ (639,965)	(19.4)%
Total current liabilities	3,542,847	3,206,519	(336,328)	(10.5)%
Working capital (deficit):	<u>\$ (889,657)</u>	<u>\$ 86,636</u>	<u>\$ (976,293)</u>	<u>(1,126.9)%</u>

The decrease in working capital was primarily attributable to the decrease in cash of approximately \$202,000, a decrease in inventory of \$474,000, an increase in the bank revolving line of credit of \$515,000 and an increase in current portion of notes payable of \$74,000 offset by an increase in accounts receivable of approximately \$41,000, a decrease in accounts payable of approximately \$140,000 and a decrease in accrued expenses of approximately \$93,000.

Net cash flow used in operating activities was \$(804,208) for the year ended December 31, 2015 as compared to net cash provided by operating activities of \$547,647 for the year ended December 31, 2014, a decrease of \$1,351,855.

- Net cash flow used in operating activities for the year ended December 31, 2015 primarily reflected a net loss of \$1,869,247 and the add-back of non-cash items consisting of depreciation and amortization of \$252,899, impairment loss of \$188,051, stock-based compensation expense of \$241,240, and other non-cash items of \$(52,544), and changes in operating assets and liabilities primarily consisting of an increase in accounts receivable (third party and related party) of \$41,095 and a decrease in accounts payable of \$139,536 offset by an increase in inventory of \$509,367 and an increase in accrued expenses of \$98,888.
- Net cash flow provided by operating activities for the year ended December 31, 2014 primarily reflected a net loss of \$2,316,836 and the add-back of non-cash items consisting of an impairment loss of \$1,933,144, depreciation and amortization of \$324,433, stock-based compensation expense of \$151,400, and other non-cash items of \$(83,439), and changes in operating assets and liabilities primarily consisting of a decrease in accounts receivable (third party and related party) of \$749,284 due to collections in 2014 offset by an increase in inventory of \$14,789, a decrease in accounts payable of \$77,325, and a decrease in deferred revenue of \$117,677.

Net cash flow used in investing activities was \$248,123 for the year ended December 31, 2015 as compared to \$181,704 for the year ended December 31, 2014. During the years ended December 31, 2015 and 2014, we purchased property and equipment of \$248,123 and \$229,825, respectively. Additionally, in 2014, we acquired cash of \$48,121 in the Combination.

Net cash provided by financing activities was \$850,115 for the year ended December 31, 2015 as compared to net cash used in financing activities \$1,575 for the year ended December 31, 2014. During the year ended December 31, 2015, we received net proceeds from the bank line of credit of \$515,404 and received net proceeds from notes payable of \$334,711. During the year ended December 31, 2014, we received net proceeds from the bank line of credit of \$573,425 and repaid a bank loan of \$575,000.

Future Liquidity and Capital Needs.

Our principal future uses of cash are for working capital requirements, including research and development and marketing expenses, legal and other fees incurred in connection with our patents and technologies, capital expenditures and reduction of accrued liabilities. These uses will depend on numerous factors including our sales and other revenues, the extent of our research and development activities and our ability to control costs. We have historically financed our working capital needs primarily through internally generated funds, and bank loans. We collect cash from our customers based on our sales to them and their respective payment terms. We expect to require additional funds through public or private debt or equity financings to be able to increase marketing for our products and to fully execute our business plan. If we are unable to raise the capital we need, we may need to reduce the scope of our business in order to continue our operations.

Revolving Credit Note

In April 2014, our subsidiary, Nanofilm entered into a \$1,500,000 revolving credit line agreement (the "Revolving Note") with Mackinac Commercial Credit, LLC. (the "Lender"). The unpaid principal balance of this Revolving Note is payable on demand, is secured by all of Nanofilm's assets, and bears interest computed at a rate of interest (the "Effective Rate") which is equal to 7.0% above the LIBOR Rate, as defined, payable monthly. Nanofilm will pay a late charge of 5.0% of any monthly payment not received by Lender within 10 calendar days after the due date. The Company, at any time or from time to time upon three business days' written notice to Lender, prepay the Revolving Note in full. If Borrower prepays the Revolving Note in full and terminates the Revolving Note aft, or if Lender terminates the Revolving Note after default, then, in addition to all other amounts due to Lender and/or paid by the Company, the Company must pay a termination premium equal to 2.0% of the maximum loan amount.

Without the Lender's consent, so long as the obligation remains outstanding, in addition to other covenants as defined in the Revolving Note, Nanofilm shall not a) merge or consolidate with any other company, except for the Combination and shall not suffer a change of control; b) make an capital expenditures, as defined, materially affecting the business; c) declare of pay cash dividends upon any of its stock, or distribute any of its property, make any loans, make investments, redeem, retire or acquire any of its stock, d) become liable for the indebtedness of anyone else, as defined, and e) incur indebtedness, other than trade payables.

At December 31, 2015, we had \$1,288,748 in borrowings outstanding under the Revolving Note with \$211,252 available for borrowing under such note. The weighted average interest rate during the 2015 and 2014 period was approximately 7.3% and 6.8%, respectively.

Equipment Financing

On February 10, 2015, Nanofilm entered into a \$373,000 promissory note (the "Equipment Note") with KeyBank, N.A. (the "Bank"). The unpaid principal balance of this Equipment Note is payable in 60 equal monthly installments payments of principal and interest through June 10, 2020. The Equipment Note is secured by certain equipment, as defined in the Equipment Note, and bears interest computed at a rate of interest of 4.35% per annum based on a year of 360 days.

CRITICAL ACCOUNTING POLICIES

Our discussion and analysis of our financial condition and results of operations are based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these consolidated financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We continually evaluate our estimates, including those related to income taxes, and the valuation of equity transactions. We base our estimates on historical experience and on various other assumptions that we believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Any future changes to these estimates and assumptions could cause a material change to our reported amounts of revenues, expenses, assets and liabilities. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of the unaudited consolidated financial statements.

Impairment of long-lived assets

In accordance with ASC Topic 360, we review long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable, or at least annually. We recognize an impairment loss when the sum of expected undiscounted future cash flows is less than the carrying amount of the asset. The amount of impairment is measured as the difference between the asset's estimated fair value and its book value.

Revenue recognition

Pursuant to the guidance of ASC Topic 605, we recognize sales when persuasive evidence of an arrangement exists, delivery has occurred or services have been provided, the purchase price is fixed or determinable and collectability is reasonably assured.

Types of Revenue:

- Net product sales by our subsidiary Nanofilm.
- Reimbursements under agreements to perform research and development for government agencies and others by our subsidiary, Applied Nanotech. We do not perform research contracts that are contingent upon successful results. Larger projects are sometimes broken down in phases to allow the customer to determine at the end of each phase if they wish to move to the next phase. The agreements with federal government agencies generally provide that, upon completion of a technology development program, the funding agency is granted a royalty-free license to use any technology developed during the course of the program for its own purposes, but not any preexisting technology that we use in connection with the program. We retain all other rights to use, develop, and commercialize the technology. Agreements with nongovernmental entities generally allow the entity the first opportunity to license the technology from us upon completion of the project.
- Product sales and other miscellaneous revenues from our subsidiary, Applied Nanotech such as the sale of conductive inks and thermal management materials.

Revenue Recognition Criteria:

- Net product sales by our subsidiary Nano, are recognized when the product is shipped to the customer and title is transferred.
- Revenue from research and development government contracts is recognized when it is earned pursuant to the terms of the contract. These projects are usually billed monthly based on costs, hours, or some other measure of activity during the month and revenue is recognized as services are provided. If there is substantive acceptance terms then revenue will not be recognized until acceptance occurs. The recognition of revenue may not correspond with the billings allowable under the contract. To the extent that billings exceed revenue earned, a portion of the revenue is deferred until such time as it is earned.
- Revenue from research and development non-governmental contracts is recognized when it is earned pursuant to the terms of the contract. Each contract is unique and tailored to the needs of the customer and goals of the project. Some contracts may call for a monthly payment for a fixed period of time. Other contracts may be for a fixed dollar amount with an unspecified time period, although there is frequently a targeted completion date. These contracts generally involve some sort of up-front payment. Some contracts may call for the delivery of samples, or may call for the transfer of equipment or other items developed during the project to the customer. These projects are usually billed monthly based on costs, hours, or some other measure of activity during the month and revenue is recognized as services are provided. If there is substantive acceptance terms then revenue will not be recognized until acceptance occurs.
- Revenue from other product sales is recognized at the time the product shipped. The Company's subsidiary Applied Nanotech's primary business is research and development and the licensing of its technology, not the sale of products. Product sales are generally insignificant in number, and are generally limited to the sale of conductive inks, thermal management materials, samples, proofs of concepts, prototypes, or other items resulting from its research.
- Other miscellaneous revenue is recognized as deemed appropriate given the facts of the situation and is generally not material.

Research and development

Research and development costs incurred in the development of our products and under other Company sponsored research and development projects are expensed as incurred. Costs such as direct labor, direct costs, and other allocated costs incurred to perform research and development service pursuant to government and private research projects are included in cost of sales.

Stock-based compensation

Stock-based compensation is accounted for based on the requirements of the Share-Based Payment Topic of ASC 718 which requires recognition in the financial statements of the cost of employee and director services received in exchange for an award of equity instruments over the period the employee or director is required to perform the services in exchange for the award (presumptively, the vesting period). The ASC also requires measurement of the cost of employee and director services received in exchange for an award based on the grant-date fair value of the award.

Pursuant to ASC Topic 505-50, for share-based payments to consultants and other third-parties, compensation expense is determined at the "measurement date." The expense is recognized over the service period of the award. Until the measurement date is reached, the total amount of compensation expense remains uncertain. We initially record compensation expense based on the fair value of the award at the reporting date.

Segment reporting

We use “the management approach” in determining reportable operating segments. The management approach considers the internal organization and reporting used by our chief operating decision maker for making operating decisions and assessing performance as the source for determining our reportable segments. Our chief operating decision maker is the Chairman and chief executive officer (“CEO”) of the Company, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. We classified the reportable operating segments into (i) the development, manufacture and sale of personal lens cleaners and accessories and ultra-thin films of organic or polymeric crystals (the “Product Segment”) and (ii) the performance of nanotechnology research and development services for government and private entities and any related sales of related products (the “Research and Development Segment”).

RECENT ACCOUNTING PRONOUNCEMENTS

There are no recent accounting pronouncements that we have not implemented that are expected to have a material impact on our consolidated financial statements.

CONTRACTUAL OBLIGATIONS AND OFF-BALANCE SHEET ARRANGEMENTS

Contractual Obligations

We have certain fixed contractual obligations and commitments that include future estimated payments. Changes in our business needs, cancellation provisions, changing interest rates, and other factors may result in actual payments differing from the estimates. We cannot provide certainty regarding the timing and amounts of payments. We have presented below a summary of the most significant assumptions used in our determination of amounts presented in the tables, in order to assist in the review of this information within the context of our consolidated financial position, results of operations, and cash flows.

The following tables summarize our contractual obligations as of December 31, 2015 (dollars in thousands), and the effect these obligations are expected to have on our liquidity and cash flows in future periods.

Contractual obligations:	Payments Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	5+ years
Bank revolving line of credit (1)	\$ 1,289	\$ 1,289	\$ -	\$ -	\$ -
Operating lease	1,279	585	694	-	-
Notes payable	386	74	223	89	-
Total	<u>\$ 2,954</u>	<u>\$ 1,948</u>	<u>\$ 917</u>	<u>\$ 89</u>	<u>\$ -</u>

(1) Bank revolving line of credit is automatically renewed in 2016 since no notice of non-renewal was given by either party.

Off-Balance Sheet Arrangements

We have not entered into any other financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholder’s equity or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. We do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or research and development services with us.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk.

Not Applicable.

Item 8. Financial Statements and Supplementary Data.

**PEN INC. AND SUBSIDIARIES
CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 and 2014**

PEN INC. AND SUBSIDIARIES
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS
December 31, 2015 and 2014

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SALBERG & COMPANY, P.A.

Certified Public Accountants and Consultants

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of:
PEN Inc.

We have audited the accompanying consolidated balance sheets of PEN Inc. and Subsidiaries as of December 31, 2015 and 2014 and the related consolidated statements of operations, changes in stockholders' equity (deficit), and cash flows for each of the two years in the period ended December 31, 2015. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of PEN Inc. and Subsidiaries as of December 31, 2015 and 2014 and the consolidated results of its operations and its cash flows for each of the two years in the period ended December 31, 2015 in conformity with accounting principles generally accepted in the United States of America.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has a net loss and net cash used in operating activities in 2015 of \$1,869,247 and \$804,208 respectively and has an accumulated deficit, stockholders' deficit and working capital deficit of \$5,344,166, \$272,335 and \$889,657 respectively, at December 31, 2015. These matters raise substantial doubt about the Company's ability to continue as a going concern. Management's Plan in regards to these matters is also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Salberg & Company, P.A.

SALBERG & COMPANY, P.A.
Boca Raton, Florida
March 30, 2016

2295 NW Corporate Blvd., Suite 240 • Boca Raton, FL 33431-7328
Phone: (561) 995-8270 • Toll Free: (866) CPA-8500 • Fax: (561) 995-1920
www.salbergco.com • info@salbergco.com
Member National Association of Certified Valuation Analysts • Registered with the PCAOB
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PEN INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	<u>December 31, 2015</u>	<u>December 31, 2014</u>
ASSETS		
CURRENT ASSETS:		
Cash	\$ 262,519	\$ 464,735
Accounts receivable, net	1,100,352	1,032,995
Accounts receivable - related party	11,984	38,246
Inventory	1,083,385	1,557,100
Prepaid expenses and other current assets	194,950	200,079
Total Current Assets	<u>2,653,190</u>	<u>3,293,155</u>
OTHER ASSETS:		
Property, plant and equipment, net	897,358	850,847
Intangible assets, net	-	239,338
Other assets	32,103	41,841
Total Other Assets	<u>929,461</u>	<u>1,132,026</u>
TOTAL ASSETS	<u>\$ 3,582,651</u>	<u>\$ 4,425,181</u>
LIABILITIES AND STOCKHOLDERS' EQUITY (DEFICIT)		
CURRENT LIABILITIES:		
Bank revolving line of credit	\$ 1,288,748	\$ 773,344
Current portion of notes payable	74,380	-
Convertible notes payable, net	-	13,333
Accounts payable	1,259,865	1,426,465
Accounts payable - related parties	27,064	-
Accrued expenses	871,098	964,587
Deferred revenue	21,692	28,790
Total Current Liabilities	<u>3,542,847</u>	<u>3,206,519</u>
LONG-TERM LIABILITIES:		
Notes payable, net of current portion	312,139	-
Total Long-term Liabilities	<u>312,139</u>	<u>-</u>
Total Liabilities	<u>3,854,986</u>	<u>3,206,519</u>
Commitments and Contingencies (See Note 14)		
STOCKHOLDERS' EQUITY (DEFICIT):		
Preferred stock, \$.0001 par value, 20,000,000 shares authorized; No shares issued and outstanding	-	-
Class A common stock: \$.0001 par value, 7,200,000 shares authorized; 1,336,759 and 1,304,137 issued and outstanding at December 31, 2015 and 2014, respectively	134	131
Class B common stock: \$.0001 par value, 2,500,000 shares authorized; 1,395,678 and 1,394,545 issued and outstanding at December 31, 2015 and 2014, respectively	139	139
Class Z common stock: \$.0001 par value, 300,000 shares authorized; 262,631 and 262,631 issued and outstanding at December 31, 2015 and 2014, respectively	26	26
Additional paid-in capital	5,071,532	4,693,285
Accumulated deficit	(5,344,166)	(3,474,919)
Total Stockholders' Equity (Deficit)	<u>(272,335)</u>	<u>1,218,662</u>
Total Liabilities and Stockholders' Equity (Deficit)	<u>\$ 3,582,651</u>	<u>\$ 4,425,181</u>

See accompanying notes to consolidated financial statements.

PEN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	For the Years Ended December 31,	
	2015	2014
REVENUES:		
Products (including related party sales of \$134,485 and \$198,858 for the years ended December 31, 2015 and 2014, respectively)	\$ 7,920,148	\$ 9,177,568
Research and development services	1,764,924	772,909
Total Revenues	9,685,072	9,950,477
COST OF REVENUES:		
Products	4,561,506	5,014,296
Research and development services	1,782,627	635,820
Total Cost of Revenues	6,344,133	5,650,116
GROSS PROFIT	3,340,939	4,300,361
OPERATING EXPENSES:		
Selling and marketing expenses	280,173	235,234
Salaries, wages and related benefits	2,214,956	2,003,996
Research and development	744,346	607,049
Professional fees	660,584	814,518
General and administrative expenses	993,032	996,238
Impairment loss	188,051	1,933,144
Total Operating Expenses	5,081,142	6,590,179
LOSS FROM OPERATIONS	(1,740,203)	(2,289,818)
OTHER INCOME (EXPENSES):		
Interest expenses	(117,879)	(28,967)
Other income, net	12,555	86,132
Total Other Income/(Expense)	(105,324)	57,165
Loss before income taxes	(1,845,527)	(2,232,653)
Income tax expense	(23,720)	(84,183)
NET LOSS	(1,869,247)	(2,316,836)
Net (income) attributable to former non-controlling interest	-	(53,418)
NET LOSS ATTRIBUTABLE TO PEN INC.	\$ (1,869,247)	\$ (2,370,254)
NET LOSS PER COMMON SHARE:		
Basic	\$ (0.63)	\$ (1.08)
Diluted	\$ (0.63)	\$ (1.08)
WEIGHTED AVERAGE COMMON SHARES OUTSTANDING:		
Basic	2,974,847	2,203,563
Diluted	2,974,847	2,203,563

See accompanying notes to consolidated financial statements.

PEN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY (DEFICIT)
FOR THE YEARS ENDED DECEMBER 31, 2015 AND 2014

	<u>Class A Common Stock</u>		<u>Class B Common Stock</u>		<u>Class Z Common Stock</u>		<u>Additional Paid-in Capital</u>	<u>Accumulated Deficit</u>	<u>Total Stockholders' Equity (Deficit)</u>
	<u># of Shares</u>	<u>Amount</u>	<u># of Shares</u>	<u>Amount</u>	<u># of Shares</u>	<u>Amount</u>			
Balance, December 31, 2013	153,723	\$ 15	1,392,772	\$ 139	262,631	\$ 26	\$ 3,115,797	\$ (1,104,665)	\$ 2,011,312
Shares deemed issued in reverse merger	1,129,795	114	-	-	-	-	1,235,168	-	1,235,282
Common stock issued for services	7,735	1	428	-	-	-	96,319	-	96,320
Common stock issued from conversion of convertible debt and interest	12,884	1	1,345	-	-	-	137,503	-	137,504
Accretion of Class A shares issuable based on market conditions	-	-	-	-	-	-	55,080	-	55,080
Net loss	-	-	-	-	-	-	53,418	(2,370,254)	(2,316,836)
Balance, December 31, 2014	1,304,137	131	1,394,545	139	262,631	26	4,693,285	(3,474,919)	1,218,662
Common stock issued for accrued compensation	11,609	1	-	-	-	-	123,284	-	123,285
Common stock issued from conversion of convertible debt and interest	1,159	-	-	-	-	-	13,725	-	13,725
Common stock issued for services	19,854	2	1,133	-	-	-	75,998	-	76,000
Accretion of Class A shares issuable based on market conditions	-	-	-	-	-	-	165,240	-	165,240
Net loss	-	-	-	-	-	-	-	(1,869,247)	(1,869,247)
Balance, December 31, 2015	<u>1,336,759</u>	<u>\$ 134</u>	<u>1,395,678</u>	<u>\$ 139</u>	<u>262,631</u>	<u>\$ 26</u>	<u>\$ 5,071,532</u>	<u>\$ (5,344,166)</u>	<u>\$ (272,335)</u>

See accompanying notes to consolidated financial statements.

