

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

DOCUMENT SECURITY SYSTEMS INC

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**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form 10-K

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

For the fiscal year ended December 31, 2018

or

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

For the transition period from _____ to _____

Commission file number 001-32146



DOCUMENT SECURITY SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

New York

(State or other jurisdiction of
incorporation or organization)

16-1229730

(I.R.S. Employer
Identification No.)

200 Canal View Boulevard

Suite 300

Rochester, New York 14623

(Address of principal executive offices)

(585) 325-3610

(Registrant's telephone number, including area code)

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

Title of each class

Common Stock, par value \$0.02 per share

Name of each exchange on which registered

NYSE American LLC

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definitions of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in Rule

Large Accelerated Filer Accelerated Filer Non-Accelerated Filer (Do not check if a smaller reporting company) Smaller Reporting Company
Emerging growth company

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

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

The aggregate market value of the registrant's common stock held by non-affiliates of the registrant computed by reference to the closing price of such common stock as reported on the NYSE American LLC exchange on June 30, 2018, was \$16,917,652.

The number of shares of the registrant's common stock outstanding as of March 1, 2019, was 17,425,858.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement relating to the registrant's 2019 Annual Meeting of Stockholders, which is expected to be filed with the Securities and Exchange Commission within 120 days after December 31, 2018, are incorporated by reference into Part III of this Annual Report on Form 10-K.

DOCUMENT SECURITY SYSTEMS, INC. & SUBSIDIARIES
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PART I

ITEM 1 - BUSINESS

Overview

Document Security Systems, Inc. (referred to in this report as “Document Security Systems”, “DSS”, “we”, “us”, “our” or “Company”) was formed in New York in 1984 and, in 2002, chose to strategically focus on becoming a developer and marketer of secure technologies. We specialize in fraud and counterfeit protection for all forms of printed documents and digital information. The Company holds numerous patents for optical deterrent technologies that provide protection of printed information from unauthorized scanning and copying. We operate two production facilities, consisting of a combined security printing and packaging facility and a plastic card facility where we produce secure and non-secure documents for our customers. We license our anti-counterfeiting technologies to printers and brand-owners. In addition, we have a digital division which provides cloud computing services for our customers, including disaster recovery, back-up and data security services. In 2013, the Company expanded its business focus by merging with DSS Technology Management, Inc., formerly known as Lexington Technology Group, Inc. (as described in greater detail below), which acquires intellectual property assets and interests in companies owning intellectual property assets for the purpose of monetizing these assets through a variety of value-enhancing initiatives, including, but not limited to, investments in the development and commercialization of patented technologies, licensing, strategic partnerships and litigation.

Prior to 2006, our primary revenue source in our document security division was derived from the licensing of our technology. In 2006, we began a series of acquisitions designed to expand our ability to produce products for end-user customers. In 2006, we acquired Plastic Printing Professionals, Inc. (“P3”), a privately held plastic cards manufacturer located in the San Francisco, California area. P3 is also referred to herein as the “DSS Plastics Group”. In 2008, we acquired DPI of Rochester, LLC, a privately held commercial printer located in Rochester, New York, referred to herein as “Secuprint” or “DSS Printing Group”. In 2010, we acquired Premier Packaging Corporation, a privately held packaging company located in Victor, New York. Premier Packaging Corporation is also referred to herein as “Premier Packaging” or the “DSS Packaging Group.” In May 2011, we acquired ExtraDev, Inc. a privately held information technology and cloud computing company located in Rochester, New York. In 2016, ExtraDev, Inc. changed its name to DSS Digital Inc. DSS Digital Inc. is also referred to herein as the “DSS Digital Group”.

On July 1, 2013, we merged with DSS Technology Management, Inc. (formerly known as Lexington Technology Group, Inc.), a private intellectual property monetization company. DSS Technology Management, Inc. is also referred to herein as “DSS Technology Management” or “DSSTM”. DSS Technology Management is focused on extracting the economic benefits of intellectual property assets through acquiring or internally developing patents or other intellectual property assets (or interests therein) and then monetizing such assets through a variety of value enhancing initiatives.

In January 2018, the Company commenced international operations with its wholly owned subsidiary, DSS Asia Limited, in its office in Hong Kong. In December 2018, this division acquired Guangzhou Hotapps Technology Ltd, a Chinese company that enhances the Company’s ability to do business in China. Guangzhou Hotapps Technology Ltd, did not have revenue but has two employees and a license to do business in China.

We do business in five operating segments as follows:

DSS Packaging and Printing Group - Produces custom paperboard packaging serving clients in the pharmaceutical, beverage, photo packaging, toy, specialty foods and direct marketing industries, among others. The group also provides secure and commercial printing services for end-user customers along with technical support for our technology licensees. The division produces a wide array of printed materials such as security paper, vital records, prescription paper, birth certificates, receipts, manuals, identification materials, entertainment tickets, secure coupons, parts tracking forms, brochures, direct mailing pieces, catalogs, business cards, etc. The division also provides resources and access to production equipment for our ongoing research and development of security printing and related technologies.

DSS Plastics Group - Manufactures laminated and surface printed cards which can include magnetic stripes, bar codes, holograms, signature panels, invisible ink, micro fine printing, guilloche patterns, biometric, radio frequency identification (RFID) and watermarks for printed plastic documents such as ID cards, event badges, and driver’s licenses.

DSS Digital Group - This division researches, develops, markets and sell the Company’s digital products, including and primarily, our AuthentiGuard product, which is a brand authentication application that integrates the Company’s optical deterrent technologies used in its security printing offerings with proprietary digital data security based solutions. The AuthentiGuard product allows customers to implement a security mark utilizing conventional printing methods that is copy and counterfeit resistant that can be read and recorded utilizing smartphones and other digital image capture devices, which can be utilized by that customers suppliers, field personnel and customers throughout its global product supply and distribution chains.

DSS International - Assists the DSS Digital Group in the development and marketing of the Company's digital authentication products in the Asia Pacific market.

DSS Technology Management - Acquires or internally develops patented technology or intellectual property assets (or interests therein), with the purpose of monetizing these assets through a variety of value-enhancing initiatives, including, but not limited to, investments in the development and commercialization of patented technologies, licensing, strategic partnerships and commercial litigation.

Our Core Products, Technology and Services

Our core business is counterfeit prevention, brand protection and validation of authentic print media, including government-issued documents, packaging, ID cards and licenses. We believe we are a leader in the research and development of optical deterrent technologies and have commercialized these technologies with a suite of products that offer our customers an array of document security solutions. We provide document security technology to security printers, corporations, consumer product companies, and governments for protection of vital records and documents, certifications, travel documents, consumer products, pharmaceutical packaging and school transcripts.

Optical deterrent features such as ours are utilized mainly by large security printers for the protection of important printed documents, such as vital records, and identification documents. Many of these features, such as micro-printing, were developed pre-1980 as they were designed to be effective on the imaging devices of the day which were mainly photography mechanisms. With the advent of modern-day scanners, digital copiers, digital cameras, smart phones and easy to use imaging software such as Adobe Photoshop many of the pre-1980 optical deterrents such as micro-printing are no longer used or are much less effective in the prevention of counterfeiting.

Unlike some of our competitors, our technologies are developed to defeat today's modern imaging systems. Almost all our products and processes are built to thwart scanners and digital copiers and we believe that our products are the most effective in doing so in the market today. In addition, our technologies do not require expensive hardware or software add-ons to authenticate a document, but instead require simple, inexpensive hand-held readers which can be calibrated to particular hidden design features. Our technologies are literally ink on paper that is printed with a particular method to hide selected things from a scanner's "eye" or distort what a scanner "sees." These attributes make our anti-scanning technologies very cost effective versus other current offerings on the market since our technologies are imbedded during the normal printing process, thereby significantly reducing the costs to implement the technologies.

The Company's primary anti-counterfeiting products and technologies are marketed under its AuthentiGuard® registered trademark. In October 2012, the Company introduced AuthentiGuard®, an iPhone application for authentication, targeted to major Fortune 500 companies worldwide. The application is a cloud-enabled solution that permits efficient and cost-effective authentication for packaging, documents and credentials. The solution embeds customizable, covert AuthentiGuard® Prism technology that resists duplication on copiers and scanners in a product's packaging. Product verification using a smartphone application creates real-time, accurate authentication results for brand owners that can be integrated into existing information systems.

Our Patent Monetization Business

Since its acquisition in 2013, DSS Technology Management's primary mission has been the attempted monetization of its various patent portfolios through commercial litigation.

Except for its investment in its social networking related patents, DSS Technology Management and the Company have partnered with various third-party funding groups in connection with patent monetization programs and may continue to do so in the future. In connection with these fundings, the Company has purchased patents in a variety of fields, including social networking, mobile communications, semi-conductors, Bluetooth and LED, and has initiated patent infringement litigation against a wide range of domestic and global Companies. In connection with these litigation matters, the Company engages with legal firms that typically work under fee caps and contingency fee arrangements. To date, the Company has been or is currently in litigation with, among others, Apple, Samsung, Taiwan Semiconductor Manufacturing Company, Intel, NEC, Lenovo, Seoul Semiconductor, Everlight Electronics, Cree, Nichia and Osram, GMBH. During the course of these litigation matters, the Company typically incurs a variety of legal challenges from defendants, including defendants seeking to have the patents in question adjudicated to be invalid by the United States Patent Office through the *Inter Partes Review* process ("*IPR*"). As a result of these various legal challenges issued by defendants, the Company has experienced varying levels of success in its efforts to monetize its patent investments. In addition, to date, most of settlements or payments received from defendants have been remitted to the Company's third-party funders in accordance with the terms of those respective funding agreements.

The status of pending patent infringement lawsuits which have been filed by DSS Technology Management and the Company are more particularly described in Part 1, Item 3 of this Report.

Intellectual Property

Patents

Our ability to compete effectively depends largely upon our ability to maintain the proprietary nature of our technology, products and manufacturing processes. We principally rely upon patent, trademark, trade secrets and contract law to establish and protect our proprietary rights. During our development, we have expended significant resources on research and development in an effort to become a market leader with the ability to provide our customers effective solutions against an ever-changing array of counterfeit risks. Our position in the security print market is based on our technologies and products. We dedicate two staff members to research and development of print technologies, digital graphic files, and printing techniques to allow us to expand our ability to combat a wide variety of counterfeiting and brand protection issues. In 2018 and 2017, we spent approximately \$146,000 and \$106,000 respectively, on research and development which is comprised mainly of compensation costs, materials and consultants, including stock-based payments to consultants. Research and development costs increased during 2018 as compared to 2017 as the Company moved some personnel from research and development to program support to meet the requirements of current and prospective customers of the Company's AuthentiGuard product line.

We own patents covering semiconductor, light emitting diode, anti-counterfeiting and document authentication, and wireless peripheral technologies, respectively. We also have several patent applications in process, including provisional and Patent Cooperation Treaty ("PCT") patent applications in various jurisdictions including the United States, Canada, and Europe. These applications cover our anti-counterfeiting technologies, including AuthentiGuard®, AuthentiGuard® Prism™, and AuthentiGuard® VeriGlow™, and several other anti-counterfeiting and authentication technologies in development. Our issued patents have remaining durations ranging from 1 to 17 years.

Trademarks

We have registered our "AuthentiGuard®" mark, as well as our "Survivor 21®" electronic check icon and "VeriGlow®" with the U.S. Patent and Trademark Office. A trademark application is pending in Canada for "AuthentiGuard." AuthentiGuard® is registered in several European countries including the United Kingdom. We have also applied to register AuthentiSite TM, AuthentiShare TM, AuthentiSuiteTM, AuthentiBlockTM, and AuthentiChainTM in the U.S.

Websites

The primary website we maintain is www.dsssecure.com, which describes our Company, our history, our patented document security solutions, our major product offerings, and our targeted vertical markets. The website provides detailed product offerings of each of our divisions – Printing/ Packaging, Plastics and Digital. In addition, we maintain the website www.protectedpaper.com, an e-commerce site that markets and sells our patented security paper, hand-held security verifiers and custom security documents to end users worldwide. In addition to the active websites, the Company owns several other domain names reserved for future use or for strategic competitive reasons.

Markets and Competition

The security print market is comprised of a few very large companies and an increasing number of small companies with specific technology niches. The expansion of this market is primarily due to the significant expansion of counterfeiting as advancing technologies in digital duplication and scanning combined with increasingly sophisticated design software has enabled easier reproduction of original documents, vital records and IDs, packaging, and labels. Our competitors include Standard Register Company, which specializes in printing security technologies for the check and forms and medical industries; and De La Rue Plc, that specializes in printing secure currency, tickets, labels, lottery tickets and vital records for governments and Fortune 500 companies. Large office equipment manufacturers, called OEMs, such as Sharp, Xerox Canon, Ricoh, Hewlett Packard and Eastman Kodak are developing "smart copier" technology that recognizes particular graphical images and produces warning words or distorted copies. Some of the OEMs are also developing user assigned and variable pantograph "hidden word" technologies in which users can assign a particular hidden word in copy, such as "void" that is displayed when a copy of such document is made. In addition, other competing hidden word technologies are being marketed by competitors such as NoCopi Technologies which sells and markets secure paper products, and Graphic Security Systems Corporation, which markets Scrambled Indicia.

Our packaging division competes with a significant number of national, regional and local companies, many of which are independent and privately-held. The largest competitors in this market are primarily focused on the long-run print order market. They include large integrated paper companies such as Rock-Tenn Company, Caraustar Industries, Inc., Graphic Packaging Holding Company and Mead Westvaco. Our printing division competes primarily with locally-based printing companies in the Rochester and Western New York markets. Most of our competitors in these markets are privately-held, single location operations.

Our plastics division competes with several companies including Bristol ID, AbNote (formerly Arthur Blanks), LaserCard Corporation and L-1 Identity Solutions. The plastics division primarily delivers its products through a dealer network, but also provides products to end-user customers. Competition in the plastic card industry is primarily based on production capabilities based on specialized equipment, geographic location, quality and service. In addition, competition is increasingly influenced by proprietary or niche offerings provided by competitors, such as RFID, biometric, read-write, and security features built into the plastic card.

Our technology division also faces competition in the area of patent acquisitions and enforcement. Entities such as Acacia, RPX, AST, Intellectual Ventures, Wi-LAN, MOSAID, Round Rock Research LLC, IPvalue Management Inc., Vringo Inc. and Pendrell Corporation compete in acquiring rights to patents.

Customers

During 2018, two customers accounted for 44% of the Company's consolidated revenue. As of December 31, 2018, these two customers accounted for 38% of the Company's trade accounts receivable balance. During 2017, these same two customers accounted for 46% of the Company's consolidated revenue. As of December 31, 2017, these two customers accounted for 38% of the Company's trade accounts receivable balance.