PEN INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

For the Years Ended
December 31,

2015 2014

CASH FLOWS FROM OPERATING ACTIVITIES	<u>2015</u>	<u>2014</u>
Net loss	\$ (1,869,247)	\$ (2,316,836)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:		
Change in inventory obsolescence reserve	(35,652)	(57,855)
Impairment loss	188,051	1,933,144
Depreciation and amortization expense	252,899	324,433
Amortization of deferred lease incentives	(12,830)	(12,830)
Change in value of stock appreciation rights	6,962	(12,853)
Change in value of equity credits	(11,024)	99
Stock-based compensation	241,240	151,400
Change in operating assets and liabilities:		
Accounts receivable	(67,357)	770,306
Accounts receivable - related party	26,262	(21,022)
Inventory	509,367	(14,789)
Prepaid expenses and other assets	14,867	(8,697)
Accounts payable	(166,600)	(77,325)
Accounts payable - related parties	27,064	-
Accrued expenses	98,888	8,149
Deferred revenue	(7,098)	(117,677)
NET CASH (USED IN) PROVIDED BY OPERATING ACTIVITIES	<u>(804,208)</u>	<u>547,647</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Cash acquired in acquisition	-	48,121
Purchases of property and equipment	(248,123)	(229,825)
NET CASH USED IN INVESTING ACTIVITIES	<u>(248,123)</u>	<u>(181,704)</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Proceeds from bank lines of credit	8,156,000	7,153,129
Repayment of bank lines of credit	(7,640,596)	(6,579,704)
Proceeds from bank loans	371,901	-
Repayment of bank loans	(37,190)	(575,000)
NET CASH PROVIDED BY (USED IN) FINANCING ACTIVITIES	<u>850,115</u>	<u>(1,575)</u>
NET (DECREASE) INCREASE IN CASH	<u>(202,216)</u>	<u>364,368</u>
CASH, beginning of year	<u>464,735</u>	<u>100,367</u>
CASH, end of year	<u>\$ 262,519</u>	<u>\$ 464,735</u>
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for:		
Interest	<u>\$ 117,879</u>	<u>\$ 28,967</u>
Income taxes	<u>\$ 23,720</u>	<u>\$ 84,183</u>
SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:		
Common stock issued for convertible notes and accrued interest	<u>\$ 13,725</u>	<u>\$ 137,504</u>
Common stock issued for accrued expenses	<u>\$ 123,285</u>	<u>\$ -</u>
Reclassification of accrued salary to notes payable - long-term	<u>\$ 51,808</u>	<u>\$ -</u>
Value of equity credits forfeited at original purchase price, in exchange for cancellation of receivables	<u>\$ -</u>	<u>\$ 18,313</u>
Liabilities assumed in share exchange	<u>\$ -</u>	<u>\$ 1,589,070</u>
Less: assets acquired in share exchange	<u>-</u>	<u>496,693</u>
Net liabilities assumed	<u>-</u>	<u>1,092,377</u>
Fair value of shares exchanged	<u>-</u>	<u>1,235,282</u>
Increase in intangible assets	<u>\$ -</u>	<u>\$ 2,327,659</u>

See accompanying notes to consolidated financial statements.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 1 – ORGANIZATION AND BASIS OF PRESENTATION

Organization

PEN Inc. (“we”, “us”, “our”, “PEN” or the “Company”), a Delaware company, develops and sells a portfolio of nano-layer coatings, nano-based cleaners, and nano-composite products based on its proprietary technology and performs nanotechnology research and development focused on generating revenues through performing research services.

Through our wholly-owned subsidiary, Nanofilm, Ltd., we develop, manufacture and sell products based on technology which permits the fabrication of oriented, ultra-thin films of organic or polymeric crystals, and also produces a line of personal lens cleaners and accessories. These products are marketed internationally primarily to customers in the eyeglass industry.

Through our wholly-owned subsidiary, Applied Nanotech, Inc., we primarily conduct research and development services for governmental and private customers.

On August 27, 2014 (the “Effective Date”), Applied Nanotech Holdings, Inc., a Texas corporation (“Applied Nanotech”), together with its wholly-owned direct subsidiaries, PEN and NanoMerger Sub Inc., a Delaware corporation (“Merger Sub”), completed a combination (the “Combination”) with NanoHolding Inc. (“Nano”). The Combination included three parts: (i) a redomestication of Applied Nanotech from Texas to Delaware by way of Applied Nanotech’s merger into PEN, (ii) a subsequent merger of Nano into Merger Sub, with Merger Sub (n/k/a Nanofilm Holdings Inc.) the surviving entity, and (iii) a subsequent exchange of 100% of Carl Zeiss, Inc.’s interest in Nanofilm Ltd., Nano’s wholly-owned subsidiary (“Nanofilm”), for stock in PEN. Nanofilm is a company formed under the laws of the Ohio on June 14, 1995 as a limited liability company.

On the Effective Date, the merger was accounted for as a reverse merger and recapitalization of Nano (See Note 3). On the Effective Date, the pre-merger shares of Nano were exchanged for an aggregate of 153,723 shares of Class A common stock of PEN and 1,392,772 shares of Class B common stock of PEN. Additionally, the Class Z member interests of Nanofilm (the non-controlling interests) were exchanged for 262,631 Class Z shares of PEN. The effect of these exchanges is reflected retroactively in the accompanying consolidated financial statements for all periods presented.

On December 17, 2014, the Company formed a new wholly-owned subsidiary, PEN Technology LLC, a Florida limited liability company and on December 19, 2014, Nanofilm Holdings Inc. was merged into PEN.

Basis of Presentation and Principles of Consolidation

The Company’s consolidated financial statements include the financial statements of its wholly-owned subsidiaries, Applied Nanotech, Inc., EZ Diagnostix, Inc. (inactive), PEN Technology LLC, and Nanofilm, Ltd. On December 19, 2014, EZ Diagnostix was merged into Applied Nanotech, Inc. All significant intercompany accounts and transactions have been eliminated in consolidation.

The Company’s historical results of operations include an allocation of the net income of Nanofilm, Ltd. to the 14.5% non-controlling interest of Nanofilm, Ltd. up to the effective date of the merger when the holder of that non-controlling interest exchanged its membership interest for shares of PEN Inc. resulting in Nanofilm, Ltd. becoming a wholly-owned subsidiary of the Company.

As a result of the exchange, the non-controlling interest is reflected retroactively for all periods presented in additional paid-in capital of the Company including \$0 and \$53,418 for the years ended December 31, 2015 and 2014, respectively.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 1 – ORGANIZATION AND BASIS OF PRESENTATION (continued)

Going concern

These consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities and commitments in the normal course of business. As reflected in the accompanying consolidated financial statements, the Company had a net loss of \$1,869,247 and \$2,370,254 for the years ended December 31, 2015 and 2014, respectively. The net cash (used in) provided by operations were \$(804,208) and \$547,647 for the years ended December 31, 2015 and 2014, respectively. Additionally, the Company had an accumulated deficit, a stockholders' deficit and a working capital deficit of \$5,344,166, \$272,335 and \$889,657, respectively, at December 31, 2015. These factors raise substantial doubt about the Company's ability to continue as a going concern. Management cannot provide assurance that the Company will ultimately achieve profitable operations or become cash flow positive, or raise additional debt and/or equity capital. During 2015, management has taken measures to reduce operating expenses. The Company is seeking to raise capital through additional debt and/or equity financings to fund its operations in the future. Although the Company has historically raised capital from sales of equity and from the issuance of promissory notes, there is no assurance that it will be able to continue to do so. If the Company is unable to raise additional capital or secure additional lending in the near future, management expects that the Company will need to curtail its operations. These consolidated financial statements do not include any adjustments related to the recoverability and classification of assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue as a going concern.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Use of estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. Significant estimates for the years ended December 31, 2015 and 2014 include estimates for allowance for doubtful accounts on accounts receivable, the estimates for obsolete inventory, the useful life of property and equipment, assumptions used in assessing impairment of long-term assets, the fair value of assets acquired and liabilities assumed in the merger, estimates of current and deferred income taxes and deferred tax valuation allowances, the fair value of non-cash equity transactions, and the fair value of equity incentives.

Fair value of financial instruments and fair value measurements

The Company adopted the guidance of Accounting Standards Codification ("ASC") 820 for fair value measurements which clarifies the definition of fair value, prescribes methods for measuring fair value, and establishes a fair value hierarchy to classify the inputs used in measuring fair value as follows:

Level 1- Inputs are unadjusted quoted prices in active markets for identical assets or liabilities available at the measurement date.

Level 2- Inputs are quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets and liabilities in markets that are not active, inputs other than quoted prices that are observable, and inputs derived from or corroborated by observable market data.

Level 3- Inputs are unobservable inputs which reflect the reporting entity's own assumptions on what assumptions the market participants would use in pricing the asset or liability based on the best available information.

The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents, accounts receivable, loans and lines of credit, accounts payable, accrued expenses, and other payables approximate their fair market value based on the short-term maturity of these instruments.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Fair value of financial instruments and fair value measurements (continued)

The Company analyzes all financial and non-financial instruments with features of both liabilities and equity under the FASB’s accounting standard for such instruments. Under this standard, financial and non-financial assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The Company accounts for three instruments at fair value using level 3 valuation.

Description	At December 31, 2015			At December 31, 2014		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
Intangible assets	-	-	\$ -	-	-	\$ 239,338
Stock appreciation rights Plan A	-	-	\$ 53,108	-	-	\$ 46,146
Equity credits issued	-	-	\$ 14,154	-	-	\$ 25,178

A roll forward of the level 3 valuation of these three financial instruments is as follows:

	Intangible Assets	Stock Appreciation Rights Plan A	Equity Credits Issued
Balance at December 31, 2013	\$ -	58,999	\$ 25,079
Intangible assets acquired	2,327,659	-	-
Amortization of intangible assets	(155,177)	-	-
Change in fair value included in net loss	(1,933,144)	(12,853)	99
Balance at December 31, 2014	239,338	46,146	25,178
Amortization of intangible assets	(51,287)	-	-
Change in fair value included in net loss	(188,051)	6,962	(11,024)
Balance at December 31, 2015	\$ -	53,108	\$ 14,154

ASC 825-10 “Financial Instruments”, allows entities to voluntarily choose to measure certain financial assets and liabilities at fair value (fair value option). The fair value option may be elected on an instrument-by-instrument basis and is irrevocable, unless a new election date occurs. If the fair value option is elected for an instrument, unrealized gains and losses for that instrument should be reported in earnings at each subsequent reporting date. The Company did not elect to apply the fair value option to any outstanding instruments.

Cash and cash equivalents

For purposes of the consolidated statements of cash flows, the Company considers all highly liquid instruments with a maturity of three months or less at the purchase date and money market accounts to be cash equivalents.

Accounts receivable

The Company recognizes an allowance for losses on accounts receivable in an amount equal to the estimated probable losses net of recoveries. The allowance is based on an analysis of historical bad debt experience, current receivables aging, and expected future write-offs, as well as an assessment of specific identifiable customer accounts considered at risk or uncollectible. The expense associated with the allowance for doubtful accounts is recognized as general and administrative expense.

Inventory

Inventory is stated at the lower of cost or market. Cost is determined using the first-in, first-out (FIFO) method.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property and equipment

Property and equipment are stated at cost and are depreciated using the straight-line method over their estimated useful lives, which range from three to ten years. Leasehold improvements are depreciated over the shorter of the useful life or lease term including scheduled renewal terms. Maintenance and repairs are charged to expense as incurred. When assets are retired or disposed of, the cost and accumulated depreciation are removed from the accounts, and any resulting gains or losses are included in income in the year of disposition. The Company examines the possibility of decreases in the value of these assets when events or changes in circumstances reflect the fact that their recorded value may not be recoverable.

Intangible assets

Intangible assets, consisting of patents, patent pending technologies and other technologies, are amortized on a straight-line method over the estimated useful life of 5 years.

Impairment of long-lived assets

In accordance with ASC Topic 360, the Company reviews long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be fully recoverable, or at least annually. The Company recognizes an impairment loss when the sum of expected undiscounted future cash flows is less than the carrying amount of the asset. The amount of impairment is measured as the difference between the asset's estimated fair value and its book value.

Revenue recognition

Pursuant to the guidance of ASC Topic 605, the Company recognizes sales when persuasive evidence of an arrangement exists, delivery has occurred or services have been provided, the purchase price is fixed or determinable and collectability is reasonably assured.

Types of Revenue:

- Net product sales by our subsidiary Nanofilm.
- Reimbursements under agreements to perform research and development for government agencies and others by our subsidiary, Applied Nanotech. We do not perform research contracts that are contingent upon successful results. Larger projects are sometimes broken down in phases to allow the customer to determine at the end of each phase if they wish to move to the next phase. The agreements with federal government agencies generally provide that, upon completion of a technology development program, the funding agency is granted a royalty-free license to use any technology developed during the course of the program for its own purposes, but not any preexisting technology that we use in connection with the program. We retain all other rights to use, develop, and commercialize the technology. Agreements with nongovernmental entities generally allow the entity the first opportunity to license the technology from us upon completion of the project.
- Product sales and other miscellaneous revenues from our subsidiary, Applied Nanotech such as the sale of conductive inks and thermal management materials.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition (continued)

Revenue Recognition Criteria:

- Net product sales by our subsidiary Nano, are recognized when the product is shipped to the customer and title is transferred.
- Revenue from research and development government contracts is recognized when it is earned pursuant to the terms of the contract. These projects are usually billed monthly based on costs, hours, or some other measure of activity during the month and revenue is recognized as services are provided. If there is substantive acceptance terms then revenue will not be recognized until acceptance occurs. The recognition of revenue may not correspond with the billings allowable under the contract. To the extent that billings exceed revenue earned, a portion of the revenue is deferred until such time as it is earned.
- Revenue from research and development non-governmental contracts is recognized when it is earned pursuant to the terms of the contract. Each contract is unique and tailored to the needs of the customer and goals of the project. Some contracts may call for a monthly payment for a fixed period of time. Other contracts may be for a fixed dollar amount with an unspecified time period, although there is frequently a targeted completion date. These contracts generally involve some sort of up-front payment. Some contracts may call for the delivery of samples, or may call for the transfer of equipment or other items developed during the project to the customer. These projects are usually billed monthly based on costs, hours, or some other measure of activity during the month and revenue is recognized as services are provided. If there is substantive acceptance terms then revenue will not be recognized until acceptance occurs.
- Revenue from other product sales is recognized at the time the product shipped. The Company's subsidiary Applied Nanotech's primary business is research and development and the licensing of its technology, not the sale of products. Product sales are generally insignificant in number, and are generally limited to the sale of conductive inks, thermal management materials, samples, proofs of concepts, prototypes, or other items resulting from its research.
- Other miscellaneous revenue is recognized as deemed appropriate given the facts of the situation and is generally not material.

Sales incentives and consideration paid to customers

The Company accounts for certain promotional costs such as sales incentives and cooperative advertising as a reduction of sales. For the years ended December 31, 2015 and 2014, the Company recorded approximately \$156,792 and \$123,868, respectively, as a reduction of sales related to these costs.

Cost of sales

Cost of sales includes inventory costs, materials and supplies costs, internal labor and related benefits, subcontractor costs, depreciation, overhead and shipping and handling costs incurred.

Shipping and handling costs

Shipping and handling costs incurred relating to the purchase of inventory are included in inventory which is charged to cost of sales as product are sold. Shipping and handling costs charged to customers are included in sales. For the years ended December 31, 2015 and 2014, shipping and handling costs incurred for product shipped to customers are included in cost of sales and amounted to \$179,584 and \$195,444, respectively.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Research and development

Research and development costs incurred in the development of the Company's products and under other Company sponsored research and development projects are expensed as incurred. Costs such as direct labor, direct costs, and other allocated costs incurred to perform research and development service pursuant to government and private research projects are included in cost of sales. For the years ended December 31, 2015 and 2014, research and development costs incurred in the development of the Company's products were \$744,346 and \$607,049, respectively, and are included in operating expenses on the accompanying consolidated statements of operations.

Advertising costs

The Company participates in various advertising programs. All costs related to advertising of the Company's products are expensed in the period incurred. For the years ended December 31, 2015 and 2014, advertising costs charged to operations were \$93,336 and \$93,257, respectively and are included in sales and marketing on the accompanying consolidated statements of operations. These advertising expenses do not include cooperative advertising and sales incentives which have been deducted from sales.

Federal and state income taxes

The Company accounts for income tax using the liability method prescribed by ASC 740, "Income Taxes". Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities using enacted tax rates that will be in effect in the year in which the differences are expected to reverse. The Company records a valuation allowance to offset deferred tax assets if based on the weight of available evidence, it is more-likely-than-not that some portion, or all, of the deferred tax assets will not be realized. The effect on deferred taxes of a change in tax rates is recognized as income or loss in the period that includes the enactment date.

Prior to the February 24, 2014, the Company's subsidiary, Nanofilm, operated as a limited liability company and passed all income and loss to each member based on their proportionate interest in Nanofilm. After February 24, 2014, the date on which Nanofilm reorganized by creating a corporation parent, NanoHolding Inc., approximately 85.5% of the net income (loss) of Nanofilm, was passed through to the majority member, NanoHolding Inc. After the effective date of the merger, 100% of the net income (loss) of Nanofilm is passed through to the Company.

The Company follows the accounting guidance for uncertainty in income taxes using the provisions of Accounting Standards Codification (ASC) 740 "Income Taxes". Using that guidance, tax positions initially need to be recognized in the financial statements when it is more likely than not the position will be sustained upon examination by the tax authorities. As of December 31, 2015 and 2014, the Company had no uncertain tax positions that qualify for either recognition or disclosure in the financial statements. Tax years that remain subject to examination are the years ending on and after December 31, 2012. The Company recognizes interest and penalties related to uncertain income tax positions in other expense. However, no such interest and penalties were recorded as of December 31, 2015.

Stock-based compensation

Stock-based compensation is accounted for based on the requirements of the Share-Based Payment Topic of ASC 718 which requires recognition in the financial statements of the cost of employee and director services received in exchange for an award of equity instruments over the period the employee or director is required to perform the services in exchange for the award (presumptively, the vesting period). The ASC also requires measurement of the cost of employee and director services received in exchange for an award based on the grant-date fair value of the award.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Stock-based compensation (continued)

Pursuant to ASC Topic 505-50, for share-based payments to consultants and other third-parties, compensation expense is determined at the “measurement date.” The expense is recognized over the service period of the award. Until the measurement date is reached, the total amount of compensation expense remains uncertain. The Company initially records compensation expense based on the fair value of the award at the reporting date.