Raw Materials

The primary raw materials the Company uses in its businesses are paper, corrugated paperboard, plastic sheets, and ink. The Company negotiates with leading suppliers to maximize its purchasing efficiencies and uses a wide variety of paper grades, formats, ink formulations and colors. Paper and paperboard prices continued to increase in 2018, and we believe increases in future years are expected. Except for certain packaging customers where the Company enters into annual contracts, for which changes in paperboard pricing is absorbed by the Company, the Company has historically passed substantially all increases and decreases to its customers, although there can be no assurances that the Company will continue to do so in the future.

Environmental Compliance

It is the Company's policy to conduct its operations in accordance with all applicable laws, regulations and other requirements. While it is not possible to quantify with certainty the potential impact of actions regarding environmental matters, particularly remediation and other compliance efforts that the Company may undertake in the future, in the opinion of management, compliance with the present environmental protection laws, before taking into account estimated recoveries from third parties, will not have a material adverse effect on the Company's consolidated annual results of operations, financial position or cash flows.

Government Regulation

We play an active role with the Document Security Alliance group, as one of our research and development management members sits on various committees of that group and has been involved in design recommendations for important U.S. documents. This group of security industry specialists was formed by the U.S. Secret Service to evaluate and recommend security solutions to the federal government for the protection of credentials and vital records.

Our patent monetization business is also faced with potential government regulations. If new legislation, regulations or rules are implemented either by Congress, the U.S. Patent and Trademark Office (the "USPTO"), or the courts that impact the patent application process, the patent enforcement process or the rights of patent holders, these changes could negatively affect our patent monetization efforts and, in turn, our assets, expenses and revenue. United States patent laws have been amended by the Leahy-Smith America Invents Act. The America Invents Act includes several significant changes to U.S. patent law. In general, the legislation attempts to address issues surrounding the enforceability of patents and the increase in patent litigation by, among other things, establishing new procedures for patent litigation. For example, the America Invents Act changes the way that parties may be joined in patent infringement actions, increasing the likelihood that such actions will need to be brought against individual parties allegedly infringing by their respective individual actions or activities. In addition, the U.S. Department of Justice ("DOJ") has conducted reviews of the patent system to evaluate the impact of patent assertion entities, such as our Company, on industries in which those patents relate. It is possible that the findings and recommendations of the DOJ could adversely impact our ability to effectively license and enforce standards-essential patents and could increase the uncertainties and costs surrounding the enforcement of any such patented technologies.

Moreover, new rules regarding the burden of proof in patent enforcement actions could significantly increase the cost of our enforcement actions, and new standards or limitations on liability for patent infringement could negatively impact our revenue derived from such enforcement actions.

Corporate History

The Company was incorporated in 1984 and changed its name to Document Security Systems, Inc. in 2002. Since then, the Company has acquired a plastics card manufacturer, a printing company, a packaging company, an IT services company, and an intellectual property monetization company.

Employees

As of March 1, 2019, all of the Company's 106 employees were full time. It is important that we continue to retain and attract qualified management and technical personnel. Our employees are not covered by any collective bargaining agreement, and we believe that our relations with our employees are generally good.

Available information

Our website address is www.dsssecure.com. Information on our website is not incorporated herein by reference. We make available free of charge through our website our press releases, Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and all amendments to those reports as soon as reasonably practicable after electronically filed with or furnished to the Securities and Exchange Commission.

ITEM 1A – RISK FACTORS

Investing in our common stock involves risk. Before deciding whether to invest in our common stock, you should consider carefully the risks and uncertainties described below. There may be other unknown or unpredictable economic, business, competitive, regulatory or other factors that could have material adverse effects on our future results. If any of these risks actually occurs, our business, business prospects, financial condition or results of operations could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment. Please also read carefully the section contained in Part II, Item 7, below, entitled "Cautionary Statement Regarding Forward-Looking Statements."

We have identified the following risks and uncertainties that may have a material adverse effect on our business, financial condition or results of operations in the future. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations. If any of these risks occur, our business, results of operations or financial condition could suffer, the market price of our common stock could decline, and you could lose all or part of your investment in our common stock.

Due to our low cash balance and negative cash flow, unless we raise additional capital we may have to further reduce our costs by curtailing future operations to continue as a business, and substantial doubt may be raised about our ability to continue as a going concern.

Our ability to fund our capital requirements out of our available cash and cash generated from our operations in the future will depend on many factors, but largely on our ability to (i) increase sales of the Company's digital products and technologies; (ii) raise capital on favorable terms; and (iii) continue to generate operating profits from the Company's packaging and plastic printing operations. It is possible that we may not be able to find financing in the capital markets or from lenders on acceptable terms or at all in the future. If we are not successful in generating needed funds from operations or in equity or debt capital raising transactions, we may need to reduce our costs which measures could include selling or consolidating certain operations or assets, and delaying, canceling or scaling back product development and marketing programs. These measures could materially and adversely affect our ability to operate profitably. In addition, if we are not successful in generating needed funds from operations or from capital raising transactions, substantial doubt may be raised about our status as a going concern.

We have a history of losses.

While profitable in 2018 due to a one-time gain on the extinguishment of liabilities, we have a history of losses, including net losses for the fiscal years 2017, and 2016 of approximately \$578,000 and \$950,000 million, respectively. Our results of operations in the future will depend on many factors, but largely on our ability to successfully market our anti-counterfeiting products, technologies and services and successfully monetize our IP assets. Failure to achieve profitability in the future could adversely affect the trading price of our common stock and our ability to raise additional capital and, accordingly, our ability to continue to grow our business. There can be no assurance that we will succeed in addressing any or all of these risks, and the failure to do so could have a material adverse effect on our business, financial condition and operating results.

We have a significant amount of indebtedness, some of which is secured by our assets, and we may be unable to satisfy our obligations to pay interest and principal thereon when due or negotiate acceptable extensions or settlements.

We have outstanding indebtedness (described below), some of which is secured by our assets. Given our history of operating losses and our cash position, we may not be able to repay indebtedness when due. If we were to default on any of our other indebtedness that require payments of cash to settle such default and not receive an extension or a waiver from the creditor and the creditor were to foreclose on the secured assets, it could have a material adverse effect on our business, financial condition and operating results.

As of December 31, 2018, we had the following significant amounts of outstanding indebtedness:

- (i) \$869,865 due under a promissory note with Citizens Bank used to purchase our packaging division facility. We are required to pay monthly installments of \$7,658 plus interest until August 2021 at which time a balloon payment of the remaining principal balance will be due. We entered into an interest rate swap agreement to lock into a 5.87% effective interest rate over the life of the term loan. The promissory note is secured by a first mortgage on our packaging division facility.
- (ii) \$315,000 under a promissory note entered into by our subsidiary, Premier Packaging, with Citizens Bank pursuant to which Premier Packaging made improvements and additions to its production facility. The promissory note is payable in monthly installments over a five-year period of \$2,500 plus interest calculated at a variable rate of 1 Month Libor plus 3.15% (5.5% at December 31, 2018), which payments commenced on July 1, 2014. The note matures in July 2019 at which time a balloon payment of the remaining principal balance of \$300,000 is due. The promissory note is secured by the assets of our packaging facility.
- (iii) \$149,542, under a promissory note entered into by our subsidiary, Premier Packaging, with Citizens Bank pursuant to which Premier Packaging purchased a HP Indigo 7800 Digital press. The term note bears interest at 3.61% and is payable in 60 equal monthly installments of principal and interest of \$9,591 until April 28, 2020.
- (iv) \$684,554 in a revolving line of credit with Citizens Bank available for use by Plastic Printing Professionals to purchase equipment, subject to certain limitations, payable in monthly installments of interest only. Interest accrues at 1 Month LIBOR plus 2.00% (4.35% at December 31, 2018).
- (v) \$339,600 in a revolving line of credit with Citizens Bank available for use by Premier Packaging to purchase equipment, subject to certain limitations, payable in monthly installments of interest only. Interest accrues at 1 Month LIBOR plus 2.00% (4.35% at December 31, 2018).
- (vi) \$100,000 in a zero-interest promissory note entered into by the Company's DSS Asia subsidiary to acquire Guangzhou Hotapps Technology Pte Ltd., a Chinese company, payable in full in October 2020.