Loss per share of common stock

ASC 260 “Earnings Per Share”, requires dual presentation of basic and diluted earnings per share (“EPS”) with a reconciliation of the numerator and denominator of the basic EPS computation to the numerator and denominator of the diluted EPS computation. Basic EPS excludes dilution. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock were exercised or converted into common stock or resulted in the issuance of common stock that then shared in the earnings of the entity. Basic net loss per common share is computed by dividing net loss available to common shareholders by the weighted average number of shares of common shares outstanding during the period. Diluted net loss per common share is computed by dividing net loss by the weighted average number of shares of common stock, common stock equivalents and potentially dilutive securities outstanding during each period. As of December 31, 2015 and 2014, 37,778 contingently issuable common shares that are issuable based on certain market conditions (see Note 12) are not included in the potential dilutive shares in calculating the diluted EPS. Additionally, potentially dilutive common shares consist of common stock options (using the treasury stock method). These common stock equivalents may be dilutive in the future. Potentially dilutive common shares were excluded from the computation of diluted shares outstanding as they would have an anti-dilutive impact on the Company’s net losses and consisted of the following:

	December 31, 2015	December 31, 2014
Total stock options	12,397	24,289

Additionally, there are an unknown quantity of common stock equivalents that result from a potential conversion of equity credits and stock appreciation rights (See Notes 14, 16 and 17).

Net loss per share for each class of common stock is as follows:

	Year ended December 31, 2015	Year ended December 31, 2014
Net loss per common shares outstanding:		
Class A common stock	\$ (0.63)	\$ (1.91)
Class B common stock	\$ (0.62)	\$ (0.80)
Class Z common stock	\$ (0.62)	\$ (0.80)
Weighted average shares outstanding:		
Class A common stock	1,317,306	547,862
Class B common stock	1,394,910	1,393,070
Class Z common stock	262,631	262,631
Total weighted average shares outstanding	2,974,847	2,203,563

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Segment reporting

The Company uses “the management approach” in determining reportable operating segments. The management approach considers the internal organization and reporting used by the Company’s chief operating decision maker for making operating decisions and assessing performance as the source for determining the Company’s reportable segments. The Company’s chief operating decision maker is the Chairman and chief executive officer (“CEO”) of the Company, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. The Company classified the reportable operating segments into (i) the development, manufacture and sale of personal lens cleaners and accessories and ultra-thin films of organic or polymeric crystals (the “Product Segment”) and (ii) the performance of nanotechnology research and development services for government and private entities and any related sales of related products.

Recent accounting pronouncements

In May 2014, the FASB issued an update (“ASU 2014-09”) *Revenue from Contracts with Customers*. ASU 2014-09 establishes a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most of the existing revenue recognition guidance. ASU 2014-09 requires an entity to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services and also requires certain additional disclosures. ASU 2014-09 is effective for interim and annual reporting periods in fiscal years that begin after December 15, 2016. The Company is currently evaluating the impact of the adoption of ASU 2014-09 on its consolidated financial statements.

In June 2014, the FASB issued an update (“ASU 2014-12”) to ASC Topic 718, *Compensation – Stock Compensation*. ASU 2014-12 requires an entity to treat performance targets that can be met after the requisite service period of a share based award has ended, as a performance condition that affects vesting. ASU 2014-12 is effective for interim and annual reporting periods in fiscal years that begin after December 15, 2015. The adoption of ASU 2014-12 is not expected to have a material effect on the Company’s financial position, results of operations and cash flows.

In August 2014, the FASB issued ASU 2014-15, *Disclosure of Uncertainties About an Entity’s Ability to Continue as a Going Concern*, that will require management to assess an entity’s ability to continue as a going concern, and to provide related footnote disclosures in certain circumstances. In connection with each annual and interim period, management will assess if there is substantial doubt about an entity’s ability to continue as a going concern within one year after the issuance date. Substantial doubt exists if it is probable that the entity will be unable to meet its obligations within one year after the issuance date. The new standard defines substantial doubt and provides example indicators. Disclosures will be required if conditions give rise to substantial doubt. However, management will need to assess if its plans will alleviate substantial doubt to determine the specific disclosures. This standard is effective for public entities for annual periods ending after December 15, 2016. Earlier application of this standard is permitted. This standard is not expected to have a material effect on our financial position, results of operations and cash flows.

In February 2015, the FASB issued ASU 2015-02, *Consolidation* (Topic 810) (“ASU 2015-02”), to address financial reporting considerations for the evaluation as to the requirement to consolidate certain legal entities. ASU 2015-02 is effective for fiscal years and for interim periods within those fiscal years beginning after December 15, 2015. This standard is not expected to have a material effect on our financial position, results of operations and cash flows.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 2015 AND 2014

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Recent accounting pronouncements (continued)

In April 2015, the FASB issued ASU 2015-03, *Interest—Imputation of Interest (Subtopic 835-30)* (“ASU 2015-03”), as part of the initiative to reduce complexity in accounting standards. The update requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. ASU 2015-03 is effective for annual periods beginning after December 15, 2015 and for interim periods within those fiscal years.

In November 2015, the FASB issued ASU 2015-17, *Balance Sheet Classification of Deferred Taxes* (“ASU 2015-17”), which requires entities to present deferred tax assets and deferred tax liabilities as noncurrent in a classified balance sheet. The ASU simplifies the current guidance in ASC Topic 740, *Income Taxes*, which requires entities to separately present deferred tax assets and liabilities as current and noncurrent in a classified balance sheet. ASU 2015-17 is effective for fiscal years beginning after December 15, 2016, and interim periods within those annual periods. Early adoption is permitted for all entities as of the beginning of an interim or annual reporting period. The Company does not expect the impact of ASU 2015-17 to be material to our consolidated financial statements.

There are no other recently issued accounting standards that apply to us or that are expected to have a material impact on our results of operations, financial condition, or cash flows.

NOTE 3 - ACQUISITION

Effective August 27, 2014, pursuant to the reverse merger and recapitalization as discussed in Note 1, the Company and Nano merged. Both Nano and Applied Nanotech were interested in the Combination because of the opportunity to commercialize new products enabled by nanotechnology. The fact that Applied Nanotech was public will facilitate access to growth capital. The strong intellectual property portfolio of Applied Nanotech, combined with the experience of the Nano team, is to be the platform for the Company to expand its product offerings and commercialize the acquired technologies.

On the Effective Date, the merger was accounted for as a reverse merger and recapitalization of Nano using the acquisition method in accordance with ASC 805-10 and related subsections since the shareholders of Nano and its subsidiary, the legal acquiree, owned 61.6% of the aggregate outstanding common shares of PEN immediately following the completion of the Combination, had its current officers assume all corporate and day-to-day management of PEN, including chief executive officer and chief financial officer, and board members of Nano control a majority of the board after the Combination. Accordingly, Nano was deemed to be the accounting acquirer in the transaction and, consequently, the transaction is treated as a reverse merger with Nano as the acquiring company. Accordingly, the assets and liabilities and the historical operations that will be reflected in the PEN consolidated financial statements after the Effective Date are those of Nano and Subsidiary and are recorded at the historical cost basis of Nano. Applied Nanotech’s assets and liabilities are recorded at their fair values as of the effective date and the results of operations of Applied Nanotech are consolidated with results of operations of Nano starting on the Effective Date.

To determine the fair value of the consideration given to acquire Applied Nanotech, the accounting acquiree, the Company analyzed the fair value of Nano, the accounting acquirer. Accordingly, the acquisition-date fair value of the consideration transferred by Nano for its interest in Applied Nanotech was based on the number of equity interests that Nano issued to give the owners of Applied Nanotech the same percentage equity interest in the combined entity that resulted from the reverse merger. The Company used the fair value of Nano since it was determined to be a better indicator of the fair value of the consideration given to acquire Applied Nanotech.

PEN INC. AND SUBSIDIARIES
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NOTE 3 – ACQUISITION (continued)

In connection with the Combination, the fair value of equity consideration given to acquire Applied Nanotech was \$1,235,282 and is reflected as 1,129,795 Class A common shares deemed issued to the pre-merger shareholders of Applied Nanotech and replacement options to purchase 30,699 Class A common shares of PEN. The purchase price exceeded the fair value of net liabilities acquired by \$2,327,659. The Company allocated the \$2,327,659 excess to intangible assets consisting and patents, patents pending and other technologies, which will be amortized over a 60-month period. The results of operations of Applied Nanotech are included in the consolidated results of operations of the Company from the Effective Date of August 27, 2014 to December 31, 2014. For the period from the Effective Date to December 31, 2014, revenues and net income included in the consolidated statement of operations from Applied Nano amounted to \$772,909 and \$48,529, respectively.

In connection with the Combination, for the year ended December 31, 2014, the Company incurred acquisition related costs of \$235,000 which, pursuant to ASC 805, are expensed and included in professional fees on the accompanying consolidated statement of operations.

In connection with the Combination, the Company entered into an at will employment agreement with the former CEO of Applied Nanotech, The Company determined that the consideration under this employment agreement did not qualify as additional purchase consideration.

The fair value of the assets acquired and liabilities assumed from Applied Nanotech are as follows:

	At August 27, 2014
Assets acquired:	
Cash	\$ 48,121
Accounts receivable	278,997
Prepaid expenses	34,383
Property and equipment	117,574
Intangible assets	2,327,659
Other	17,618
Total assets	2,824,352
Liabilities assumed:	
Accounts payable	781,930
Convertible notes payable, net	146,667
Accrued expenses and other current liabilities	565,245
Deferred revenue	95,228
Total liabilities	1,589,070
Purchase price	\$ 1,235,282

The following unaudited pro forma consolidated results of operations have been prepared as if the Combination of Applied Nanotech had occurred as of the beginning of the following period:

	Year Ended December 31, 2014
Net Revenues	\$ 11,879,532
Net Loss	\$ (2,685,794)
Net Loss per Share	\$ (1.22)

Pro forma data does not purport to be indicative of the results that would have been obtained had these events actually occurred at the beginning of the periods presented and is not intended to be a projection of future results.

PEN INC. AND SUBSIDIARIES
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NOTE 4 – ACCOUNTS RECEIVABLE

At December 31, 2015 and 2014, accounts receivable consisted of the following:

	December 31, 2015	December 31, 2014
Accounts receivable	\$ 1,108,824	\$ 1,040,826
Less: allowance for doubtful accounts	(8,472)	(7,831)
Accounts receivable, net	<u>\$ 1,100,352</u>	<u>\$ 1,032,995</u>

NOTE 5 – INVENTORY

At December 31, 2015 and 2014, inventory consisted of the following:

	December 31, 2015	December 31, 2014
Raw materials	\$ 705,952	\$ 953,566
Finished goods	551,599	813,352
	<u>1,257,551</u>	<u>1,766,918</u>
Less: reserve for obsolescence	(174,166)	(209,818)
Inventory, net	<u>\$ 1,083,385</u>	<u>\$ 1,557,100</u>

NOTE 6 - PROPERTY AND EQUIPMENT

At December 31, 2015 and 2014, property and equipment consisted of the following:

	Useful Life	2015	2014
Machinery and equipment	5 - 10 Years	\$ 3,943,708	\$ 3,510,398
Furniture and office equipment	3 - 7 Years	980,801	994,684
Leasehold improvements	7 - 15 Years	287,162	287,162
Construction in progress	-	4,744	201,027
		<u>5,216,415</u>	<u>4,993,271</u>
Less: accumulated depreciation		(4,319,057)	(4,142,424)
Property and equipment, net		<u>\$ 897,358</u>	<u>\$ 850,847</u>

For the years ended December 31, 2015 and 2014, depreciation and amortization expense amounted to \$201,612 and \$169,256, respectively, of which \$155,499 and \$119,566, respectively, is included in cost of sales and the remainder is included in operating expenses.

NOTE 7 – INTANGIBLE ASSETS

In connection with the Combination (See Note 3), the fair value of equity consideration given to acquire Applied Nanotech exceeded the fair value of net liabilities acquired by \$2,327,659. The Company allocated the \$2,327,659 excess to intangible assets consisting of patents, patents pending and other technologies, which was to be amortized over a 60-month period.

At December 2015 and 2014, the Company assessed its long-lived assets for any impairment and concluded that there were indicators of impairment as of December 31, 2015 and 2014 and we calculated that the estimated undiscounted cash flows were less than the carrying amount of the intangible asset. Based on the Company's analysis, the Company recognized an impairment loss of \$188,051 and \$1,933,144 for the years ended December 31, 2015 and 2014, respectively, which reduced the value of intangible assets acquired to \$0.

PEN INC. AND SUBSIDIARIES
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NOTE 7 – INTANGIBLE ASSETS (continued)

At December 31, 2015 and 2014, intangible assets consisted of the following:

	Useful Life	2015	2014
Patents, patents pending and other technologies	4.7 Years	\$ -	\$ 239,338
Less: accumulated amortization		-	-
Intangible assets, net		<u>\$ -</u>	<u>\$ 239,338</u>

For the years ended December 31, 2015 and 2014, amortization expense amounted to \$51,287 and \$155,177, respectively.

NOTE 8 – BANK LOANS AND LINES OF REVOLVING CREDIT FACILITY

In April 2014, Nanofilm entered into a \$1,500,000 revolving credit line agreement (the “Revolving Note”) with Mackinac Commercial Credit, LLC (the “Lender”). The unpaid principal balance of this Revolving Note is payable on demand, is secured by all of Nanofilm’s assets, and bears interest computed at a rate of interest (the “Effective Rate”) which is equal to 7.0% above the LIBOR Rate, as defined, payable monthly. Nanofilm will pay to Lender a late charge of 5.0% of any monthly payment not received by Lender within 10 calendar days after its due date. The Company may, at any time or from time to time upon three business days’ written notice to Lender, prepay the Note in whole provided that (i) if Borrower prepays the Revolving Note in full and terminates the Revolving Note, or (ii) Lender terminates the Revolving Note after default, then Borrower will pay a termination premium equal to 2.0% of the maximum loan amount.

Without the Lender’s consent, so long as the obligation remains outstanding, in addition to other covenants as defined in the Revolving Note, Nanofilm shall not a) merge or consolidate with any other company, except for the Combination and shall not suffer a change of control; b) make any capital expenditures, as defined, materially affecting the business; c) declare or pay cash dividends upon any of its stock, or distribute any of its property, make any loans, make investments, redeem, retire or acquire any of its stock, d) become liable for the indebtedness of anyone else, as defined, and e) incur indebtedness, other than trade payables.

On May 1, 2015 Nanofilm entered into an amendment to the Loan and Security Agreement with the Lender to extend the outside maturity date to April 4, 2016 and to permit advances against an expanded borrowing base. The borrowing base was increased by \$450,000 through October 31, 2015, with this amount reducing by \$7,500 monthly thereafter. In addition, the Company guaranteed Nanofilm’s obligations to the Lender.

At December 31, 2015 and 2014, the Company had \$1,288,748 and \$773,344, respectively, in borrowings outstanding under the Revolving Note with \$211,252 and \$726,656, respectively, available for borrowing under such note. The weighted average interest rate during the years ended December 31, 2015 and 2014 was approximately 7.31% and 6.8%, respectively.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 9 – NOTES PAYABLE

On February 10, 2015, Nanofilm entered into a promissory note (the “Equipment Note”) with KeyBank, N.A. (the “Bank”) to borrow up to \$373,000. Nanofilm may obtain one or more advances not to exceed \$373,000. The unpaid principal balance of this Equipment Note is payable in 60 equal monthly installments payments of principal and interest through June 10, 2020. The Equipment Note is secured by certain equipment, as defined in the Equipment Note, and bears interest computed at a rate of interest of 4.35% per annum based on a year of 360 days. At December 31, 2015, the principal amount due under the Equipment Note amounted to \$334,711.

In June and November 2015, in connection with a severance package offered to four employees, the Company entered into three promissory note agreements with such employees which obligates the Company to pay these employees accrued and unpaid deferred salary in an aggregate amount of \$51,808. The principal amounts due under these notes shall bear interest at the minimum rate of interest applicable under the internal revenue code (approximately 3.0% at December 31, 2015). All principal and interest payable under three of these notes aggregating \$37,458 are due in 2025 and all principal and interest payable under one of these notes amounting to \$14,350 are due in 2020.

Future payments of notes payable are as follows:

Years ending December 31:	Amount
2016	\$ 74,380
2017	74,380
2018	74,380
2019	74,380
2020	51,540
Thereafter	37,459
	<u>\$ 386,519</u>

NOTE 10 – CONVERTIBLE NOTES PAYABLE

In connection with the reverse merger, the Company assumed certain 8% convertible notes payable dated from April 2014 to August 2014, with an aggregate principal amount of \$50,000, which are due on July 15, 2015. These Notes will automatically convert into shares of Class A Common Stock of PEN Inc. on the later of (i) the day 180 days after the Note dates which range from April to August 2014, (ii) the day 60 days after the closing under the Merger & Exchange Agreement which closed effective August 27, 2014, or (iii) October 15, 2014. Principal and accrued interest will be converted into shares using a conversion price equal to 75% of the average closing price of the Company’s Class A Common Stock for the twenty trading days immediately preceding the conversion date.

Pursuant to ASC Topic 470-20-525 (Debt with conversion and other options), since these convertible notes had fixed conversion percentages of 75% of the stock price, the Company determined it had a fixed monetary amounts that can be settled for the debt. Accordingly, on the respective note date, the Company accrued a put premium amount aggregating \$16,666 since these convertible notes are convertible for the conversion premium. Upon conversion, the Company reclassified \$13,333 of the conversion premium to additional paid-in capital, which is included on the “common stock issued for conversion of convertible debt and interest” line item on the consolidated statement of stockholders’ equity.

From October 26, 2014 to December 7, 2014, the Company issued 6,036 shares of Class A common stock upon the automatic conversion in accordance with their terms of \$40,000 of aggregate principal amount of these convertible promissory notes and accrued interest of \$1,614. The notes converted based on 75% of the average closing price of the Company’s common shares for the 20 day trading period ending on the last trading day prior to the conversion.

PEN INC. AND SUBSIDIARIES
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NOTE 10 – CONVERTIBLE NOTES PAYABLE (continued)

On February 7, 2015, the Company issued 1,159 shares of Class A common stock upon the automatic conversion in accordance with its terms of \$10,000 of principal amount of convertible promissory notes, and accrued interest of \$392 (See Note 12). Upon conversion, the Company reclassified \$3,333 of the conversion premium to additional paid-in capital. At December 31, 2015 and 2014, aggregate convertible notes payable consisted of the following:

	December 31, 2015	December 31, 2014
Convertible notes payable	\$ -	\$ 10,000
Put premium	-	3,333
Total	\$ -	\$ 13,333

NOTE 11 – RELATED PARTY TRANSACTIONS

Sales to related party

During the years ended December 31, 2015 and 2014, the Company engaged in certain sales transactions with a company which is a shareholder and related to a director of the Company. Sales to the related party totaled \$134,485 and \$198,858 for the years ended December 31, 2015 and 2014, respectively. Accounts receivable from the related party totaled \$11,984 and \$38,246 at December 31, 2015 and 2014, respectively.

Convertible notes payable – related parties

In connection with the reverse merger, the Company assumed certain 8% convertible notes payable from related parties dated from April 2014 to August 2014, with an aggregate principal amount of \$60,000, which are due on the Note dates which range from April to May 2014. These Notes will automatically convert into shares of Class A Common Stock of PEN Inc. on the later of (i) the day 180 days after the Note dates which range from April to August 2014, (ii) the day 60 days after the closing under the Merger & Exchange Agreement which closed effective August 27, 2014, or (iii) October 15, 2014. Principal and accrued interest will be converted into shares using a conversion price equal to 75% of the average closing price of the Company's Class A Common Stock for the twenty trading days immediately preceding the conversion date.

Pursuant to ASC Topic 470-20-525 (Debt with conversion and other options), since these convertible notes had fixed conversion percentages of 75% of the stock price, the Company determined it had a fixed maximum amounts that can be settled for the debt. Accordingly, the Company accrued a put premium amount aggregating \$20,001 since these convertible notes are convertible for the conversion premium. Upon conversion, the Company reclassified \$20,001 of the conversion premium to additional paid-in capital.

From October 26, 2014 to November 17, 2014, the Company issued 6,848 shares of Class A common stock and 1,345 shares of Class B common stock upon the automatic conversion in accordance with their terms of \$60,000 of aggregate principal amount of related party convertible promissory notes, and accrued interest of \$2,556. The notes converted based on 75% of the average closing price of the Company's common shares for the 20 day trading period ending on the last trading day prior to the conversion date. At December 31, 2015 and 2014, principal amount due under these convertible notes amounted to \$0.

Other

A board member is a principal in an investment advisory firm which the Company expensed \$115,000 and \$232,872 in fees and expenses during the years ended December 31, 2015 and 2014, respectively.

PEN INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
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NOTE 12 - STOCKHOLDERS' EQUITY

Description of Preferred and Common Stock

On December 11, 2015, the Board of Directors of the Company approved a reverse stock split of the issued and outstanding shares of the Company's common stock at the ratio of 180-for-1 (the "Reverse Stock Split") and authorized an amendment of the Company's Amended and Restated Certificate of Incorporation, as amended, to effect the Reverse Stock Split, to reduce the number of authorized shares of common stock, and to set a par value of \$0.0001 per share after the Reverse Stock Split. Upon the filing and effectiveness of the Amendment which occurred on January 26, 2016 (the "Effective Time"), each one hundred eighty (180) shares of the Company's (i) Class A Common Stock, (ii) Class B Common Stock and (iii) Class Z Common Stock, issued and outstanding immediately prior to the Effective Time ("Old Shares") were automatically combined into one (1) validly issued, fully paid and non-assessable share of Class A Common Stock, Class B Common Stock and Class Z Common Stock ("New Shares"), respectively, without any further action by the Company or the holder. Additionally, the authorized number of shares of common stock were reduced to 10,000,000 comprised of 7,200,000 shares of Class A Common Stock, 2,500,000 shares of Class B Common Stock and 300,000 shares of Class Z Common Stock. The par value of each class of common stock remained the same at \$0.0001 per common share. All share and per share data in the accompanying consolidated financial statements have been retroactively restated to reflect the effect of the Reverse Stock Split and authorized shares.

Preferred Stock

The preferred stock may be issued in one or more series. The Company's board of directors are authorized to issue the shares of preferred stock in such series and to fix from time to time before issuance thereof the number of shares to be included in any such series and the designation, powers, preferences and relative, participating, optional or other rights, and the qualifications, limitations or restrictions thereof, of such series.

Common Stock – General

The rights of each share of Class A common stock, each share of Class B common stock and each share of Class Z common stock are the same with respect to dividends, distributions and rights upon liquidation.

Class A Common Stock

Holders of the Class A common stock are entitled to one vote per share in the election of directors and other matters submitted to a vote of the stockholders.

Class B Common Stock

Conversion Rights. Shares of Class B common stock can be converted, one-for-one, into shares of Class A common stock at any time at the option of the holder. Shares of Class B common stock will automatically be converted into shares of Class A common stock if the shares of Class B common stock are not owned by the Company's chief executive officer, his spouse, or their descendants and their spouses, or by entities or trusts wholly-owned by them.

Voting Rights Holders of PEN Class B common stock are entitled to 100 votes per share in the election of directors and other matters submitted to a vote of the stockholders.

Class Z common stock sell or convert more than one-half of the shares of Class Z common stock that are received in the Combination, all shares of Class Z common stock will automatically convert into Class A common stock.

PEN INC. AND SUBSIDIARIES
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NOTE 12 - STOCKHOLDERS' EQUITY (continued)

Description of Preferred and Common Stock (continued)

Class Z Common Stock

Conversion Rights. Shares of Class Z common stock can be converted, one-for-one, into shares of Class A common stock at any time at the option of the holder. Shares of Class Z common stock will automatically be converted into shares of Class A common stock if the shares of Class Z common stock are not owned by Zeiss or an entity wholly owned by the ultimate parent of Zeiss. In addition, if Zeiss and other permitted holders of shares of

Voting Rights. Holders of PEN Class Z common stock do not vote in the election of directors or otherwise, but they do have the right to designate a director to the PEN Board, have anti-dilution rights described below and have consent rights with respect to certain amendments to PEN's certificate of incorporation.

Other Rights. The Class Z common stock has anti-dilutive rights that, subject to limited exceptions, permit holders of Class Z common stock to purchase additional shares or equity rights issued by PEN (on the same terms as made available to third parties by PEN) to maintain their economic ownership percentage. The holders of Class Z common stock are also entitled to receive a copy of any notice sent to the holders of Class A common stock or Class B common stock, as and when the notice is sent to such holders.

Issuances of Common Stock

Immediately prior the Effective Date, Applied Nanotech had 1,129,795 Class A shares outstanding. These 1,129,795 Class A common shares are reflected as shares deemed issued as merger consideration in the accompanying consolidated financial statements.

Common stock issued for services

On September 24, 2014, the Company issued 464 shares of Class A common stock and 186 shares of Class B common stock to directors for services rendered. These shares were valued on the date of grant at \$10.76 per share based on the quoted price of the stock for a total value of \$7,000. Additionally, on December 10, 2014, the Company issued 604 shares of Class A common stock and 242 shares of Class B common stock to directors for services rendered. These shares were valued on the date of grant at \$8.28 per share based on the quoted trading price for a total value of \$7,000. For the year ended December 31, 2014, in connection with the issuance of these shares, the Company recorded stock-based compensation of \$14,000.

On May 4, 2015, the Company issued an aggregate of 665 shares of Class A common stock and 266 shares of Class B common stock to the Company's directors as partial payment for their service on the Company's board. These shares were valued on the date of grant of May 4, 2015 at \$7.52 per share based on the quoted price of the stock for a total value of \$7,000.

On July 30, 2015, the Company issued an aggregate of 857 shares of Class A common stock and 343 shares of Class B common stock to the Company's directors as partial payment for their service on the Company's board. These shares were valued on the date of grant of July 30, 2015 at \$5.83 per share based on the quoted price of the stock for a total value of \$7,000.

On November 30, 2015, the Company issued an aggregate of 1,048 shares of Class A common stock and 524 shares of Class B common stock to the Company's directors as partial payment for their service on the Company's board. These shares were valued on the date of grant of November 30, 2015 at \$3.82 per share based on the quoted price of the stock for a total value of \$6,000.

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NOTE 12 - STOCKHOLDERS' EQUITY (continued)

Common stock issued for services (continued)

On December 9, 2015, the Company issued 11,111 shares of Class A common stock to the Company's chief financial officer as partial payment for services rendered. These shares were valued on the date of grant at \$3.24 per share based on the quoted price of the stock for a total value of \$36,000.

On December 9, 2015, the Company issued 6,173 shares of Class A common stock for legal services rendered. These shares were valued on the date of grant at \$3.24 per share based on the quoted price of the stock for a total value of \$20,000.

Common stock issued for convertible debt and interest

From October 26, 2014 to December 7, 2014, the Company issued 6,036 shares of Class A common stock upon the automatic conversion in accordance with their terms of \$40,000 of aggregate principal amount of convertible promissory notes and accrued interest of \$1,614. Upon conversion, the Company reclassified \$13,333 of conversion premium to additional paid-in capital (See Note 10).

From October 26, 2014 to November 17, 2014, the Company issued 6,848 shares of Class A common stock and 1,345 shares of Class B common stock upon the automatic conversion in accordance with their terms of \$60,000 of aggregate principal amount of related party convertible promissory notes, and accrued interest of \$2,556. Upon conversion, the Company reclassified \$20,001 of conversion premium to additional paid-in capital (See Note 11).

On February 7, 2015, the Company issued 1,159 shares of Class A common stock upon the automatic conversion in accordance with its terms of \$10,000 of principal amount of a convertible promissory note, and accrued interest on that note of \$392 (see Note 10). Upon conversion, the Company reclassified \$3,333 of the conversion premium to additional paid-in capital.

Common stock issued in connection with a Stock Grant Agreement

On September 1, 2014, the Company issued 6,667 shares of Class A common stock to the former chief financial officer of Applied Nanotech pursuant to a Stock Grant Agreement dated in February 2014. These shares were valued on the measurement date of September 1, 2014 at \$12.35 per share based on the quoted trading price of the stock for a total value of \$82,320. For the year ended December 31, 2014, in connection with the issuance of these shares, the Company recorded stock-based compensation of \$82,320.

Under that Agreement, the Company issued 4,942 shares on January 31, 2015 and 6,667 shares of in February 2015 for an aggregate of 11,609 shares of Class A common stock. These shares were valued on the date of grant at \$10.62 per share based on the quoted trading price for a total value of \$123,285. In connection with these shares, during the year ended December 31, 2014, the Company recorded compensation expense of \$123,285 and at December 31, 2014, included \$123,285 in accrued expenses on the accompanying consolidated balance sheet. Upon issuance of these shares in 2015, the accrued expense was relieved and recorded as equity.

PEN INC. AND SUBSIDIARIES
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NOTE 12 - STOCKHOLDERS' EQUITY (continued)

Stock Options

Stock options outstanding are to purchase Class A common stock, Stock option activities for the years ended December 31, 2015 and 2014 are summarized as follows:

	Number of Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
Balance Outstanding December 31, 2013	-	\$ -	-	\$ -
Stock options assumed in acquisition	30,796	108.00	-	-
Forfeited	(6,507)	(176.40)	-	-
Balance Outstanding December 31, 2014	24,289	90.00	-	-
Forfeited	(11,892)	(97.87)	-	-
Balance Outstanding December 31, 2015	12,397	\$ 81.15	3.87	-
Exercisable, December 31, 2015	12,397	\$ 81.15	3.87	\$ -

Contingently issuable Class A common shares

On August 27, 2014, the Company entered into a Restricted Stock Agreement with Dr. Zvi Yaniv, the former Chief Operating Officer and President, of Applied Nanotech, and a current employee of the Company granting Dr. Yaniv 37,778 shares of Class A common stock, subject to forfeiture. All these shares become vested and not subject to forfeiture on the earlier of a change of control of us, Dr. Yaniv's death, or if more than 180 days after closing, the average trading price of the shares during a measurement period of ten consecutive trading days reaches certain price thresholds. At an \$18.00 price, 5,554 shares vest, with additional tranches of 5,556 shares vesting if the price reaches \$27.00, \$36.00, \$45.00 and \$54.00. The last 10,000 shares vest at a \$63.00 price threshold. Any shares that have not vested five years after the Effective Date will be forfeited. We also entered into a Piggyback Registration Rights Agreement that will allow Dr. Yaniv, subject to other customary terms and conditions, to register shares that are no longer subject to forfeiture if we are registering our shares. Pursuant to ASC 718-10 and related subsections, these shares were valued on the date of grant of August 27, 2014 at \$13.12 per shares for a total value of \$495,720. The Company estimates the fair value of the awards with market conditions using a Binomial simulation, which utilizes several assumptions including the risk-free interest rate, the volatility of the Company's stock and the exercise behavior of award recipients. The grant-date fair value of \$495,720 of the awards will be recognized over the requisite service period of 3 years, which represents the derived service period for the stock grant as determined by the Binomial simulation method. For the years ended December 31, 2015 and 2014, in connection with the amortization of the fair value of this stock grant, the Company recorded stock-based compensation of \$165,240 and \$55,080, respectively.

2015 Equity Incentive Plan

On November 30, 2015, the Board of Directors authorized the 2015 Equity Incentive Plan (the "Plan"), which reserved 111,111 shares of common stock. If any share of common stock that have been granted pursuant to a stock option ceases to be subject to a stock option, or if any shares of common stock that are subject to any other stock-based award granted are forfeited or terminates, such shares shall again be available for distribution in connection with future grants and awards under the Plan, The Plans purpose is to enable the Company to offer its employees, officers, directors and consultants an opportunity to acquire a proprietary interest in the Company for their contributions. As of December 31, 2015, 17,284 common shares have been issued pursuant to the Plan and 93,827 shares are available for future issuance.

PEN INC. AND SUBSIDIARIES
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NOTE 13 – INCOME TAXES

The Company maintains deferred tax assets and liabilities that reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The net deferred tax asset has been fully offset by a valuation allowance because of the uncertainty of the attainment of future taxable income.

For the period from January 2014 to February 28, 2014, the Company operated as a limited liability company and passed all income and loss to each member based on their proportionate interest in the Company. Accordingly, no provision for federal and state income taxes has been made in these consolidated financial statements for these periods. Had the Company been subject to income taxes during the period from January 2014 to February 28, 2014, the pro forma effect of income taxes on the Company's net income (loss) based of the Company's statutory income tax rate of 34% was not material.

The items accounting for the difference between income taxes at the effective statutory rate and the provision for income taxes for the years ended December 31, 2015 and 2014 were as follows:

	Years Ended December 31,	
	2015	2014
Income tax benefit at U.S. statutory rate of 34%	\$ (628,000)	\$ (759,000)
Forfeiture of stock options	215,000	184,000
Non-deductible expenses	54,000	615,000
Income tax incurred on LLC profits prior to acquisition	23,720	84,183
Change in valuation allowance	359,000	(40,000)
Total provision for income tax	<u>\$ 23,720</u>	<u>\$ 84,183</u>

The Company's approximate net deferred tax assets as of December 31, 2015 and 2014 were as follows:

	December 31, 2015	December 31, 2014
Deferred Tax Assets:		
Net operating loss carryforward	\$ 2,917,000	\$ 2,407,000
Stock-based compensation	177,000	392,000
Allowance for inventory obsolescence	60,000	72,000
Accrued compensation	101,000	106,000
Other	61,000	61,000
Total deferred tax assets	<u>3,316,000</u>	<u>3,038,000</u>
Less: deferred tax liability: intangible assets	-	(81,000)
Net deferred tax assets before valuation allowance	<u>3,316,000</u>	<u>2,957,000</u>
Valuation allowance	(3,316,000)	(2,957,000)
Net deferred tax assets	<u>\$ -</u>	<u>\$ -</u>

The estimated net operating loss carryforward was approximately \$8,579,000 at December 31, 2015 which is an estimate of the Company's net operating loss carryforward acquired in the Combination after giving effect to the limitation on the usage of such net operating loss carryforwards due to a change in ownership in accordance with Section 382 of the Internal Revenue Code plus net operating loss carryforwards since the Combination. The Company provided a valuation allowance equal to the net deferred income tax asset for the year ended December 31, 2015 because it was not known whether future taxable income will be sufficient to utilize the loss carryforward. The increase in the valuation allowance was \$359,000 from the year ended December 31, 2015. The potential tax benefit arising from tax loss carryforwards will expire in 2035.

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NOTE 13 – INCOME TAXES (continued)

Additionally, the future utilization of the net operating loss carryforward to offset future taxable income may be subject to special tax rules which may limit their usage under the Separate Return Limitation Year (“SRLY”) rules. If necessary, the deferred tax assets will be reduced by any carryforward that expires prior to utilization as a result of such limitations, with a corresponding reduction of the valuation allowance.

The Company does not have any uncertain tax positions or events leading to uncertainty in a tax position. The Company’s 2013, 2014 and 2015 Corporate Income Tax Returns are subject to Internal Revenue Service examination.

NOTE 14 – COMMITMENTS AND CONTINGENCIES

Leases

The Company leases its facilities and certain equipment under non-cancelable operating leases. The Company has the right to renew certain facility leases for an additional five years. Rent expense for operating leases was reflected net of any sublease income and was \$514,739 and \$426,488 for the years ended December 31, 2015 and 2014, respectively, including \$12,830 of amortization for deferred lease incentives for the years ended December 31, 2015 and 2014.

Future minimum lease payments under non-cancelable operating leases at December 31, 2015 are as follows:

Years ending December 31,	Amount
2016	\$ 584,638
2017	469,347
2018	192,400
2019	32,200
Total minimum non-cancelable operating lease payments	\$ 1,278,585

Equity Credits

Equity credits may become convertible into an unknown amount of capital stock of the Company to be determined by the Company’s board of directors (See Note 16).

Stock Appreciation Rights

If the Company completes an IPO, the value of stock appreciation rights calculated based on the IPO formula may cause a material increase in the value of the liability (See Note 17).

Litigation

Subsequent to December 31, 2015, the Company became a party to certain litigation (See Note 19).

NOTE 15 – CONCENTRATIONS

Concentrations of credit risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of trade accounts receivable and cash deposits and investments in cash equivalent instruments.

The Company places its cash in banks at levels that, at times, may exceed federally insured limits. There were no balances in excess of FDIC insured levels as of December 31, 2015 and 2014. The Company has not experienced any losses in such accounts through December 31, 2015.

Lender concentration

The Company relies on one lender under a \$1,500,000 Revolving Note.

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NOTE 15 – CONCENTRATIONS (continued)

Geographic concentrations of sales

For the years ended December 31, 2015 and 2014, total sales in the United States represent approximately 73% and 89% of total consolidated revenues, respectively. No other geographical area accounting for more than 10% of total sales during the years ended December 31, 2015 and 2014.

Customer concentrations

Customer concentrations for the years ended December 31, 2015 and 2014 are as follows:

	Revenues		Accounts Receivable	
	Years Ended December 31,		As of December 31,	
	2015	2014	2015	2014
Customer A	28%	24%	31%	31%
Customer B	*	16%	*	*
Customer C	11%	10%	14%	10%
Total	39%	50%	45%	44%

* less than 10%

A reduction in sales from or loss of such customers would have a material adverse effect on our consolidated results of operations and financial condition.

Vendor concentrations

For the years ended December 31, 2015, the Company purchased 55% of its inventory from three suppliers (32%, 12% and 11%, respectively). For the year ended December 31, 2014, the Company purchased approximately 49% of its inventory from four suppliers (24%, 9%, 8% and 8%, respectively).

NOTE 16 – EQUITY CREDITS

During 1997, Nanofilm established *The Equity Credit Incentive Program*. This program enabled select employees the opportunity to purchase equity credits that increase in value based upon an increase in Nanofilm's revenue over a base year of 1996. Eligible credits can be redeemed after two years at the equity credit value for that year. Under certain circumstances, the equity credits are convertible into Nano equity on a one-for-one basis.