The Citizens Bank obligations are secured by all of the assets of Premier Packaging and Plastic Printing Professionals. Under the Citizens Bank credit facilities, these subsidiaries are subject to various covenants including fixed charge coverage ratio, tangible net worth and current ratio covenants. For the years ended December 31, 2018 and December 31, 2017, Premier Packaging and Plastic Printing Professionals were in compliance with the covenants.

We cannot predict our future capital needs and we may not be able to secure additional financing.

We may need to raise additional funds in the future to fund our working capital needs and to continue our business. We also may need additional funds to complete development, testing and marketing of our products and technologies, or to make strategic acquisitions or investments. We expect to seek equity or debt financings, collaborative arrangements with corporate partners or funds from other sources for these purposes. No assurance can be given that necessary funds will be available for us to finance our development on acceptable terms, if at all. Furthermore, such additional financings may involve substantial dilution of our stockholders or may require that we relinquish rights to certain of our technologies or products. In addition, we may experience operational difficulties and delays due to working capital restrictions. If adequate funds are not available from operations or additional sources of financing, we may have to delay or scale back our growth plans.

The value of our intangible assets and investments may not be equal to their carrying values.

As of December 31, 2018, we had approximately \$3.3 million of net intangible assets, including goodwill. Approximately \$421,000 of this amount are intangible assets which derive their value from patents or patent rights. If licensing efforts and litigation are not successful, the values of these assets could be reduced. We are required to evaluate the carrying value of such intangibles and goodwill and the fair value of investments whenever events or changes in circumstances indicate that the carrying value of an intangible asset, including goodwill, and investment may not be recoverable. If any of our intangible assets, goodwill or investments are deemed to be impaired then it will result in a significant reduction of the operating results in such period.

A significant amount of our revenue is derived by two customers.

During 2018, two customers accounted for 44% of our consolidated revenue. As of December 31, 2018, these two customers accounted for 38% of our trade accounts receivable balance. During 2017, these two customers accounted for 46% of our consolidated revenue. As of December 31, 2017, these two customers accounted for 38% of our trade accounts receivable balance. If we were to lose these customers or if the amount of business we do with these two customers declines significantly, our business would be adversely affected.

We have pending legal proceedings against numerous companies, and we expect such litigation to continue to be time-consuming and costly, which may adversely affect our financial condition and our ability to operate our business.

To monetize and protect our patent assets, we have commenced legal proceedings against numerous companies, alleging infringement of our patents. Our viability as an operating company is partially dependent on the outcome of this litigation, and there is a risk that we may be unable to achieve the results we desire from such litigation, which failure could significantly harm our business. In addition, the defendants in this litigation are much larger than us and have substantially more resources than us, which could make our litigation efforts more difficult.

These legal proceedings may continue for several years and may require significant expenditures for legal fees and other expenses. Disputes regarding the assertion of patents and other intellectual property rights are highly complex and technical. Once initiated, we may be forced to litigate against others to enforce or defend our intellectual property rights or to determine the validity and scope of other parties' proprietary rights. The defendants or other third parties involved in the lawsuits in which we are involved may allege defenses and/or file counterclaims in an effort to avoid or limit liability and damages for patent infringement. If such defenses or counterclaims are successful, they may have a great impact on the value of the patents and preclude our ability to derive licensing revenue from the patents. Therefore, a negative outcome of any such litigation, or one or more claims contained within any such litigation, could materially and adversely impact our business. The defendants may also seek reimbursement of court costs, legal fees and other expenses, which, if awarded, could be substantial and materially and adversely impact our cash positions.

In addition, certain of our patents are subject to security agreements with third parties that could cause the ownership of the patents to be transferred to such third-party in the event of default, which could result in the loss of value to the Company. As an example, our proceeds investment agreement with BKI is secured by certain of our LED patents.

While we believe that certain of our patents are being infringed by the defendants named in our various litigation matters, there is a risk that a court will find the patents invalid, not infringed or unenforceable and/or that the USPTO will either invalidate the patents or materially narrow the scope of their claims during the course of a re-examination or Inter Partes Review. In addition, even with a positive trial court verdict, the patents may be invalidated, found not infringed or rendered unenforceable on appeal. This risk may occur either presently in our current litigation or from time to time in connection with future litigation we may bring. If this were to occur, it would have a material adverse effect on our viability and operations.

Patent litigation is inherently risky, and the outcome is uncertain. Some of the parties we believe are infringing on our patents are large and well-financed companies with substantially greater resources than ours. We believe that parties will devote a substantial amount of resources in an attempt to avoid or limit a finding that they are liable for infringing our patents or, in the event liability is found, to avoid or limit the amount of associated damages. In addition, there is a risk that these parties may file re-examinations or other proceedings with the USPTO or other government agencies in an attempt to invalidate, narrow the scope or render unenforceable our patents. It is also possible that a court may rule that we have violated statutory authority, regulatory authority, federal rules, local court rules, or governing standards relating to the substantive or procedural aspects of such enforcement actions. In such event, a court may issue monetary sanctions against us or award attorneys' fees and/or expenses to one or more defendants, which could be material, and if we are required to pay such monetary sanctions, attorneys' fees and/or expenses, such payment could materially harm our operating results and our financial position.

In addition, it is difficult in general to predict the outcome of patent enforcement litigation at the trial level. There is a higher rate of appeals in patent enforcement litigation than more standard business litigation. Such appeals are expensive and time-consuming, and the outcomes of such appeals are sometimes unpredictable, resulting in increased costs and reduced or delayed revenue. We would expect any defendant in our patent enforcement litigation to appeal a trial court ruling against them, which would add to the expense and duration of the litigation and could result in a reversal of the trial court ruling.

New legislation, regulations or rules related to obtaining patents or enforcing patents could significantly increase our operating costs and decrease our revenue.

We expect to spend a significant amount of resources to enforce our patent assets. If new legislation, regulations or rules are implemented either by Congress, the USPTO, any state or the courts that impact the patent application process, the patent enforcement process or the rights of patent holders, these changes could negatively affect our expenses and revenue and any reductions in the funding of the USPTO could negatively impact the value of our assets. United States patent laws have been amended by the Leahy-Smith America Invents Act. The America Invents Act includes a number of significant changes to U.S. patent law. In general, the legislation attempts to address issues surrounding the enforceability of patents and the increase in patent litigation by, among other things, establishing new procedures for patent litigation. For example, the America Invents Act changes the way that parties may be joined in patent infringement actions, increasing the likelihood that such actions will need to be brought against individual parties allegedly infringing by their respective individual actions or activities. The America Invents Act and its implementation could increase the uncertainties and costs surrounding the enforcement of our patented technologies, which could have a material adverse effect on our business and financial condition.

Several states have adopted or are considering legislation to make the patent enforcement process more difficult for non-practicing entities, such as allowing such entities to be sued in state court and setting higher standards of proof for infringement claims. We cannot predict what, if any, impact these state initiatives will have on the operation of our enforcement business. However, such legislation could increase the uncertainties and costs surrounding the enforcement of our patented technologies, which could have a material adverse effect on our business and financial condition.