The maximum number of credits available for issuance is 385,000. During the year ended December 31, 2015, no equity credits were forfeited and no units were redeemed. As of December 31, 2015, 77,700 equity credits were issued and outstanding with an approximate value of \$0.1822 per credit and, as of December 31, 2014, 77,700 equity credits were issued and outstanding with an approximate value of \$0.3240 per credit. At December 31, 2015 and 2014, \$14,154 and \$25,178, respectively, was accrued, and included in accrued expenses, representing the redemption value associated with the equity credits outstanding for both years.

Under the terms of the Plan, when the Company completes a registered offering of its common stock, the equity credit participants will have the option to convert the equity credits into Class A common shares of the Company, or in the case of our President, into shares of Class B common stock.

For the years ended December 31, 2015 and 2014, a gain (loss) from the change in value of the equity credits was \$11,024 and \$(99), respectively, and is included in operating expenses on the accompanying consolidated statements of operations.

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NOTE 17 – STOCK APPRECIATION PLAN

From June 1, 1988, until December 31, 1997, when the plan was terminated, Nanofilm had in place a Stock Appreciation Rights Plan A (the “Plan”), intended to provide employees, directors, members of a technical advisory board and certain independent contractors selected by the Board with equity-like participation in the growth of Nanofilm. The maximum number of stock appreciation rights that could be granted by the Board was 1,000,000.

There were 235,782 fully vested stock appreciation rights (“SARS”) outstanding under the terms of the Plan at December 31, 2015 and 2014. The SARS unit value is based on the book value of the Company as of the last fiscal year end multiplied by a SARS multiplier stipulated in the SARS plan. However, in the event of an initial public offering (“IPO”) of Nano, the SARS are redeemable based on a value equal to offering price of the stock in an IPO times the total outstanding shares of the Company just subsequent to the completion of the IPO, multiplied by the SARS multiplier. The SARS multiplier is to be adjusted, as the Board determines, to reflect changes in the capitalization of Nanofilm. Generally, the SARS are redeemable in cash, at their then fair value as computed pursuant to the Plan, in the event of termination of employment or business relationship, death, permanent and total disability, or sale of Nano (as defined). Upon an IPO, SARS are to be redeemed by applying 70% of the redemption value to purchase common shares, with the remaining 30% being distributed in cash to the participant.

The August 2014 Combination does not qualify as an IPO under the Plan; however, a future underwritten registered offering may qualify.

The accrued redemption value associated with the stock appreciation rights amounted to \$53,108 and \$46,146, at December 31, 2015 and 2014, respectively. If the Company completes an IPO, the value of SARS calculated based on the IPO formula may cause a material increase in the value of the liability.

NOTE 18 – SEGMENT REPORTING

The Company’s principal operating segments coincide with the types of products to be sold. The products from which revenues are derived are consistent with the reporting structure of the Company’s internal organization. The Company’s two reportable segments for the years ended December 31, 2015 and 2014 were i) the Product Segment and ii) the Research and Development Segment. For the 2014 period, the Company began operating in the Research and Development Segment beginning after August 27, 2014. The Company’s chief operating decision-maker has been identified as the Chairman and CEO, who reviews operating results to make decisions about allocating resources and assessing performance for the entire Company. Segment information is presented based upon the Company’s management organization structure as of December 31, 2015 and the distinctive nature of each segment. Future changes to this internal financial structure may result in changes to the reportable segments disclosed. There are no inter-segment revenue transactions and, therefore, revenues are only to external customers. As the Company primarily generates its revenues from customers in the United States, no geographical segments are presented.

Segment operating profit is determined based upon internal performance measures used by the chief operating decision-maker. The Company derives the segment results from its internal management reporting system. The accounting policies the Company uses to derive reportable segment results are the same as those used for external reporting purposes. Management measures the performance of each reportable segment based upon several metrics, including net revenues, gross profit and operating income (loss). Management uses these results to evaluate the performance of, and to assign resources to, each of the reportable segments. The Company manages certain operating expenses separately at the corporate level and does not allocate such expenses to the segments. Segment income from operations excludes interest income/expense and other income or expenses and income taxes according to how a particular reportable segment’s management is measured. Management does not consider impairment charges, and unallocated costs in measuring the performance of the reportable segments.

PEN INC. AND SUBSIDIARIES
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NOTE 18 – SEGMENT REPORTING (continued)

Segment information available with respect to these reportable business segments for the years ended December 31, 2015 and 2014 was as follows:

	Years Ended December 31,	
	2015	2014
Revenues:		
Product segment	\$ 7,920,148	\$ 9,177,568
Research and development segment	1,764,924	772,909
Total segment and consolidated revenues	<u>\$ 9,685,072</u>	<u>\$ 9,950,477</u>
Gross profit (loss):		
Product segment	\$ 3,358,305	\$ 4,163,272
Research and development segment	(17,366)	137,089
Total segment and consolidated gross profit	<u>\$ 3,340,939</u>	<u>\$ 4,300,361</u>
Income (loss) from operations		
Product segment	\$ 487,973	\$ 509,888
Research and development segment	(696,369)	(69,157)
Total segment income (loss)	(208,396)	440,731
Unallocated costs	(1,531,807)	(2,730,549)
Total consolidated (loss) from operations	<u>\$ (1,740,203)</u>	<u>\$ (2,289,818)</u>
Depreciation and amortization:		
Product segment	\$ 150,056	\$ 151,438
Research and development segment	51,556	17,818
Total segment depreciation and amortization	201,612	169,256
Unallocated depreciation	51,287	155,177
Total consolidated depreciation and amortization	<u>\$ 252,899</u>	<u>\$ 324,433</u>
Capital additions:		
Product segment	\$ 244,737	\$ 229,385
Research and development segment	3,386	440
Total segment capital additions	248,123	229,825
Unallocated capital additions	-	-
Total consolidated capital additions	<u>\$ 248,123</u>	<u>\$ 229,825</u>
	December 31, 2015	December 31, 2014
Segment tangible assets		
Product segment	\$ 845,332	\$ 750,651
Research and development segment	52,026	100,196
Total consolidated tangible assets	<u>\$ 897,358</u>	<u>\$ 850,847</u>

The Company does not allocate any general and administrative expenses, other income or income taxes to its reportable segments because these activities are managed at a corporate level.

PEN INC. AND SUBSIDIARIES
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NOTE 19 – SUBSEQUENT EVENTS

On February 17, 2016, the Company issued an aggregate of 1,248 shares of Class A common stock and 624 shares of Class B common stock to the Company's directors as partial payment for their service on the Company's board. These shares were valued on the date of grant at \$3.20 per share based on the quoted price of the stock for a total value of \$6,000.

The Company is a defendant in the matter of Dongsheng Mao v. PEN Inc., Cause No. D-1-GN-16-00065 in the 345th Judicial District Court of Travis County, Texas. The plaintiff is a former employee of Applied Nanotech Inc. His employment was terminated in 2015 and he seeks payment of deferred compensation allegedly due to him. The Company will contest the case vigorously. The Company has accrued the \$83,000 claimed, but the loss in the event of an unfavorable outcome could include other fees and expenses such as statutory interest, attorney's fees and other costs.

Item 9. Changes and Disagreements with Accountants on Accounting and Financial Disclosures.

Not Applicable.

Item 9A. Controls and Procedures**Evaluation of Disclosure Controls and Procedures**

We maintain disclosure controls and procedures as defined in Rules 13a-15(e) and 15d-15(e) of the Exchange Act that are designed to ensure that information required to be disclosed in our reports filed or submitted to the SEC under the Exchange Act is recorded, processed, summarized and reported within the time periods specified by the SEC's rules and forms, and that information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosures. Our Chief Executive Officer and Chief Financial Officer evaluated the effectiveness of disclosure controls and procedures as of December 31, 2015 pursuant to Rule 13a-15(b) under the Exchange Act. Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures were effective to ensure that information required to be included in our periodic SEC filings is recorded, processed, summarized, and reported within the time periods specified in the SEC rules and forms.

Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for the preparation of our consolidated financial statements and related information. Management uses its best judgment to ensure that the consolidated financial statements present fairly, in material respects, our financial position and results of operations in conformity with generally accepted accounting principles. Management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in the Securities Exchange Act of 1934. These internal controls are designed to provide reasonable assurance that the reported financial information is presented fairly, that disclosures are adequate and that the judgments inherent in the preparation of financial statements are reasonable. There are inherent limitations in the effectiveness of any system of internal controls including the possibility of human error and overriding of controls. Consequently, an ineffective internal control system can only provide reasonable, not absolute, assurance with respect to reporting financial information.

Our internal control over financial reporting includes policies and procedures that: (i) pertain to maintaining records that, in reasonable detail, accurately and fairly reflect our transactions; (ii) provide reasonable assurance that transactions are recorded as necessary for preparation of our financial statements in accordance with generally accepted accounting principles and that the receipts and expenditures of company assets are made in accordance with our management and directors authorization; and (iii) provide reasonable assurance regarding the prevention of or timely detection of unauthorized acquisition, use or disposition of assets that could have a material effect on our financial statements.

Under the supervision of management, including our Chief Executive Officer and our Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission published in 1992 and subsequent guidance prepared by the Commission specifically for smaller public companies. Based on that evaluation, our management concluded that our internal controls over financial reporting were effective as of December 31, 2015.

Our management, including our Chief Executive Officer and Chief Financial Officer, does not expect that our disclosure controls and procedures or our internal controls will prevent all error and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of controls must be considered relative to their costs. Due to the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected.

This annual report does not include an attestation report of our registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered public accounting firm pursuant to the rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the quarter ended December 31, 2015 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. Other Information.

Not Applicable.

PART III

Item 10. Directors, Executive Officers and Corporate Governance

The following sets forth the names of our directors and executive officers, their ages, positions they hold and the time they have served us. The narrative below sets out their principal occupations at present and for at least the past five years.

<u>Name</u>	<u>Age</u>	<u>Position(s)</u>	<u>Serving Since</u>
Ronald J. Berman	59	Director	May 1996
Douglas Q. Holmes	59	Director	August 2014
Jeanne M. Rickert	62	Director and Chief Legal Officer	August 2014
Scott E. Rickert	62	Chairman of the Board and Chief Executive Officer	August 2014
James Sharp	59	Director	August 2014
Adam Wasserman	51	Chief Financial Officer	January 2015
Howard Westerman	63	Director	May 2007

Except for the one director designated by the holders of Class Z common stock (currently Mr. Sharp), our directors are appointed for a one-year term to hold office until the next annual general meeting of our shareholders or until removed from office in accordance with our bylaws. The director designated by the Class Z common stock holders may only be removed (with or without cause) by the Class Z common stock holders. Our officers are appointed by our board of directors and hold office until removed by the board. All officers and directors listed above will remain in office until the next annual meeting of our stockholders, and until their successors have been duly elected and qualified. There are no agreements with respect to the election of Directors. Our Board of Directors appoints officers annually and each Executive Officer serves at the discretion of our Board of Directors.

Ronald J. Berman was in the private practice of law from 1980-1987. Mr. Berman co-founded Rock Financial (now Quicken Loans) in 1985 and was a member of its Board of Directors. Mr. Berman cofounded BEG Enterprises and served as its President from 1989 to 1998. Mr. Berman is currently President of R.J. Berman Enterprises, Ltd., a real estate investment company, and practicing law as a sole practitioner. Mr. Berman is a licensed attorney in both Michigan and Florida. Mr. Berman filed for personal bankruptcy in 2011.

With his experience in legal matters and founding businesses, Mr. Berman provides our board with professional and strategic expertise as well as the benefit of his significant knowledge of business operations.

Douglas Q. Holmes is an investment banker and member of Holmes Hollister & Co. Mr. Holmes has been an investment banker since 1978. He has been an investment banker in New York and Chicago for Lazard Freres & Co., The First Boston Corporation and Kidder, Peabody & Co. before starting two private investment banks, Carleton McCreary Holmes & Co., which was merged with Key Corp., and subsequently, Holmes Hollister & Co. Mr. Holmes has been a founding partner of a private equity firm, Full Circle Investments, and a mezzanine fund, Key Mezzanine Partners, and has been a principal and board member in several companies as a financial investor. Mr. Holmes has a wide range of merger and acquisition experience, advising both domestic and international corporations on both buying and selling companies, structuring joint ventures, providing fairness opinions and starting new businesses. His corporate finance experience includes public equity and debt offerings, structuring new asset based securities with complex tax structures and privately placing all forms of capital. Industry experience includes automotive/truck, specialty materials, consumer, healthcare, and natural resources. Mr. Holmes received a B.A. from Kenyon College and an M.B.A. from Tuck at Dartmouth College.

With his experience in corporate finance and mergers and acquisitions, Mr. Holmes brings broad corporate finance experience, knowledge of financing options and alternatives as well as providing significant knowledge of a wide range of mergers and acquisitions.

Jeanne M. Rickert has served as our General Counsel and a Director since August 2014 and as the General Counsel of Nanofilm since January, 2014. Before that she was a lawyer with the Cleveland office of the international law firm of Jones Day, as a partner of the firm for 25 years and as Of Counsel in 2013. Her practice focused on mergers and acquisitions, joint ventures and general corporate and commercial matters. Her undergraduate degree is from Cornell University and her law degree from Case Western Reserve University. She is married to Scott Rickert.

With her prior experience in the practice of law and as our General Counsel, Ms. Rickert provides our board with legal expertise as well as the benefit of her significant knowledge of mergers and acquisitions.

Scott E. Rickert has served as Chairman of our Board of Directors, Chief Executive Officer and President since August 2014. He has been the Chief Executive Officer of Nanofilm since 2002, after serving Nanofilm as President from its founding in 1985. Prior to starting Nanofilm, Mr. Rickert was a tenured professor of Macromolecular Science at Case Western Reserve University. He has a B.S. in Chemical Engineering from Cornell University and an M.S. and Ph.D. from Case Western Reserve University. He did post-doctoral work at the University of Pennsylvania. He is married to Jeanne Rickert.

Combining his technical background and expertise with his prior experience in developing, commercializing and marketing enhanced-performance products enabled by nanotechnology, Mr. Rickert provides our board with technical and operational expertise as well providing guidance to the companies based on his significant knowledge of all aspects of the production and sale of nanotechnology enhanced-performance products.

James Sharp is President and CEO of Zeiss and he is also President of Carl Zeiss Microscopy. Mr. Sharp began his career 40 years ago as a Zeiss service technician with an undergraduate degree in electrical engineering. Mr. Sharp has served Zeiss in North America as well as in Germany, supervising operations in both light and electron microscopy. Over the years he has held a number of regional and national managerial positions, becoming President of the Microscope Division in 1991. After spending four years at Carl Zeiss Jena GmbH in Germany as Senior Vice President and General Manager of the Microscopy Business Unit, Mr. Sharp returned to the U.S. as head of Carl Zeiss MicroImaging. Prior to the Combination he was a board member of Nanofilm, and he is a trustee of the Marine Biological Laboratories. He also serves on the board of several Carl Zeiss companies.

With his prior experience in the management and operation of Carl Zeiss Microscopy in North America, Mr. Sharp provides our board with management and operational expertise as well as the benefit of his significant knowledge of the operation of a technology company.

Adam Wasserman has served as our Chief Financial Officer since January, 2015. He was elected our Chief Accounting Officer in September 2014. Mr. Wasserman has been a majority shareholder and chief executive officer of CFO Oncall, Inc. since 1999. CFO Oncall provides chief financial officer services to a number of companies. Through CFO Oncall, Mr. Wasserman has served as the chief financial officer of a number of private and publicly held companies including: Cleantech Solutions International, Inc. from December 2012 to February 2016, Zoned Properties, Inc. since October 2015 and Point Capital, Inc. since July 2015. Mr. Wasserman also previously served as chief financial officer for other companies, all under the terms of consulting agreements with CFO Oncall. Mr. Wasserman served as a member of the Board of Directors of CD International, Inc., a public company, from January 2010 to December 2011 and a member of the Board of Directors and audit committee chairman of Bohai Pharmaceuticals Group, Inc. from July 2010 to February 2012. From June 1991 to November 1999 Mr. Wasserman was a Senior Audit Manager at American Express Tax and Business Services, in Fort Lauderdale, Florida where his responsibilities included supervising, training and evaluating senior accounting staff members, work paper review, auditing, maintaining client relations, preparation of tax returns and financial statements. From September 1986 to May 1991, Mr. Wasserman was employed by Deloitte & Touche, LLP where his assignments included public and private company audits and Securities and Exchange Commission reporting, tax preparation and planning, management consulting, systems design, staff instruction and recruiting. Mr. Wasserman is a member of the American Institute of Certified Public Accountants. Mr. Wasserman holds a Bachelor of Science Degree in Accounting from the State University of New York at Albany.

Howard Westerman is the Chief Executive Officer of JW Energy Company, a privately held energy development and energy services company headquartered in Dallas, Texas. Mr. Westerman joined JW Energy Company in 1978 and became CEO in 1999. Under his leadership as CEO, the Company's revenues increased from approximately \$70 million to \$1 Billion. Mr. Westerman is also a member of the Board of Directors of Peerless Manufacturing Company, a global provider of environmental and separation filtration products, listed on the NASDAQ Global Market Exchange. Mr. Westerman also serves on numerous charitable and community boards.

As a former executive of an operating company, Mr. Westerman brings operations experience to our board, as well as financial acumen and the perspective of an investor.

Compliance with Section 16(a) of the Exchange Act

Based solely upon a review of Forms 3 and 4 and amendments thereto furnished to us under Rule 16a-3(d) of the Securities Exchange Act of 1934 during the fiscal year ended December 31, 2014 and Forms 5 and amendments thereto furnished to us with respect to the fiscal year ended December 31, 2014, as well as any written representation from a reporting person that no Form 5 is required, we are not aware that any officer, director or 10% or greater shareholder failed to file on a timely basis, as disclosed in the aforementioned Forms, reports required by Section 16 (a) of the Securities Exchange Act of 1934 during the fiscal year ended December 31, 2014 with the exception of (i) Mr. Berman who was late in filing with respect to some shares purchased on December 24, 2015 that were reported in a filing on January 22, 2016, and Mr. Berman was late in filing with respect to purchases made on November 23, 2015 that were reported on November 23, 2015; (ii) Mr. Wasserman who acquired shares on December 9, 2015 that were reported in a filing made December 18, 2015.

Code of Ethics

We have adopted a code of ethics that applies to our executive officers and other employees. A copy of the Code of Ethics will be sent, free of charge, to any person who sends a written request for a copy to Jeanne Rickert, Secretary, PEN Inc., 701 Brickell Avenue, Suite 1550, Miami, Florida 33131.

Board Leadership Structure and Board's Role in Risk Oversight

Our Chief Executive Officer also serves as the Chairman of our board of directors and we have not designated any of our independent directors as a "lead director." Our board of directors believes that by combining the role of Chairman with the Chief Executive Officer, the Company will unify under one vision and be able to better focus its limited resources. Because of his background, our Chairman brings to the Board and to the task a perspective that combines the operational experience of a member of management with the oversight focus of a member of the Board.

Risk is inherent within every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including credit risk, interest rate risk, liquidity risk, operational risk, strategic risk and reputation risk. Management is responsible for the day-to-day management of the risks we face, while the Board, as a whole and through its committees, has responsibility for the oversight of risk management. Taking its risk oversight role, the Board of Directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed. To do this, our directors meet regularly with management to discuss strategy and risks we face.

Board Committees and Director Independence

Our securities are not quoted on an exchange that has requirements that a majority of our Board members be independent and we are not currently otherwise subject to any law, rule or regulation requiring that all or any portion of our Board of Directors include "independent" directors, nor are we required to establish or maintain an Audit Committee or other committee of our Board of Directors. Our board has determined that Messrs. Berman and Westerman are "independent" as defined by the NASDAQ Marketplace rules.

The Board does not have standing compensation or nominating committees. The Board does not believe these committees are necessary based on the size of our company, the current levels of compensation to corporate officers and the voting control exercised by Mr. Rickert by virtue of his ownership or control over the Class B common stock. We will consider establishing audit, compensation and nominating committees at the appropriate time.

The entire Board of Directors participates in the consideration of compensation issues relating to the Chairman and CEO. Except for the one director designated by the holders of Class Z common stock, candidates for director nominees are reviewed in the context of the current composition of the Board and the particular operating and strategic challenges that we face in the next few years. In conducting this assessment, we consider skills, diversity, age, and such other factors as it deems appropriate given the current needs of the Board and our company, to maintain a balance of knowledge, experience and capability. The process for identifying and evaluating nominees for director, including nominees recommended by stockholders, will involve compiling names of potentially eligible candidates, conducting background and reference checks, conducting interviews with the candidate and others (as schedules permit), We will seek out individuals with relevant experience to provide strategic guidance and to advise management as we operate our business and introduce new products.

Audit Committee

In February 2016, the Board created an audit committee. It is charged with overseeing (1) the integrity of our financial statements and accounting and financial reporting processes; (2) our compliance with legal and regulatory requirements; (3) the performance of our independent auditor and the qualifications and independence of that firm; (4) our system of disclosure, internal controls and compliance with our Code of Conduct. Howard Westerman is the sole director on the audit Committee. He is not an audit committee financial expert.

Report of the Audit Committee

The audit Committee (the “Committee”) oversees the Company’s financial reporting process on behalf of the Board of Directors. Management has the primary responsibility for the financial statements and the reporting process, including internal control systems. The Company’s independent registered public accounting firm is responsible for expressing an opinion on the conformity of the company’s audited financial statements with U.S. generally accepted accounting principles.

In fulfilling its oversight responsibilities, the Committee reviewed and discussed with management the audited financial statements in the Annual Report on Form 10-K for the fiscal year ended December 31, 2015, including discussions of the accounting principles, the reasonableness of significant judgments and the clarity of disclosures in the financial statements.

In addition, the Committee discussed with the independent registered public accounting firm the matters required to be discussed by the Public Company Accounting Oversight Board’s Auditing Standard No. 16 “Communications with audit Committees.” The Committee met with the independent registered public accounting firm, with and without management present, to discuss the results of that firm’s examinations and the overall quality of the Company’s financial reporting. In addition, the audit Committee has reviewed and discussed with management management’s report on internal control over financial reporting in accordance with Section 404 of the Sarbanes-Oxley Act of 2002.

The Committee has received the written disclosures and the letter from the independent registered public accounting firm required by the applicable requirements of the Public Company Accounting Oversight Board regarding the independent registered accounting firm’s communications with the Committee concerning independence and has discussed with the independent registered accounting firm the independence of that firm.

In reliance on the reviews and discussions described in this report, the Committee recommends to the Board of the Directors (and the Board has approved) the inclusion of the audited financial statement in the Annual Report on form 10-K for the fiscal year ended December 31, 2015 filed with the SEC.

Stockholder Nominations

We have new bylaws as part of the Combination that made some changes with respect to stockholders’ rights to nominate candidates for service as a director on our board. To make a nomination, a stockholder must hold at least \$2,000 in value of shares entitled to vote in the election of directors. As before, notice must be given not less than 60 or more than 90 days before the meeting. If less than 75-days notice is given of the date of the meeting, the stockholder’s notice is due not more than 10 days after notice of the meeting is given or after public disclosure of the date of the meeting, whichever is first. The new bylaws added additional information that must be provided in the notice about a proposed candidate: the class and number of shares of stock held of record, owned beneficially and represented by proxy by such shareholder or any person directly or indirectly controlling, controlled by, under common control with or acting in concert with such shareholder (which we refer to as a “shareholder associated person”), and by each person to be nominated such information to be as of the record date for the meeting and as of the date of such notice; a description of all contracts, arrangements, understandings or relationships between (a) the shareholder making the nomination and any shareholder associated person that relate to the nomination, (b) the shareholder making the nomination and the proposed nominee and (c) the shareholder making the nomination, the proposed nominee or any shareholder associated person and any other person or persons that relate to the nomination.

Item 11. Executive Compensation

SUMMARY COMPENSATION TABLE

The table below sets forth certain compensation information for: (i) our principal executive officer or other individual serving in a similar capacity during our fiscal year ended December 31, 2015; (ii) our two most highly compensated executive officers other than our principal executive officer who were serving as executive officers at December 31, 2015 whose compensation exceed \$100,000; and (iii) up to two additional individuals for whom disclosure would have been required but for the fact that the individual was not serving as an executive officer at December 31, 2015. Compensation information is shown for the fiscal years ended December 31, 2015 and, if the individual was employed with us in 2014, for 2014.

We sometimes refer to these individuals to as the “named executive officers” as that term is defined under Rule 3b-7 of the Securities Exchange Act of 1934. The value attributable to any stock or option awards is computed in accordance with ASC Topic 718. None of our named executive officers received compensation in the form of Non-Equity Incentive Plan Compensation or Nonqualified Deferred Compensation Earnings in fiscal 2014 and fiscal 2013. The value of stock awards represents the dollar amount recognized for financial statement reporting purposes with respect to fiscal 2015 and fiscal 2014 for the fair value of securities granted in each respective year in accordance with ASC Topic 718. Pursuant to Securities and Exchange Commission rules, the amounts shown exclude the impact of estimated forfeitures related to service-based vesting conditions. Our methodology, including its underlying estimates and assumptions used in calculating these values, is set forth in Note 12 to our audited financial statements for the fiscal year ended December 31, 2015. These amounts reflect our accounting expense for these awards, and do not correspond to the actual value that may be realized upon exercise.

For stock awards, these shares were valued on the measurement date based on the quoted trading price of the stock on such date. Due the 2014 and 2014, we did not grant any stock options.

Name & Principal Position	Year	Salary	Stock Awards	All Other Compensation	Total
Scott E. Rickert, Chief Executive (1)	2015	\$ 141,900	\$ 3,000	(2) \$	\$ 144,900
	2014	\$ 210,000	2,000	\$ 2,000	\$ 214,000
Adam Wasserman Chief Financial Officer (3)	2015	\$ 108,000	\$ 36,000	\$	\$ 144,000
	2014	\$ 52,350		\$	\$ 52,350

- (1) Scott. Rickert has served as our Chairman of the Board of Directors and Chief Executive Officer since August 22, 2014. Before that he served as CEO of Nanofilm and NanoHolding.
- (2) All directors are compensated for service on our Board. The compensation paid to Mr. Rickert in 2014 for Board service is reflected in the prior column and in this column. In addition to the amounts paid in 2015, there are accrued unpaid director’s fees for Mr. Rickert for meetings attended in 2015 aggregating \$3,000.
- (3) Mr. Wasserman is the Chief Executive Officer and a controlling stockholder of CFO OnCall. His compensation is paid under a contract between CFO Oncall and the Company. Mr. Wasserman sold the stock that was awarded in lieu of cash fees and since he did not realize the full \$36,000, we have accrued additional compensation due to him for 2015 of \$17,103 which is the difference between the value of the stock when granted and the amount realized. 2014 compensation includes fees earned as chief accounting office and a consultant. The amounts above do not include reimbursements for certain office costs.

Mr. Rickert does not have an employment agreement. Mr. Wasserman's services are provided under the contract with CFO Oncall, Inc. That contract is terminable by either party on 30 days notice.

Outstanding Equity Awards at Fiscal Year End Table

The following table provides information concerning unexercised options, stock that has not vested and equity incentive plan awards for each named executive officer outstanding at December 31, 2014:

Outstanding Equity Awards at year End

Name	Option Awards					Stock Awards				
	Number of Securities Underlying Unexercised options - exercisable	Number of Securities Underlying Unexercised Options - unexercisable	Number of Securities Underlying Unexercised Options	Option Exercise Price (\$)	Option Expiration Date	Number of Shares or Units of Stock that have not Vested	Market Value of Shares or Units of Stock that have not Vested (1)	Equity Incentive Plan Awards: Number of Shares, Units or Rights that have not Vested (2)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Rights that have not Vested (1)	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	
Scott E Rickert								(1) \$	(1)	

(1) Mr. Rickert holds 8,250 equity credits under the Nanofilm Equity Credit Program. Those equity credits can convert into PEN common stock but the number of shares is not determinable at this time. See Note 16 to our Consolidated Financial Statements.

Director Compensation

We paid our directors the amounts shown below during the fiscal year ended December 31, 2015. Amounts paid to Scott Rickert are shown in the summary Compensation Table for named executive officers.

Name	Fees earned or paid in cash	Stock Awards	Option Awards(1)	All Other Compensation	Total
Ronald Berman	\$ 3,000	\$ 3,000	-0-	-0-	\$ 6,000
Douglas Q. Holmes	\$ 3,000	\$ 3,000	-0-	(2)	\$ 6,000
Jeanne M. Rickert	\$ 3,000	\$ 3,000	-0-	(3)	\$ 6,000
Robert Ronstadt(*)	\$ 3,000	\$ 3,000	-0-	-0-	\$ 6,000
James Sharp (4)	\$ 2,000	\$ 2,000	-0-	-0-	\$ 4,000
Howard Westerman	\$ 3,000	\$ 3,000	-0-	-0-	\$ 6,000

(*) Resigned from the board on December 1, 2015.

- (1) No option awards were made in 2015 or the prior year. Mr. Berman holds options for 1,744 shares and Mr. Westerman holds options for 1,059 shares.
- (2) Mr. Holmes is a principal of Holmes Hollister Co. We incurred Holmes Hollister aggregate fees and expenses in 2015 of \$115,000.
- (3) Ms. Rickert served as our General Counsel starting on August 27, 2014, and prior to that was the General Counsel of Nanofilm and NanoHolding. She was paid a salary in 2015 of \$120,370.
- (4) Mr. Sharp is the Zeiss designee to our Board. His fees are paid to Carl Zeiss, Inc.

All directors are compensated with a fee of \$2,000 per meeting. The fee is payable one-half in cash, and one half in shares of our Class A common stock, except that the Rickerts receive shares of Class B common stock instead of Class A shares.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Equity Compensation Plans

See table and related explanations under item 5 above regarding Equity Compensation Plans.

Security Ownership of Certain Beneficial Owners and Management

Set forth in the following table is the indicated information with respect to (1) each person who is known to us to be the beneficial owner of more than five percent of our Class A common stock, (2) each person who is known to us to be the beneficial owner of more than five percent of our Class B common stock, (3) each person who is known to us to be the beneficial owner of more than five percent of our Class Z common stock.

Title of Class	Name and address of beneficial owner	Amount and nature of beneficial ownership	Percent of Class
Class B common stock	Scott E. Rickert PEN Inc. 701 Brickell Ave., Suite 1550 Miami, FL 33131	1,394,535(1)	99%
Class Z common stock	Carl Zeiss, Inc. One Zeiss Drive Thornwood, NY 10594	262,631	100%

- (1) As the sole general partner of Rickert Family, Limited partnership, Mr. Rickert has voting and investment power over the 1,392,768 shares held by the partnership. Mr. Rickert disclaims beneficial ownership of 928,512 shares for which he does not have a pecuniary interest.

Set forth in the table below is information as of March 15, 2016 with respect to the beneficial ownership of Class A, Class B and Class Z common stock by our directors, and Named Executive Officers.

Name of Beneficial Owner	Title of Class of common stock	Amount and Nature of Beneficial Ownership (1)	Percent of Class absent conversion of Class B and Class Z common stock	Percent of Class A assuming conversion of all Class B & Class Z common stock
Ronald J Berman	Class A	39,402	3%	(5)
Douglas Q. Holmes	Class A	1,094	(5)	(5)
Jeanne M. Rickert (2)	Class B	466,023	33%	15%
Scott E. Rickert (3)	Class B	1,394,535	100%	46%
James Sharp (4)	Class Z	262,631	100%	
	Class A	831	(5)	9%
Adam Wasserman		-0-	-0-	-0-
Howard Westerman	Class A	25,160	2%	(5)
All directors and officers as a group (6)	Class A	63,178	5%	57%
	Class B	1,396,302	100%	
	Class Z	262,631	100%	

(1) Includes options held by the following individuals that are presently exercisable:

Mr. Berman	1,744
Mr. Westerman	1,059

- (2) Shares reported include 1,767 owned directly, and 464,256 beneficially owned through Rickert Family, Limited Partnership. The shares owned by Rickert Family, Limited Partnership are also included in the shares owned by Mr. Rickert by virtue of his voting and dispositive power of those shares.
- (3) Shares reported include 1,767 owned directly, and 1,392,768 over which Mr. Rickert has sole voting and dispositive power as the sole general partner of Rickert Family, Limited Partnership. Mr. Rickert disclaims beneficial ownership of 928,512 shares held by Rickert Family, Limited Partnership for which he does not have a pecuniary interest.
- (4) All the shares of both Class A common stock and Class Z common stock are owned by Carl Zeiss, Inc., of which Mr. Sharp is a Director and serves as President and Chief Executive Officer. Mr. Sharp disclaims beneficial ownership of any shares owned by Carl Zeiss, Inc.
- (5) Ownership represents less than 1%.
- (6) Does not include shares held by Mr. Ronstadt as he no longer serves as a director or as an executive officer.

Item 13. Certain relationships and Related Transaction, and Director Independence.

Our director, Mr. Holmes is a principal in Holmes Hollister & Co., an investment banking firm that we incurred fees and expenses in an aggregate amount of \$115,000 in 2015 and \$232,872 in 2014.

Mr. Sharp, one of our directors, is the President and Chief Executive Officer of Carl Zeiss, Inc., and Carl Ziess, Inc. owns greater than 5% of our Class Z common stock. During the year ended December 31, 2015 and 2014, we sold products to a related company. These transactions were conducted in the normal course of our business on terms consistent with similar transactions with unrelated parties. Sales to the related party totaled \$134,485 and \$198,858 for the year ended December 31, 2015 and 2014, respectively. Accounts receivable from the related party totaled \$11,984 and \$38,246 at December 31, 2015 and 2014, respectively.

Our board has determined that Messrs. Berman and Westerman are “independent” as defined by the NASDAQ Marketplace rules.

Corporate governance.

See discussion under item 10 above.

Item 14. Principal Accounting Fees and Services

The following table sets forth the fees billed by our principal independent accountants, Salberg & Co., P.A., for each of our last two fiscal years for the categories of services indicated.

Category	Years Ended December 31,	
	2015	2014
Audit Fees	\$ 78,000	\$ 77,200
Audit Related Fees	\$ 500	\$ 8,300
Tax Fees	\$ 0	\$ 0
All Other Fees	\$ 0	\$ 0

Audit fees. Consists of fees billed for the audit of our annual financial statements, review of our Form 10-K, review of our interim financial statements included in our Form 10-Q and services that are normally provided by the accountant in connection with year-end statutory and regulatory filings or engagements.

Audit-related fees. Consists of fees billed for assurance and related services that are reasonably related to the performance of the audit or review of our financial statements and are not reported under “Audit Fees”, review of our Forms 8-K filings and services that are normally provided by the accountant in connection with non-year-end statutory and regulatory filings or engagements.

Tax fees. Consists of professional services rendered by a company aligned with our principal accountant for tax compliance, tax advice and tax planning.

Other fees. The services provided by our accountants within this category consisted of advice and other services relating to SEC matters, registration statement review, accounting issues and client conferences.

PART IV

Item 15. Exhibits, Financial Statement Schedules

<u>Exhibit No.</u>	<u>Description</u>
2.1	Agreement and Plan of Merger and Exchange, dated as of March 10, 2014, by and among Applied Nanotech Holdings, Inc., PEN INC., NanoMerger Sub Inc., NanoHolding Inc, and Carl Zeiss, Inc. (the Company hereby agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request) (Incorporated herein by reference to the Company's Form 8-K filed with the Commission on March 11, 2014).
2.2	First Amendment to Agreement and Plan of Merger and Exchange dated May 28, 2014 among Applied Nanotech Holdings, Inc., PEN INC., NanoMerger Sub Inc., NanoHolding Inc., and Carl Zeiss, Inc. (Incorporated herein by reference to Exhibit 2.2 of the Company's Form 8-K filed with the SEC on May 30, 2014).
2.3	Second Amendment to Agreement and Plan of Merger and Exchange dated July 2, 2014 among Applied Nanotech Holdings, Inc., PEN INC., NanoMerger Sub Inc., NanoHolding Inc., and Carl Zeiss, Inc. (Incorporated herein by reference to Exhibit 10.1 of the Company's Form 8-K filed with the SEC on July 7, 2014).
3.1	Amended and Restated Certificate of Incorporation of PEN Inc. (Incorporated herein by reference to Annex C, Exhibit B-1 of the Company's Proxy Statement filed with the SEC on July 3, 2014).
3.2	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of PEN Inc. (Incorporated herein by reference to Exhibit 3.1 of the Company's Form 8-K filed with the SEC on January 26, 2016).
3.2	Bylaws of PEN Inc. (Incorporated herein by reference to Annex C, Exhibit B-2 of the Company's Proxy Statement filed with the SEC on July 3, 2014).
10.1	Piggyback Registration Rights Agreement, dated March 10, 2014, between Douglas P. Baker and the Company (Incorporated herein by reference to the Company's Form 8-K filed with the Commission on March 11, 2014).
10.2	Restricted Stock Agreement by and between PEN Inc. and Zvi Yaniv dated August 27, 2014 (Incorporated herein by reference to Exhibit 10.7, Annex B of the Company's Form 8-K filed with the SEC on March 11, 2014).
10.3	Piggyback Registration Rights Agreement by and between PEN Inc. and Zvi Yaniv dated August 27, 2014 (Incorporated herein by reference to Exhibit 10.7, Annex C of the Company's Form 8-K filed with the SEC on March 11, 2014).
10.4	Revolving Credit and Loan Rider (to Loan and Security Agreement effective as of April 4, 2014) between Mackinac Commercial Credit, LLC and Nanofilm, Ltd. (Incorporated herein by reference to the Company's Form 10Q filed with the Commission on November 14, 2014).
10.5	Revolving Credit Note dated April 4, 2014 to Mackinac Commercial Credit, LLC from Nanofilm, Ltd. (Incorporated herein by reference to the Company's Form 10Q filed with the Commission on November 14, 2014).
10.6	Loan and Security Agreement effective as of April 4, 2014 by and between Nanofilm Ltd. And Mackinac Commercial Credit, LLC (Incorporated herein by reference to the Company's Form 10Q filed with the Commission on November 14, 2014).
10.7+	Letter Agreement, dated September 23, 2014, between the Company and CFO Oncall, Inc. (Incorporated herein by reference to Exhibit 10.11 of the Company's form 10-K filed with the Commission on April 10, 2015).
10.8	Promissory Note, dated February 10, 2015, between Nanofilm, Ltd. and KeyBank National Association (Incorporated herein by reference to Exhibit 10.12 of the Company's form 10-K filed with the Commission on April 10, 2015).
10.9	Commercial Security Agreement, dated February 10, 2015, between Nanofilm, Ltd. and KeyBank National Association (Incorporated herein by reference to Exhibit 10.13 of the Company's form 10-K filed with the Commission on April 10, 2015).
10.10	Amended and Restated 2002 Equity Compensation Plan. (Incorporated herein by reference from the Company's Form 8-K filed with the SEC on December 12, 2007).
10.11	Applied Nanotech Holdings, Inc. 2012 Equity Compensation Plan. (Incorporated herein by reference from the Company's Form 8-K filed with the SEC on April 27, 2012).
10.12	Nanofilm Ltd. Equity Credit Incentive Program (Incorporated herein by reference to Exhibit 10.16 of the Company's form 10-K filed with the Commission on April 10, 2015).