In addition, the U.S. Department of Justice, or DOJ, has conducted reviews of the patent system to evaluate the impact of patent assertion entities on industries in which those patents relate. It is possible that the findings and recommendations of the DOJ could impact the ability to effectively license and enforce standards-essential patents and could increase the uncertainties and costs surrounding the enforcement of any such patented technologies.

Finally, new rules regarding the burden of proof in patent enforcement actions could significantly increase the cost of our enforcement actions, and new standards or limitations on liability for patent infringement could negatively impact any revenue we might derive from such enforcement actions.

If we are unable to adequately protect our intellectual property, our competitive advantage may disappear.

Our success will be determined in part by our ability to obtain United States and foreign patent protection for our technology and to preserve our trade secrets. Because of the substantial length of time and expense associated with developing new document security technology, we place considerable importance on patent and trade secret protection. We intend to continue to rely primarily on a combination of patent protection, trade secrets, technical measures, and nondisclosure agreements with our employees and customers to establish and protect the ideas, concepts and documentation of software and trade secrets developed by us. Our ability to compete and the ability of our business to grow could suffer if these intellectual property rights are not adequately protected. There can be no assurance that our patent applications will result in patents being issued or that current or additional patents will afford protection against competitors. Failure of our patents, trademarks and trade secret protection, non-disclosure agreements and other measures to provide protection of our technology and our intellectual property rights could enable our competitors to more effectively compete with us and have an adverse effect on our business, financial condition and results of operations. In addition, our trade secrets and proprietary know-how may otherwise become known or be independently discovered by others. No guarantee can be given that others will not independently develop substantially equivalent proprietary information or techniques, or otherwise gain access to our proprietary technology.

In addition, we may be required to litigate in the future to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity. Any such litigation could result in substantial costs and diversion of resources and could have a material adverse effect on our business, financial condition or results of operations, and there can be no assurances of the success of any such litigation.

We may face intellectual property infringement or other claims against us, our customers or our intellectual property that could be costly to defend and result in our loss of significant rights.

Although we have received patents with respect to certain of our core business technologies, there can be no assurance that these patents will afford us any meaningful protection. Although we believe that our use of the technology and products we have developed, and other trade secrets used in our operations do not infringe upon the rights of others, our use of the technology and trade secrets we developed may infringe upon the patents or intellectual property rights of others. In the event of infringement, we could, under certain circumstances, be required to obtain a license or modify aspects of the technology and trade secrets we developed or refrain from using the same. We may not have the necessary financial resources to defend an infringement claim made against us or be able to successfully terminate any infringement in a timely manner, upon acceptable terms and conditions or at all. Failure to do any of the foregoing could have a material adverse effect on our operations and our financial condition. Moreover, if the patents, technology or trade secrets we developed or use in our business are deemed to infringe upon the rights of others, we could, under certain circumstances, become liable for damages, which could have a material adverse effect on our operations and our financial condition. As we continue to market our products, we could encounter patent barriers that are not known today. A patent search may not disclose all related applications that are currently pending in the United States Patent Office, and there may be one or more such pending applications that would take precedence over any or all of our applications.

Furthermore, third parties may assert that our intellectual property rights are invalid, which could result in significant expenditures by us to refute such assertions. If we become involved in litigation, we could lose our proprietary rights, be subject to damages and incur substantial unexpected operating expenses. Intellectual property litigation is expensive and time-consuming, even if the claims are subsequently proven unfounded, and could divert management's attention from our business. If there is a successful claim of infringement, we may not be able to develop non-infringing technology or enter into royalty or license agreements on acceptable terms, if at all. If we are unsuccessful in defending claims that our intellectual property rights are invalid, we may not be able to enter into royalty or license agreements on acceptable terms, if at all. Moreover, if we are unsuccessful in our pending patent infringement litigation, we could lose certain patents that have been collateralized by third party funding partners. This could prohibit us from providing our products and services to customers, which could have a material adverse effect on our operations and our financial condition.

Certain of our recently developed products are not yet commercially accepted and there can be no assurance that those products will be accepted, which would adversely affect our financial results.

Over the past several years, we have spent significant funds and time to create new products by applying our technologies onto media other than paper, including plastic and cardboard packaging, and delivery of our technologies digitally. Our business plan includes plans to incur significant marketing, intellectual property development and sales costs for these newer products, particularly the digitally delivered products. If we are not able to sell these new products, our financial results will be adversely affected.

The results of our research and development efforts are uncertain and there can be no assurance of the commercial success of our products.

We believe that we will need to continue to incur research and development expenditures to remain competitive. The products we are currently developing or may develop in the future may not be technologically successful. In addition, the length of our product development cycle may be greater than we originally expected, and we may experience delays in future product development. If our resulting products are not technologically successful, they may not achieve market acceptance or compete effectively with our competitors' products.

Changes in document security technology and standards could render our applications and services obsolete.

The market for document security products, applications, and services is fast moving and evolving. Identification and authentication technology is constantly changing as we and our competitors introduce new products, applications, and services, and retire old ones as customer requirements quickly develop and change. In addition, the standards for document security are continuing to evolve. If any segments of our market adopt technologies or standards that are inconsistent with our applications and technology, sales to that market segments could decline, which could have a material adverse effect on our operations and our financial condition.

The market in which we operate is highly competitive, and we may not be able to compete effectively, especially against established industry competitors with greater market presence and financial resources.

Our market is highly competitive and characterized by rapid technological change and product innovations. Our competitors may have advantages over us because of their longer operating histories, more established products, greater name recognition, larger customer bases, and greater financial, technical and marketing resources. As a result, they may be able to adapt more quickly to new or emerging technologies and changes in customer requirements and devote greater resources to the promotion and sale of their products. Competition may also force us to decrease the price of our products and services. We cannot assure you that we will be successful in developing and introducing new technology on a timely basis, new products with enhanced features, or that these products, if introduced, will enable us to establish selling prices and gross margins at profitable levels.

If we are unable to respond to regulatory or industry standards effectively, our growth and development could be delayed or limited.

Our future success will depend in part on our ability to enhance and improve the functionality and features of our products and services in accordance with regulatory or industry standards. Our ability to compete effectively will depend in part on our ability to influence and respond to emerging industry governmental standards in a timely and cost-effective manner. If we are unable to influence these or other standards or respond to these or other standards effectively, our growth and development of various products and services could be delayed or limited.

Our business is subject to complex and rapidly evolving U.S. and international laws and regulations regarding privacy and data protection. Many of these laws and regulations are subject to change and uncertain interpretation and could result in claims, changes to our business practices, penalties, increased cost of operations, or declines in user growth or engagement, or otherwise harm our business.

Companies are under increased regulatory scrutiny relating to data privacy and security. Authorities around the world are considering a number of legislative and regulatory proposals concerning data protection, including measures to ensure that encryption of users' data does not hinder law enforcement agencies' access to that data. In addition, the interpretation and application of consumer and data protection laws in the U.S., Europe and elsewhere are often uncertain and in flux. It is possible that these laws may be interpreted and applied in a manner that is inconsistent with our data practices. These legislative and regulatory proposals, if adopted, and such interpretations could, in addition to the possibility of fines, result in an order requiring that we change our data practices, which could have an adverse effect on our business and results of operations. Complying with these various laws could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business.

Recent legal developments in Europe have created compliance uncertainty regarding certain transfers of personal data from Europe to the United States. For example, the General Data Protection Regulation (GDPR), became effective in the European Union (EU) beginning on May 25, 2018, and applies to all of our activities conducted from an establishment in the EU or related to products and services that we offer to EU users or customers, or the monitoring of their behavior in the EU. The GDPR subjects us to a range of new compliance obligations.

Ensuring compliance with the GDPR is an ongoing commitment which involves substantial costs, and it is possible that despite our efforts, governmental authorities or third parties will assert that our business practices fail to comply. We have been and may in the future be, subject to lawsuits alleging violations of the GDPR. If our operations are found to be in violation of the GDPR's requirements, we may be required to change our business practices and/or be subject to significant civil penalties, business disruption, and reputational harm, any of which could have a material adverse effect on our business. In particular, serious breaches of the GDPR can result in administrative fines of up to the higher of 4% of annual worldwide revenues or €20 million. Fines of up to the higher of 2% of annual worldwide revenues or €10 million can be levied for other specified violations.

In addition, the European Commission in July 2016 and the Swiss Government in January 2017 approved the EU-U.S. and the Swiss-U.S. Privacy Shield frameworks, respectively, which are designed to allow U.S. companies that self-certify to the U.S. Department of Commerce and publicly commit to comply with the Privacy Shield requirements to freely import personal data from the EU and Switzerland. However, these frameworks face a number of legal challenges and their validity remains subject to legal, regulatory and political developments in both Europe and the U.S. This has resulted in some uncertainty, and compliance obligations could cause us to incur costs or require us to change our business practices in a manner adverse to our business.

Breaches in security, whether cyber or physical, and other disruptions and/or our inability to prevent or respond to such breaches, could diminish our ability to generate revenues or contain costs, compromise our assets, and negatively impact our business in other ways.

We face certain security threats, including threats to our information technology infrastructure, attempts to gain access to our proprietary or classified information, and threats to physical and cyber security. Our information technology networks and related systems are critical to the operation of our business and essential to our ability to successfully perform day-to-day operations. The risks of a security breach, cyber-attack, cyber intrusion, or disruption, particularly through actions taken by computer hackers, foreign governments and cyber terrorists, have increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. Although we have acquired and developed systems and processes designed to protect our proprietary and/or classified information, they may not be sufficient and the failure to prevent these types of events could disrupt our operations, require significant management attention and resources, and could negatively impact our reputation among our customers and the public, which could have a negative impact on our financial condition, and weaken our results of operations and liquidity.

Our operations in Asia are subject to unique risks and uncertainties, including tariffs and trade restrictions.

Our operating facility in Asia, in addition to our investment in Singapore eDevelopment (SED) presents risks including, but not limited to, changes in share price of investments, changes in local regulatory requirements, changes in labor laws, local wage laws, environmental regulations, taxes and operating licenses, compliance with U.S. regulatory requirements, including the Foreign Corrupt Practices Act, uncertainties as to application and interpretation of local laws and enforcement of contract and intellectual property rights, currency restrictions, currency exchange controls, fluctuations of currency, and currency revaluations, eminent domain claims, civil unrest, power outages, water shortages, labor shortages, labor disputes, increase in labor costs, rapid changes in government, economic and political policies, political or civil unrest, acts of terrorism, or the threat of boycotts, other civil disturbances and the possible impact of the imposition of tariffs as a result of the tariff dispute between the U.S. and China as well as any retaliating trade policies or restrictions. Any such disruptions could depress our earnings and have other material adverse effects on our business, financial condition and results of operations.

We are subject to foreign currency fluctuations.

Our Asia Pacific subsidiaries maintain their books Hong Kong dollars and the translation of the subsidiary financial statements into U.S. dollars for our consolidated financial statements could have an adverse effect on our consolidated financial results due to changes in Hong Kong dollar value relative to the U.S. dollar. Accordingly, currency fluctuations could have a material adverse effect on our business, financial condition and results of operations by increasing our expenses and reducing our income. Finally, we maintain certain domestic U.S. cash balances denominated in foreign currencies, and the U.S. dollar equivalent of these balances fluctuates with changes in the foreign exchange rates between these currencies and the U.S. dollar.

If we do not successfully expand our sales force, we may be unable to increase our revenues.

We must expand the size of our marketing activities and sales force to increase revenues. We continue to evaluate various methods of expanding our marketing activities, including the use of outside marketing consultants and representatives and expanding our in-house marketing capabilities. If we are unable to hire or retain qualified sales personnel or if newly hired personnel fail to develop the necessary skills to be productive, or if they reach productivity more slowly than anticipated, our ability to increase our revenues and grow could be compromised. The challenge of attracting, training and retaining qualified candidates may make it difficult to meet our sales growth targets. Further, we may not generate sufficient sales to offset the increased expense resulting from expanding our sales force or we may be unable to manage a larger sales force.

If we fail to retain certain of our key personnel and attract and retain additional qualified personnel, we might not be able to remain competitive, continue to expand our technology or pursue growth.

Our future success depends upon the continued service of certain of our executive officers and other key sales and research personnel who possess longstanding industry relationships and technical knowledge of our products and operations. Although we believe that our relationship with these individuals is positive, there can be no assurance that the services of these individuals will continue to be available to us in the future. There can be no assurance that these persons will agree to continue to be employed by us after the expiration dates of their current contracts.

We may be unable to retain experts and legal counsel on a favorable basis to represent us in our patent infringement litigation.

The success of our pending legal proceedings and future legal proceedings depends in part upon our ability to retain experts and legal counsel on a favorable basis to represent us in such litigation. The retention of such experts and legal counsel is expensive and we may not be able to retain such experts and legal counsel on favorable economic terms. Therefore, an inability to retain experts and legal counsel to represent us in our litigation could have a material adverse effect on our business.

Future growth in our business could make it difficult to manage our resources.

Future business expansion could place a significant strain on our management, administrative and financial resources. Significant growth in our business may require us to implement additional operating, product development and financial controls, improve coordination among marketing, product development and finance functions, increase capital expenditures and hire additional personnel. There can be no assurance that we will be able to successfully manage any substantial expansion of our business, including attracting and retaining qualified personnel. Any failure to properly manage our future growth could negatively impact our business and operating results.

We have identified weaknesses in our internal control over financial reporting structure; any material weaknesses may cause errors in our financial statements that could require restatements of our financial statements and investors may lose confidence in our reported financial information, which could lead to a decline in our stock price.

Section 404 of the Sarbanes-Oxley Act of 2002 requires us to evaluate the effectiveness of our internal control over financial reporting as of the end of each year, and to include a management report assessing the effectiveness of our internal control over financial reporting in each Annual Report on Form 10-K. We have had previously identified weaknesses in our internal control over financial reporting following management's annual assessment of internal controls over financial reporting and, as a result of that assessment, management had concluded our controls associated with identifying and accounting for complex and non-routine transactions in accordance with GAAP were ineffective and that we did not maintain a sufficient complement of qualified accounting personnel and controls associated with segregation of duties, and that the foregoing represented material weakness in our internal control over financial reporting.

We have a large number of authorized but unissued shares of common stock, which our management may issue without further stockholder approval, thereby causing dilution of your holdings of our common stock.

As of December 31, 2018, we had approximately 183 million authorized but unissued shares of our common stock. Our management continues to have broad discretion to issue shares of our common stock in a range of transactions, including capital-raising transactions, mergers, acquisitions, for anti-takeover purposes, and in other transactions, without obtaining stockholder approval, unless stockholder approval is required for a particular transaction under the rules of the NYSE American LLC Exchange ("NYSE American"), state and federal law, or other applicable laws. If our board of directors determines to issue additional shares of our common stock from the large pool of authorized but unissued shares for any purpose in the future with or without obtaining stockholder approval, your ownership position would be diluted without your ability to vote on such transaction.