- 10.13 Nanofilm Stock Appreciation Rights Plan (Incorporated herein by reference to Exhibit 10.17 of the Company's form 10-K filed with the Commission on April 10, 2015).
- 10.14+* PEN Inc. 2015 Equity Incentive Plan
- 14.1 Code of Ethics (Incorporated herein by reference to Exhibit 14.1 of the Company's form 10-K filed with the Commission on April 10, 2015).
- 21.1* Subsidiaries of the Registrant
- 31.1* Rule 13a-14(a)/15d-14(a) Certificate of Chief Executive Officer
- 31.2* Rule 13a-14(a)/15d-14(a) Certificate of Chief Financial Officer
- 32.1* Section 1350 Certificate of Chief Executive Officer and Chief Financial Officer
- 101.INS** XBRL Instance Document
- 101.SCH** XBRL Taxonomy Extension Schema
- 101.CAL** XBRL Taxonomy Extension Calculation
- 101.DEF** XBRL Taxonomy Extension Definition
- 101.LAB** XBRL Taxonomy Extension Labels
- 101.PRE** XBRL Taxonomy Extension Presentation Linkbase
- + Management contract or compensatory plan or arrangement.
- * Filed herewith.
- ** XBRL Information is furnished and not filed or a part of a registration statement or prospectus for purposes of sections 11 or 12 of the Securities Act of 1933, as amended, is deemed not filed for purposes of section 18 of the Securities Exchange Act of 1934, as amended, and otherwise is not subject to liability under these sections.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PEN Inc.
(Registrant)

By: */s/ Jeanne M. Rickert*

Jeanne M. Rickert
Secretary

Date: March 30, 2016

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Jeanne M. Rickert as his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to the annual report, which amendments may make such changes in the annual report as the attorney-in-fact deems appropriate and to file the same, with all exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that such attorney-in-fact and agent or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

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

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Scott R. Rickert</u> Scott E Rickert	Chairman & Chief Executive Officer (principal executive officer)	March 30, 2016
<u>/s/ Adam Wasserman</u> Adam Wasserman	Chief Financial Officer (principal financial and accounting officer)	March 30, 2016
<u>/s/ Ronald J. Berman</u> Ronald J. Berman	Director	March 30, 2016
<u>/s/ Douglas Q. Holmes</u> Douglas Q. Holmes	Director	March 30, 2016
<u>/s/ Jeanne Rickert</u> Jeanne M. Rickert	Director	March 30, 2016
<u>/s/ Scott E. Rickert</u> Scott E. Rickert	Director	March 30, 2016
<u>James Sharp</u>	Director	
<u>/s/ Howard Westerman</u> Howard Westerman	Director	March 30, 2016

PEN Inc.
2015 EQUITY INCENTIVE PLAN

1. Purpose of the Plan. The purpose of this Plan is to permit equity compensation for those who provide services to the Company and to encourage ownership in the Company by key personnel whose long-term service the Company considers essential to its continued progress and, thereby, encourage recipients to act in the stockholders' interest and share in the Company's success.

2. Definitions. As used herein, the following definitions shall apply:

“Act” shall mean the Securities Act of 1933, as amended.

“Administrator” shall mean the Board, any Committees, or such delegates as shall be administering the Plan in accordance with Section 4 of the Plan.

“Affiliate” shall mean any entity that is directly or indirectly in control of or controlled by the Company, or any entity in which the Company has a significant ownership interest as determined by the Administrator.

“Applicable Laws” shall mean the requirements relating to the administration of stock plans under federal and state laws; any stock exchange or quotation system on which the Company has listed or submitted for quotation the Common Stock to the extent provided under the terms of the Company's agreement with such exchange or quotation system.

“Award” shall mean, individually or collectively, a grant under the Plan of an Option or other such Stock Award.

“Awardee” shall mean a Service Provider who has been granted an Award under the Plan.

“Award Agreement” shall mean an Option Agreement or Stock Award Agreement, which may be in written or electronic format, in such form and with such terms as may be specified by the Administrator, evidencing the terms and conditions of an individual Award. Each Award Agreement is subject to the terms and conditions of the Plan.

“Board” shall mean the Board of Directors of the Company.

“Change in Control” shall mean any of the following, unless the Administrator provides otherwise:

(i) any merger or consolidation in which the Company shall not be the surviving entity (or survives only as a subsidiary of another entity whose stockholders did not own all or substantially all of the Common Stock in substantially the same proportions as immediately before such transaction);

(ii) the sale of all or substantially all of the Company's assets to any other person or entity (other than a wholly-owned subsidiary of the Company);

(iii) the acquisition of beneficial ownership of a controlling interest (including power to vote) in the outstanding shares of Common Stock by any person or entity (including a “group” as defined by or under Section 13(d)(3) of the Exchange Act);

(iv) the dissolution or liquidation of the Company;

(v) a contested election of Directors, as a result of which or in connection with which the persons who were Directors before such election or their nominees cease to constitute a majority of the Board; or

(vi) any other event specified, at the time an Award is granted or thereafter, by the Board or a Committee.

Notwithstanding the foregoing, the term “Change in Control” shall not include any underwritten public offering of Shares registered under the Act.

“Code” shall mean the Internal Revenue Code of 1986, as amended.

“Committee” shall mean a committee of Directors appointed by the Board in accordance with Section 4 of the Plan.

“Common Stock” shall mean the Class A common stock of the Company.

“Company” shall mean PEN Inc., a Delaware corporation, or its successor.

“Consultant” shall mean any natural person, other than an Employee or Director, who performs bona fide services for the Company or an Affiliate as a consultant or advisor.

“Conversion Award” has the meaning set forth in Section 4(b)(xii) of the Plan.

“Director” shall mean a member of the Board.

“Disability” shall mean permanent and total disability as defined in Section 22(e)(3) of the Code.

“Employee” shall mean an employee of the Company or any Affiliate, and may include an Officer or Director. Within the limitations of Applicable Law, the Administrator shall have the discretion to determine the effect upon an Award and upon an individual’s status as an Employee in the case of (i) any individual who is classified by the Company or its Affiliate as leased from or otherwise employed by a third party or as intermittent or temporary, even if any such classification is changed retroactively as a result of an audit, litigation or otherwise; (ii) any leave of absence approved by the Company or an Affiliate; (iii) any transfer between locations of employment with the Company or an Affiliate or between the Company and any Affiliate or between any Affiliates; (iv) any change in the Awardee’s status from an employee to a Consultant or Director; and (v) an employee who, at the request of the Company or an Affiliate, becomes employed by any partnership, joint venture, or corporation not meeting the requirements of an Affiliate in which the Company or an Affiliate is a party.

“Exchange Act” shall mean the Securities Exchange Act of 1934, as amended.

“Fair Market Value” shall mean, unless the Administrator determines otherwise, as of any date, the closing price for such Common Stock as of such date (or if no sales were reported on such date, the closing price on the last preceding day for which a sale was reported), as reported in such source as the Administrator shall determine.

“Grant Date” shall mean the date upon which an Award is granted to an Awardee pursuant to this Plan.

“Incentive Stock Option” shall mean an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

“Nonstatutory Stock Option” shall mean an Option not intended to qualify as an Incentive Stock Option.

“Officer” shall mean a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act.

“Option” shall mean a right granted under Section 8 of the Plan to purchase a certain number of Shares at such exercise price, at such times, and on such other terms and conditions as are specified in the agreement or other documents evidencing the Award (the “**Option Agreement**”). Both Options intended to qualify as Incentive Stock Options and Nonstatutory Stock Options may be granted under the Plan.

“Participant” shall mean the Awardee or any person (including any estate) to whom an Award has been assigned or transferred as permitted hereunder.

“Plan” shall mean this PEN Inc. 2015 Equity Incentive Plan.

“Qualifying Performance Criteria” shall have the meaning set forth in Section 14(b) of the Plan.

“Related Corporation” shall mean any parent or subsidiary (as those terms are defined in Section 424(e) and (f) of the Code) of the Company.

“Service Provider” shall mean an Employee, Officer, Director, or Consultant.

“Share” shall mean a share of Common Stock, as adjusted in accordance with Section 13 of the Plan.

“Stock Award” shall mean an award or issuance of Shares made under Section 11 of the Plan, the grant, issuance, retention, vesting, and transferability of which is subject during specified periods to such conditions (including continued service or performance conditions) and terms as are expressed in the agreement or other documents evidencing the Award (the “**Stock Award Agreement**”).

“Ten-Percent Stockholder” shall mean the owner of stock (as determined under Section 424(d) of the Code) possessing more than 10% of the total combined voting power of all classes of stock of the Company (or any Related Corporation).

“Termination Date” shall mean the date of a Participant’s Termination of Service, as determined by the Administrator in its sole discretion.

“Termination of Service” shall mean ceasing to be a Service Provider. However, for Incentive Stock Option purposes, Termination of Service will occur when the Awardee ceases to be an employee (as determined in accordance with Section 3401(c) of the Code and the regulations promulgated thereunder) of the Company. The Administrator shall determine whether any corporate transaction, such as a sale or spin-off of a division or business unit, or a joint venture, shall be deemed to result in a Termination of Service.

3. Stock Subject to the Plan.

(a) Aggregate Limit. The maximum aggregate number of Shares that may be issued under the Plan through Awards is 20,000,000 Shares. The limitations of this Section 3(a) shall be subject to the adjustments set forth in Section 13 of the Plan.

(b) Reduction and Replenishment. Upon payment for Shares pursuant to the exercise of an Award, the number of Shares available for issuance under the Plan shall be reduced only by the number of Shares actually issued in such payment. If any outstanding Award expires or is terminated or canceled without having been exercised or settled in full, or if Shares acquired pursuant to an Award subject to forfeiture or repurchase are forfeited or repurchased by the Company, the Shares allocable to the terminated portion of such Award or such forfeited or repurchased Shares shall again be available to grant under the Plan. Notwithstanding the foregoing, the aggregate number of shares of Common Stock that may be issued under the Plan upon the exercise of Incentive Stock Options shall not be increased for restricted Shares that are forfeited or repurchased. Notwithstanding anything in the Plan, or any Award Agreement to the contrary, Shares attributable to Awards transferred under any Award transfer program shall not be again available for grant under the Plan. The Shares subject to the Plan may be either Shares reacquired by the Company, including Shares purchased in the open market, or authorized but unissued Shares.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. The Plan shall be administered by the Board or one or more Committees, including such delegates as may be appointed under paragraph (a)(iv) of this Section 4.

(ii) Section 162(m). To the extent that the Administrator determines it to be desirable to qualify Awards granted hereunder as “performance-based compensation” within the meaning of Section 162(m) of the Code, Awards to “covered employees” within the meaning of Section 162(m) of the Code or Employees that the Committee determines may be “covered employees” in the future shall be made by a Committee of two or more “outside directors” within the meaning of Section 162(m) of the Code.

(iii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3 promulgated under the Exchange Act (“**Rule 16b-3**”), Awards to Officers and Directors shall be made in such a manner to satisfy the requirement for exemption under Rule 16b-3.

(iv) Other Administration. The Board or a Committee may delegate to an authorized Officer or Officers of the Company the power to approve Awards to persons eligible to receive Awards under the Plan who are not (A) subject to Section 16 of the Exchange Act; or (B) at the time of such approval, “covered employees” under Section 162(m) of the Code.

(v) Delegation of Authority for the Day-to-Day Administration of the Plan. Except to the extent prohibited by Applicable Law, the Administrator may delegate to one or more individuals the day-to-day administration of the Plan and any of the functions assigned to it in this Plan. Such delegation may be revoked at any time.

(b) Powers of the Administrator. Subject to the provisions of the Plan and, in the case of a Committee or delegates acting as the Administrator, subject to the specific duties delegated to such Committee or delegates, the Administrator shall have the authority, in its sole discretion:

(i) to select the Service Providers of the Company or its Affiliates to whom Awards are to be granted hereunder;

(ii) to determine the number of shares of Common Stock to be covered by each Award granted hereunder;

(iii) to determine the type of Award to be granted to the selected Service Provider;

(iv) to approve the forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, consistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include the exercise or purchase price, the time or times when an Award may be exercised (which may or may not be based on performance criteria), the vesting schedule, any vesting or exercisability acceleration or waiver of forfeiture restrictions, the acceptable forms of consideration, the term, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine and may be established at the time an Award is granted or thereafter;

(vi) to correct administrative errors;

(vii) to construe and interpret the terms of the Plan (including sub-plans and Plan addenda) and Awards granted pursuant to the Plan;

(viii) to adopt rules and procedures relating to the operation and administration of the Plan to accommodate the specific requirements of local laws and procedures. Without limiting the generality of the foregoing, the Administrator is specifically authorized (A) to adopt the rules and procedures regarding the conversion of local currency, withholding procedures, and handling of stock certificates that vary with local requirements; and (B) to adopt sub-plans and Plan addenda as the Administrator deems desirable, to accommodate foreign laws, regulations and practice;

(ix) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans and Plan addenda;

(x) to modify or amend each Award, including the acceleration of vesting, exercisability, or both; *except* that any modification or amendment of an Award is subject to Section 14(b) of the Plan and may not materially impair any outstanding Award unless agreed to by the Participant;

(xi) to allow Participants to satisfy withholding tax amounts by electing to have the Company withhold from the Shares to be issued pursuant to an Award that number of Shares having a Fair Market Value equal to the amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined in such manner and on such date that the Administrator shall determine or, in the absence of provision otherwise, on the date that the amount of tax to be withheld is to be determined. All elections by a Participant to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may provide;

(xii) to authorize conversion or substitution under the Plan of any or all stock options, stock appreciation rights, or other stock awards held by service providers of an entity acquired by the Company (the “**Conversion Awards**”). Any conversion or substitution shall be effective as of the close of the merger or acquisition. The Conversion Awards may be Nonstatutory Stock Options or Incentive Stock Options, as determined by the Administrator, with respect to options granted by the acquired entity. Unless otherwise determined by the Administrator at the time of conversion or substitution, all Conversion Awards shall have the same terms and conditions as Awards generally granted by the Company under the Plan;

(xiii) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xiv) to determine whether Awards will be settled in Shares, cash, or in any combination thereof;

(xv) to determine whether to provide for the right to receive dividends or dividend equivalents;

(xvi) to establish a program whereby Service Providers designated by the Administrator can reduce compensation otherwise payable in cash in exchange for Awards under the Plan;

(xvii) to impose such restrictions, conditions, or limitations as it determines appropriate as to the timing and manner of any resales by a Participant or other subsequent transfers by the Participant of any Shares issued as a result of or under an Award, including (A) restrictions under an insider trading policy, and (B) restrictions as to the use of a specified brokerage firm for such resales or other transfers;

(xviii) to provide, either at the time an Award is granted or by subsequent action, that an Award shall contain as a term thereof, a right, either in tandem with the other rights under the Award or as an alternative thereto, of the Participant to receive, without payment to the Company, a number of Shares, cash, or a combination of both, the amount of which is determined by reference to the value of the Award; and

(xix) to make all other determinations deemed necessary or advisable for administering the Plan and any Award granted hereunder.

(c) **Effect of Administrator's Decision.** All decisions, determinations and interpretations by the Administrator regarding the Plan, any rules and regulations under the Plan and the terms and conditions of any Award granted hereunder, shall be final and binding on all Participants. The Administrator shall consider such factors as it deems relevant, in its sole and absolute discretion, to making such decisions, determinations and interpretations, including the recommendations or advice of any officer or other employee of the Company and such attorneys, consultants and accountants as it may select.

5. Eligibility. Awards may be granted to Service Providers of the Company or any of its Affiliates.

6. Effective Date and Term of the Plan. The Plan shall become effective upon its adoption by the Board. Options and Stock Awards may be granted immediately thereafter. The Plan shall continue in effect for a term of TEN (10) years from the date of the Plan's adoption by the Board unless terminated earlier under Section 14.

7. Term of Award. The term of each Award shall be determined by the Administrator and stated in the Award Agreement. In the case of an Option, the term shall be TEN (10) years from the Grant Date or such shorter term as may be stated in the Award Agreement.

8. Options. The Administrator may grant an Option or provide for the grant of an Option, from time to time in the discretion of the Administrator or automatically upon the occurrence of specified events, including the achievement of performance goals, and for the satisfaction of an event or condition within the control of the Awardee or within the control of others.

(a) Option Agreement. Each Option Agreement shall contain provisions regarding (i) the number of Shares that may be issued upon exercise of the Option; (ii) the type of Option; (iii) the exercise price of the Shares and the means of payment for the Shares; (iv) the term of the Option; (v) such terms and conditions on the vesting or exercisability of an Option, or both, as may be determined from time to time by the Administrator; (vi) restrictions on the transfer of the Option and forfeiture provisions; and (vii) such further terms and conditions, in each case not inconsistent with this Plan, as may be determined from time to time by the Administrator.

(b) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option shall be determined by the Administrator, subject to the following:

(i) In the case of an Incentive Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the Grant Date. Notwithstanding the foregoing, if any Incentive Stock Option is granted to a Ten-Percent Stockholder, then the exercise price shall not be less than 110% of the Fair Market Value of a share of Common Stock on the Grant Date.

(ii) In the case of a Nonstatutory Stock Option, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the Grant Date. The per Share exercise price may also vary according to a predetermined formula; so long as, on the Grant Date, the exercise price never falls below 100% of the Fair Market Value per Share.

(iii) Notwithstanding the foregoing, at the Administrator's discretion, Conversion Awards may be granted in substitution or conversion of options of an acquired entity, with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of such substitution or conversion.

(c) Vesting Period and Exercise Dates. Options granted under this Plan shall vest, be exercisable, or both, at such times and in such installments during the Option's term as determined by the Administrator. The Administrator shall have the right to make the timing of the ability to exercise any Option granted under this Plan subject to continued service, the passage of time, or such performance requirements as deemed appropriate by the Administrator. At any time after the grant of an Option, the Administrator may reduce or eliminate any restrictions surrounding any Participant's right to exercise all or part of the Option.