The exercise of our outstanding options and warrants, vesting of restricted stock awards and conversion of debt securities may depress our stock price.

As of December 31, 2018, there were 2,212,773 of common stock share equivalents potentially issuable under options and warrants agreements that could potentially dilute basic earnings per share in the future. The prospect of the issuance of shares of common stock upon the conversion, exercise or vesting of these securities in the public market, or the perception that future sales of the common stock underlying these securities could occur, could have the effect of lowering the market price of our common stock below current levels and make it more difficult for us and our stockholders to sell our equity securities in the future. Sales or the availability for sale of shares of common stock by stockholders, including upon conversion, exercise or vesting of any outstanding derivative or restricted securities, could cause the market price of our common stock to decline and could impair our ability to raise capital through an offering of additional equity securities.

We do not intend to pay cash dividends.

We do not intend to declare or pay cash dividends on our common stock in the foreseeable future. We anticipate that we will retain any earnings and other cash resources for investment in our business. The payment of dividends on our common stock is subject to the discretion of our board of directors and will depend on our operations, financial position, financial requirements, general business conditions, restrictions imposed by financing arrangements, if any, legal restrictions on the payment of dividends and other factors that our board of directors deems relevant.

We may seek to internally develop additional new inventions and intellectual property, which would take time and would be costly. Moreover, the failure to obtain or maintain intellectual property rights for such inventions would lead to the loss of our investments in such activities.

Members of our management team have significant experience as inventors. As such, part of our business may include the internal development of new inventions and intellectual property that we would seek to monetize. However, this aspect of our business would likely require significant capital and would take time to achieve. Such activities could also distract our management team from our present business initiatives, which could have a material and adverse effect on our business. There is also the risk that these initiatives would not yield any viable new inventions or technology, which would lead to a loss our investments in time and resources in such activities.

In addition, even if we are able to internally develop new inventions, in order for those inventions to be viable and to compete effectively, we would need to develop and maintain, and we would heavily rely on, a proprietary position with respect to such inventions and intellectual property. However, there are significant risks associated with any such intellectual property we may develop principally including the following:

- patent applications we may file may not result in issued patents or may take longer than we expect to result in issued patents;
- we may be subject to interference proceedings;
- we may be subject to opposition proceedings in the U.S. or foreign countries;
- any patents that are issued to us may not provide meaningful protection;
- we may not be able to develop additional proprietary technologies that are patentable;
- other companies may challenge patents issued to us;
- other companies may design around technologies we have developed; and
- enforcement of our patents may be complex, uncertain and very expensive.

We cannot be certain that patents will be issued as a result of any future applications, or that any of our patents, once issued, will provide us with adequate protection from competing products. For example, issued patents may be circumvented or challenged, declared invalid or unenforceable, or narrowed in scope. In addition, since publication of discoveries in scientific or patent literature often lags behind actual discoveries, we cannot be certain that it will be the first to make our additional new inventions or to file patent applications covering those inventions. It is also possible that others may have or may obtain issued patents that could prevent us from commercializing our products or require us to obtain licenses requiring the payment of significant fees or royalties in order to enable us to conduct our business. As to those patents that we may license or otherwise monetize, our rights will depend on maintaining our obligations to the licensor under the applicable license agreement, and we may be unable to do so. Our failure to obtain or maintain intellectual property rights for our inventions would lead to the loss of our investments in such activities, which would have a material and adverse effect on our business.

Moreover, patent application delays could cause delays in recognizing revenue from our internally generated patents and could cause us to miss opportunities to license patents before other competing technologies are developed or introduced into the market.

Changes in the laws and regulations to which we are subject may increase our costs.

We are subject to numerous laws and regulations, including, but not limited to, environmental and health and welfare benefit regulations, as well as those associated with being a public company. These rules and regulations may be changed by local, state, provincial, national or foreign governments or agencies. Such changes may result in significant increases in our compliance costs. Compliance with changes in rules and regulations could require increases to our workforce, and could result in increased costs for services, compensation and benefits, and investment in new or upgraded equipment.

Declines in general economic conditions or acts of war and terrorism may adversely impact our business.

Demand for printing services is typically correlated with general economic conditions. The prolonged decline in United States economic conditions associated with the great recession adversely impacted our business and results of operations and may do so again. The overall business climate of our industry may also be impacted by domestic and foreign wars or acts of terrorism, which events may have sudden and unpredictable adverse impacts on demand for our products and services.

Our acquisitions of patent assets may be time consuming, complex and costly, which could adversely affect our operating results.

Acquisitions of patent or other intellectual property assets, which may continue to be part of our business plan, are often-times consuming, complex and costly to consummate. We may utilize many different transaction structures in our acquisitions and the terms of such acquisition agreements tend to be heavily negotiated. As a result, we would expect to incur significant operating expenses and would likely be required to raise capital during the negotiations even if the acquisition were ultimately not consummated. Even if we were able to acquire particular patent assets, there is no guarantee that we would generate sufficient revenue related to those patent assets to offset the acquisition costs. While we would seek to conduct confirmatory due diligence on any patent assets we consider for acquisition, we may acquire patent assets from a seller who does not have proper title to those assets. In those cases, we could be required to spend significant resources to defend our interest in the patent assets and, if we were not successful, our acquisition may be invalid, in which case we could lose part or all of our investment in the assets.

In addition, we may acquire patents and technologies that are in the early stages of adoption in the commercial, industrial and consumer markets. Demand for some of these technologies will likely be untested and may be subject to fluctuation based upon the rate at which licensees will adopt these patents and technologies in their products and services. As a result, there can be no assurance as to whether technologies we acquire or develop will have value that we can monetize.

In certain acquisitions of patent assets, we may seek to defer payment or finance a portion of the acquisition price. This approach may put us at a competitive disadvantage and could result in harm to our business.

We have limited capital and may seek to negotiate acquisitions of patent or other intellectual property assets where we can defer payments or finance a portion of the acquisition price. These types of debt financing or deferred payment arrangements may not be as attractive to sellers of patent assets as receiving the full purchase price for those assets in cash at the closing of the acquisition. Moreover, funding by third parties for patent acquisitions may not be available to us in the future. As a result, we might not compete effectively against other companies in the market for acquiring patent assets, many of whom have greater cash resources than we have.

We may not be able to capitalize on potential market opportunities related to our licensing strategy or patent portfolio for our core business.

In order to capitalize on our core business patent portfolio, we intend to enter into licensing relationships. However, there can be no assurance that we will be able to capitalize on our patent portfolio or any potential market opportunity in the foreseeable future. Our inability to generate licensing revenues associated with potential market opportunities could result from a number of factors, including, but not limited to:

- failure to enter into licensing relationships on commercially acceptable terms, or at all; and
- challenges from third parties as to the validity of our patents underlying licensing opportunities.

Weak global economic conditions may cause infringing parties to delay entering into licensing agreements, which could prolong our litigation and adversely affect our financial condition and operating results.

Our business plan may be affected by worldwide economic conditions, and the United States and world economies have recently experienced and, in some areas, continue to experience prolonged weak economic conditions. Uncertainty about global economic conditions poses a risk as businesses may postpone spending in response to tighter credit, negative financial news and declines in income or asset values. This response could have a material negative effect on the willingness of parties infringing on our assets to enter into licensing or other revenue generating agreements voluntarily. Entering into such agreements is critical to our business plan, and failure to do so could cause material harm to our business.