(d) Form of Consideration. The Administrator shall determine the acceptable form of consideration for exercising an Option, including the method of payment, either through the terms of the Option Agreement or at the time of exercise of an Option. The consideration, determined by the Administrator (or pursuant to authority expressly delegated by the Board, a Committee, or other person), and in the form and amount required by applicable law, shall be actually received before issuing any Shares pursuant to the Plan; which consideration shall have a value, as determined by the Board, not less than the par value of such Shares. Acceptable forms of consideration may include:

(i) cash;

(ii) check or wire transfer;

(iii) subject to any conditions or limitations established by the Administrator, other Shares that have a Fair Market Value on the date of surrender or attestation that does not exceed the aggregate exercise price of the Shares as to which said Option shall be exercised;

(iv) consideration received by the Company under a broker-assisted sale and remittance program acceptable to the Administrator to the extent that this procedure would not violate Section 402 of the Sarbanes-Oxley Act of 2002, as amended;

(v) cashless exercise, subject to any conditions or limitations established by the Administrator;

(vi) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws; or

(vii) any combination of the foregoing methods of payment.

9. Incentive Stock Option Limitations.

(a) Eligibility. Only employees (as determined in accordance with Section 3401(c) of the Code and the regulations promulgated thereunder) of the Company may be granted Incentive Stock Options.

(b) \$100,000 Limitation. Notwithstanding the designation “Incentive Stock Option” in an Option Agreement, if the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Awardee during any calendar year (under all plans of the Company) exceeds \$100,000, then the portion of such Options that exceeds \$100,000 shall be treated as Nonstatutory Stock Options. An Incentive Stock Option is considered to be first exercisable during a calendar year if the Incentive Stock Option will become exercisable at any time during the year, assuming that any condition on the Awardee’s ability to exercise the Incentive Stock Option related to the performance of services is satisfied. If the Awardee’s ability to exercise the Incentive Stock Option in the year is subject to an acceleration provision, then the Incentive Stock Option is considered first exercisable in the calendar year in which the acceleration provision is triggered. For purposes of this Section 9(b), Incentive Stock Options shall be taken into account in the order in which they were granted. However, because an acceleration provision is not taken into account before the trigger occurs, an Incentive Stock Option that becomes exercisable for the first time during a calendar year by operation of such provision does not affect the application of the \$100,000 limitation with respect to any Incentive Stock Option (or portion thereof) exercised before such acceleration. The Fair Market Value of the Shares shall be determined as of the Grant Date.

(c) Leave of Absence. For purposes of Incentive Stock Options, no leave of absence may exceed three months, unless the right to reemployment upon expiration of such leave is provided by statute or contract. If the period of leave exceeds three months and the Awardee’s right to reemployment is not provided by statute or contract, the Awardee’s employment with the Company shall be deemed to terminate on the first day immediately following such three-month period, and any Incentive Stock Option granted to the Awardee shall cease to be treated as an Incentive Stock Option and shall terminate upon the expiration of the three-month period starting on the date the employment relationship is deemed terminated.

(d) Transferability. The Option Agreement must provide that an Incentive Stock Option cannot be transferable by the Awardee otherwise than by will or the laws of descent and distribution, and, during the lifetime of such Awardee, must not be exercisable by any other person. Notwithstanding the foregoing, the Administrator, in its sole discretion, may allow the Awardee to transfer his or her Incentive Stock Option to a trust where under Section 671 of the Code and other Applicable Law, the Awardee is considered the sole beneficial owner of the Option while it is held in the trust. If the terms of an Incentive Stock Option are amended to permit transferability, the Option will be treated for tax purposes as a Nonstatutory Stock Option.

(e) Exercise Price. The per Share exercise price of an Incentive Stock Option shall be determined by the Administrator in accordance with Section 8(b)(i) of the Plan.

(f) Ten-Percent Stockholder. If any Incentive Stock Option is granted to a Ten-Percent Stockholder, then the Option term shall not exceed FIVE (5) years measured from the date of grant of such Option.

(g) Other Terms. Option Agreements evidencing Incentive Stock Options shall contain such other terms and conditions as may be necessary to qualify as Incentive Stock Options, to the extent determined desirable by the Administrator, under the applicable provisions of Section 422 of the Code.

10. Exercise of Option

(a) Procedure for Exercise; Rights as a Stockholder

(i) Any Option granted hereunder shall be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the respective Award Agreement.

(ii) An Option shall be deemed exercised when the Company receives (A) written or electronic notice of exercise (in accordance with the Award Agreement) from the person entitled to exercise the Option; (B) full payment for the Shares with respect to which the related Option is exercised; and (C) with respect to Nonstatutory Stock Options, payment of all applicable withholding taxes.

(iii) Shares issued upon exercise of an Option shall be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Unless provided otherwise by the Administrator or pursuant to this Plan, until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder shall exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option.

(iv) The Company shall issue (or cause to be issued) such Shares as soon as administratively practicable after the Option is exercised. An Option may not be exercised for a fraction of a Share.

(b) Effect of Termination of Service on Options

(i) Generally. Unless otherwise provided for by the Administrator, if a Participant ceases to be a Service Provider, other than upon the Participant's death or Disability, the Participant may exercise his or her Option within such period as is specified in the Award Agreement to the extent that the Option is vested on the Termination Date (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the vested portion of the Option will remain exercisable for THREE (3) months following the Participant's Termination Date. Unless otherwise provided by the Administrator, if on the Termination Date the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will automatically revert to the Plan. If after the Termination of Service the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will automatically terminate, and the Shares covered by such Option will revert to the Plan.

(ii) Disability of Awardee. Unless otherwise provided for by the Administrator, if a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period as is specified in the Award Agreement to the extent the Option is vested on the Termination Date (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve months following the Participant's Termination Date. Unless otherwise provided by the Administrator, if at the time of Disability the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will automatically revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will automatically revert to the Plan.

(iii) Death of Awardee. Unless otherwise provided for by the Administrator, if a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the Option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, so long as such beneficiary has been designated before the Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person or persons to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for TWELVE (12) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

11. Stock Awards

(a) Stock Award Agreement. Each Stock Award Agreement shall contain provisions regarding (i) the number of Shares subject to such Stock Award or a formula for determining such number; (ii) the purchase price, if any, of the Shares, and the means of payment for the Shares; (iii) the performance criteria, if any, and level of achievement versus these criteria that shall determine the number of Shares granted, issued, retained, or vested, as applicable; (iv) such terms and conditions on the grant, issuance, vesting, or forfeiture of the Shares, as applicable, as may be determined from time to time by the Administrator; (v) restrictions on the transferability of the Stock Award; and (vi) such further terms and conditions in each case not inconsistent with this Plan as may be determined from time to time by the Administrator.

(b) Restrictions and Performance Criteria. The grant, issuance, retention, and vesting of each Stock Award may be subject to such performance criteria and level of achievement versus these criteria as the Administrator shall determine, which criteria may be based on financial performance, personal performance evaluations, or completion of service by the Awardee.

Notwithstanding anything to the contrary herein, the performance criteria for any Stock Award that is intended to satisfy the requirements for “performance-based compensation” under Section 162(m) of the Code shall be established by the Administrator based on one or more Qualifying Performance Criteria selected by the Administrator and specified in writing.

(c) Forfeiture. Unless otherwise provided for by the Administrator, upon the Awardee’s Termination of Service, the unvested Stock Award and the Shares subject thereto shall be forfeited, except if the Participant purchased any Shares pursuant to such Stock Award, the Company shall have a right to repurchase the unvested portion of such Shares at the original price paid by the Participant.

(d) Rights as a Stockholder. Unless otherwise provided by the Administrator, the Participant shall have the rights equivalent to those of a stockholder and shall be a stockholder only after Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company) to the Participant.

12. Other Provisions Applicable to Awards.

(a) Non-Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, either at the time of grant or thereafter, such Award shall contain such additional terms and conditions as the Administrator deems appropriate, and any transferee shall be bound by such terms upon acceptance of such transfer.

(b) Qualifying Performance Criteria. For purposes of this Plan, the term “**Qualifying Performance Criteria**” shall mean any one or more of the following performance criteria, applied to either the Company as a whole or to a business unit, Affiliate, or business segment, either individually, alternatively, or in any combination, and measured either annually or cumulatively over a period of years, on an absolute basis or relative to a pre-established target, to previous years’ results or to a designated comparison group, in each case as specified in the Award by the Committee: (i) cash flow, (ii) earnings (including gross margin, earnings before interest and taxes, earnings before taxes, and net earnings), (iii) earnings per share, (iv) growth in earnings or earnings per share, (v) stock price, (vi) return on equity or average stockholders’ equity, (vii) total stockholder return, (viii) return on capital, (ix) return on assets or net assets, (x) return on investment, (xi) revenue, (xii) income or net income, (xiii) operating income or net operating income, (xiv) operating profit or net operating profit, (xv) operating margin, (xvi) return on operating revenue, (xvii) market share, (xviii) contract awards or backlog, (xix) overhead or other expense reduction, (xx) growth in stockholder value relative to the moving average of the S&P 500 Index or a peer group index, (xxi) credit rating, (xxii) strategic plan development and implementation, (xxiii) improvement in workforce diversity, (xxiv) EBITDA, and (xxv) any other similar criteria.

(c) Certification. Before payment of any compensation under an Award intended to qualify as “performance-based compensation” under Section 162(m) of the Code, the Committee shall certify the extent to which any Qualifying Performance Criteria and any other material terms under such Award have been satisfied (other than in cases where such relate solely to the increase in the value of the Common Stock).

(d) Discretionary Adjustments Pursuant to Section 162(m). Notwithstanding satisfaction or completion of any Qualifying Performance Criteria, to the extent specified at the time of grant of an Award to “covered employees” within the meaning of Section 162(m) of the Code, the number of Shares, Options or other benefits granted, issued, retained, or vested under an Award on account of satisfaction of such Qualifying Performance Criteria may be reduced by the Committee on the basis of such further considerations as the Committee in its sole discretion shall determine.

(e) Section 409A. Notwithstanding anything in the Plan to the contrary, it is the Company's intent that all Awards granted under this Plan comply with Section 409A of the Code, and each Award shall be interpreted in a manner consistent with that intention.

13. Adjustments upon Changes in Capitalization, Dissolution, Merger or Asset Sale.

(a) Changes in Capitalization.

(i) The limitations set forth in Section 3, the number and kind of Shares covered by each outstanding Award, and the price per Share (but not the total price) subject to each outstanding Award shall be proportionally adjusted to prevent dilution or enlargement of rights under the Plan for any change in the outstanding Common Stock subject to the Plan, or subject to any Award, resulting from any stock splits, combination or exchange of Shares, consolidation, spin-off or recapitalization of Shares or any capital adjustment or transaction similar to the foregoing or any distribution to holders of Common Stock other than regular cash dividends.

(ii) The Administrator shall make such adjustment in such manner as it deems equitable and appropriate, subject to compliance with Applicable Laws. Any determination, substitution or adjustment made by the Administrator under this Section shall be conclusive and binding on all persons. The conversion of any convertible securities of the Company shall not be treated as a transaction requiring any adjustment under this Section. Except as expressly stated in this Section 13, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of Shares subject to an Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Participant as soon as practicable before the effective date of such proposed transaction. The Administrator in its discretion may provide for an Option to be fully vested and exercisable until ten days before such proposed transaction. In addition, the Administrator may provide that any restrictions on any Award shall lapse before the proposed transaction, if the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Award will terminate immediately before the consummation of such proposed transaction.

(c) Change in Control. If there is a Change in Control of the Company, as determined by the Board or a Committee, the Board or Committee, or board of directors of any surviving entity or acquiring entity may, in its discretion, (i) provide for the assumption, continuation or substitution (including an award to acquire substantially the same type of consideration paid to the stockholders in the transaction in which the Change in Control occurs) of, or adjustment to, all or any part of the Awards; (ii) accelerate the vesting of all or any part of the Options and SARs and terminate any restrictions on all or any part of the Stock Awards or Cash Awards; (iii) provide for the cancellation of all or any part of the Awards for a cash payment to the Participants; and (iv) provide for the cancellation of all or any part of the Awards as of the closing of the Change in Control; so long as, with respect to clause (iv) the Participants are notified that they must exercise or redeem their Awards (including, at the discretion of the Board or Committee, any unvested portion of such Award) at or before the closing of the Change in Control.

14. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Administrator may amend, alter, or discontinue the Plan or any Award Agreement. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan before the date of such termination.

(b) Participant Consent. No amendment, suspension, or termination of the Plan shall materially impair the rights of any Award, unless agreed otherwise between the Participant and the Administrator

(c) Effect of the Plan on Other Arrangements. Neither the adoption of the Plan by the Board or a Committee nor the submission of the Plan to the stockholders of the Company for approval shall be construed as creating any limitations on the power of the Board or any Committee to adopt such other incentive arrangements as it or they may deem desirable, including the granting of restricted stock or stock options otherwise than under the Plan, and such arrangements may be either generally applicable or applicable only in specific cases.

15. Designation of Beneficiary.

(a) An Awardee may file a written designation of a beneficiary who is to receive the Awardee's rights pursuant to Awardee's Award or the Awardee may include his or her Awards in an omnibus beneficiary designation for all benefits under the Plan. To the extent that Awardee has completed a designation of beneficiary such beneficiary designation shall remain in effect with respect to any Award hereunder until changed by the Awardee to the extent enforceable under Applicable Law.

(b) The Awardee may change such designation of beneficiary at any time by written notice. If an Awardee dies and no beneficiary is validly designated under the Plan who is living at the time of such Awardee's death, the Company shall allow the executor or administrator of the estate of the Awardee to exercise the Award, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may allow the spouse or one or more dependents or relatives of the Awardee to exercise the Award to the extent permissible under Applicable Law.

16. No Right to Awards or to Service. No person shall have any claim or right to be granted an Award and the grant of any Award shall not be construed as giving an Awardee the right to continue in the service of the Company or its Affiliates.

17. Preemptive Rights. No Shares will be issued under the Plan in violation of any preemptive rights held by any stockholder of the Company.

18. Legal Compliance. No Share will be issued pursuant to an Award under the Plan unless the issuance and delivery of such Share, as well as the exercise of such Award, if applicable, will comply with Applicable Laws. Issuance of Shares under the Plan shall be subject to the approval of counsel for the Company with respect to such compliance. Notwithstanding anything in the Plan to the contrary, the Plan is intended to comply with the requirements of Section 409A of the Code and shall be interpreted in a manner consistent with that intention.

19. Inability to Obtain Authority. To the extent the Company is unable to or the Administrator deems that it is not feasible to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, the Company shall be relieved of any liability with respect to the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

20. Reservation of Shares. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

21. Notice. Any written notice to the Company required by any provisions of this Plan shall be addressed to the Secretary of the Company and shall be effective when received.

22. Governing Law; Interpretation of Plan and Awards.

(a) This Plan and all determinations made and actions taken pursuant hereto shall be governed by the substantive laws, but not the choice of law rules, of the State of Arizona.

(b) If any provision of the Plan or any Award granted under the Plan is declared to be illegal, invalid, or otherwise unenforceable by a court of competent jurisdiction, such provision shall be reformed, if possible, to the extent necessary to render it legal, valid, and enforceable, or otherwise deleted, and the remainder of the terms of the Plan and Award shall not be affected except to the extent necessary to reform or delete such illegal, invalid, or unenforceable provision.

(c) The headings preceding the text of the sections hereof are inserted solely for convenience of reference, and shall not constitute a part of the Plan, nor shall they affect its meaning, construction or effect.

(d) The terms of the Plan and any Award shall inure to the benefit of and be binding upon the parties hereto and their respective permitted heirs, beneficiaries, successors, and assigns.

(e) All questions arising under the Plan or under any Award shall be decided by the Administrator in its total and absolute discretion. If the Participant believes that a decision by the Administrator with respect to such person was arbitrary or capricious, the Participant may request arbitration with respect to such decision. The review by the arbitrator shall be limited to determining whether the Administrator's decision was arbitrary or capricious. This arbitration shall be the sole and exclusive review permitted of the Administrator's decision, and the Awardee shall as a condition to the receipt of an Award be deemed to waive explicitly any right to judicial review.

23. Limitation on Liability. The Company and any Affiliate or Related Corporation that is in existence or hereafter comes into existence shall not be liable to a Participant, an Employee, an Awardee, or any other persons as to:

(a) The Non-Issuance of Shares. The non-issuance or sale of Shares as to which the Company has been unable to obtain from any regulatory body having jurisdiction the authority deemed by the Company's counsel to be necessary to the lawful issuance and sale of any shares hereunder; and

(b) Tax Consequences. Any tax consequence expected, but not realized, by any Participant, Employee, Awardee or other person due to the receipt, exercise or settlement of any Option or other Award granted hereunder.

24. Unfunded Plan. Insofar as it provides for Awards, the Plan shall be unfunded. Although bookkeeping accounts may be established with respect to Awardees who are granted Stock Awards under this Plan, any such accounts will be used merely as a bookkeeping convenience. The Company shall not be required to segregate any assets that may at any time be represented by Awards, nor shall this Plan be construed as providing for such segregation, nor shall the Company or the Administrator be deemed a trustee of stock or cash to be awarded under the Plan. Any liability of the Company to any Participant with respect to an Award shall be based solely upon any contractual obligations that may be created by the Plan; no such obligation of the Company shall be deemed secured by any pledge or other encumbrance on any property of the Company. Neither the Company nor the Administrator shall be required to give any security or bond for the performance of any obligation that may be created by this Plan.

Adopted 11.30.15

Subsidiaries of the Registrant

Nanofilm, Ltd. Ohio
Applied Nanotech, Inc. Delaware
PEN Technology LLC Florida

Certificate of Principal Executive Officer
Pursuant to Rule 13a-14(a)/15d-14(a)

I, Scott Rickert, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2015 of PEN Inc. (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present, in all material respects, the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant’s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in the Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting) as defined in the Exchange Act Rules 13a - 15(f) and 15d - 15(f) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the registrant’s board of directors:

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 30, 2016

/s/ Scott Rickert

Scott Rickert
President and Chief Executive Officer

Certificate of Principal Financial Officer
Pursuant to Rule 13a-14(a)/15d-14(a)

I, Adam Wasserman, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2015 of PEN Inc. (the “registrant”);

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present, in all material respects, the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.

4. The registrant’s other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in the Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting) as defined in the Exchange Act Rules 13a - 15(f) and 15d - 15(f) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant’s internal control over financial reporting that occurred during the registrant’s most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant’s internal control over financial reporting; and

5. The registrant’s other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the registrant’s board of directors:

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: March 30, 2016

/s/ Adam Wasserman

Adam Wasserman
Chief Accounting Officer

Section 1350 Certification of Principal Executive Officer

In connection with the annual report of PEN Inc. (the "Company") on Form 10-K for the year ended December 31, 2015, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Scott Rickert, the President and Chief Executive Officer of the Company, and I, Adam Wasserman, Chief Accounting Officer, certify to the best of our knowledge:

1. The Report fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and

2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 30, 2016

/s/ Scott Rickert

Scott Rickert
President and Chief Executive Officer

Date: March 30, 2016

/s/ Adam Wasserman

Adam Wasserman
Chief Accounting Officer