If we fail to comply with the continued listing standards of the NYSE American LLC Exchange, it may result in a delisting of our common stock from the exchange.

Our common stock is currently listed for trading on the NYSE American LLC Exchange (“NYSE American”), and the continued listing of our common stock on the NYSE American is subject to our compliance with a number of listing standards.

If our common stock were no longer listed on the NYSE American, investors might only be able to trade our shares on the OTC Bulletin Board ® or in the Pink Sheets ® (a quotation medium operated by Pink Sheets LLC). This would impair the liquidity of our common stock not only in the number of shares that could be bought and sold at a given price, which might be depressed by the relative illiquidity, but also through delays in the timing of transactions and reduction in media coverage.

If we are delisted from the NYSE American, your ability to sell your shares of our common stock may be limited by the penny stock restrictions, which could further limit the marketability of your shares.

If our common stock is delisted from the NYSE American, it could come within the definition of a “penny stock” as defined in the Exchange Act and could be covered by Rule 15g-9 of the Exchange Act. That rule imposes additional sales practice requirements on broker-dealers who sell securities to persons other than established customers and accredited investors. For transactions covered by Rule 15g-9, the broker-dealer must make a special suitability determination for the purchaser and receive the purchaser’s written agreement to the transaction prior to the sale. Consequently, Rule 15g-9, if it were to become applicable, would affect the ability or willingness of broker-dealers to sell our securities, and accordingly would affect the ability of stockholders to sell their securities in the public market. These additional procedures could also limit our ability to raise additional capital in the future.

If our common stock is not listed on a national securities exchange, compliance with applicable state securities laws may be required for certain offers, transfers and sales of the shares of our common stock.

Because our common stock is listed on the NYSE American Exchange, we are not required to register or qualify in any state the offer, transfer or sale of the common stock. If our common stock is delisted from the NYSE American Exchange and is not eligible to be listed on another national securities exchange, sales of stock pursuant to the exercise of warrants and transfers of the shares of our common stock sold by us in private placements to U.S. holders may not be exempt from state securities laws. In such event, it will be the responsibility of us in the case of warrant exercises or the holder of privately placed shares to register or qualify the shares for any offer, transfer or sale in the United States or to determine that any such offer, transfer or sale is exempt under applicable state securities laws.

There is no public market for the warrants we issued in the Fall of 2015.

There is no established public trading market for the warrants we issued in the Fall of 2015, and we do not expect a market to develop. In addition, we do not intend to apply for listing of those warrants on any national securities exchange or other nationally recognized trading system. Without an active market, the liquidity of those warrants will be limited.

ITEM 2 - PROPERTIES

Our corporate group and digital division together occupy approximately 5,700 square feet of commercial office space located at 200 Canal View Boulevard, Rochester, New York under a lease that expires in December 2020, at a rental rate of approximately \$6,100 per month. Our Plastics division leases approximately 15,000 square feet under a lease that expires January 31, 2024 for approximately \$19,422 per month. Our DSS Asia division leases commercial office space in Hong Kong under a lease that expires November 30, 2020 for approximately \$3,382 per month. In addition, the Company owns a 40,000 square foot packaging and printing plant in Victor, New York, a suburb of Rochester, New York. We believe that our facilities are adequate for our current operations.

ITEM 3 - LEGAL PROCEEDINGS

On November 26, 2013, DSSTM filed suit against Apple, Inc. ("Apple") in the United States District Court for the Eastern District of Texas, for patent infringement (the "Apple Litigation"). The complaint alleges infringement by Apple of DSSTM's patents that relate to systems and methods of using low power wireless peripheral devices. DSSTM is seeking a judgment for infringement, injunctive relief, and compensatory damages from Apple. On October 28, 2014, the case was stayed by the District Court pending a determination of Apple's motion to transfer the case to the Northern District of California. On November 7, 2014, Apple's motion to transfer the case to the Northern District of California was granted. On December 30, 2014, Apple filed two Inter Partes Review ("IPR") petitions with the Patent Trial and Appeal Board ("PTAB") for review of the patents at issue in the case. The PTAB instituted the IPRs on June 25, 2015. The California District Court then stayed the case pending the outcome of those IPR proceedings. Oral arguments of the IPRs took place on March 15, 2016, and on June 17, 2016, PTAB ruled in favor of Apple on both IPR petitions. DSSTM then filed an appeal with the U.S. Court of Appeals for the Federal Circuit (the "Federal Circuit") seeking reversal of the PTAB decisions. Oral arguments for the appeal were held on August 9, 2017. On March 23, 2018, the Federal Circuit reversed the PTAB, finding that the PTAB erred when it found the claims of U.S. Patent No. 6,128,290 to be unpatentable. The Federal Circuit affirmed its decision on July 12, 2018, when it denied Apple's petition for panel rehearing of the Federal Circuit's Opinion and Judgment issued on March 23, 2018. On July 27, 2018, the District Court judge lifted the Stay resuming the litigation. The patent assets underlying this matter had no carrying value as of the date of the PTAB decision and therefore, there were no impairment considerations because of that earlier PTAB decision.

On February 16, 2015, DSS Technology Management filed suit in the United States District Court, Eastern District of Texas, against defendants Intel Corporation, Dell, Inc., GameStop Corp., Conn's Inc., Conn Appliances, Inc., NEC Corporation of America, Wal-Mart Stores, Inc., Wal-Mart Stores Texas, LLC, and AT&T, Inc. The complaint alleges patent infringement and seeks judgment for infringement of two of DSSTM's patents, injunctive relief and money damages. On December 9, 2015, Intel filed IPR petitions with PTAB for review of the patents at issue in the case. Intel's IPRs were instituted by PTAB on June 8, 2016. On June 1, 2017, the PTAB ruled in favor of Intel for all the challenged claims. On July 28, 2017, DSS Technology Management filed a notice of appeal of the PTAB's decision relating to U.S. Patent 6,784,552 with the Federal Circuit. On January 8, 2019, DSS Technology Management entered into a confidential settlement agreement with Intel Corporation, Dell Inc., GameStop Corp., Conn's, Inc., Conn Appliances, Inc., Wal-Mart Stores, Inc., Wal-Mart Stores Texas, LLC and AT&T Mobility LLC (collectively, the "Defendants"). The Federal Circuit Appeal involving DSS Technology Management and Intel was dismissed on January 16, 2019, and the District Court case against the Defendants was dismissed, as to all the Defendants, on February 5, 2019.

On July 16, 2015, DSS Technology Management filed three separate lawsuits in the United States District Court for the Eastern District of Texas alleging infringement of certain of its semiconductor patents. The defendants are SK Hynix et al., Samsung Electronics et al., and Qualcomm Incorporated. Each respective complaint alleges patent infringement and seeks judgment for infringement, injunctive relief and money damages. On November 12, 2015, SK Hynix filed an IPR petition with PTAB for review of the patent at issue in their case. SK Hynix's IPR was instituted by the PTAB on May 11, 2016. On August 16, 2016, DSS Technology Management and SK Hynix entered into a confidential settlement agreement ending the litigation between them. The pending SK Hynix IPR was then terminated by mutual agreement of the parties on August 31, 2016. On March 18, 2016, Samsung also filed an IPR petition, which was instituted by the PTAB. On September 20, 2017, PTAB ruled in favor of Samsung for all the challenged claims relating to U.S. Patent 6,784,552. DSS Technology Management then appealed this PTAB ruling to the Federal Circuit on November 17, 2017. The Federal Circuit joined this appeal with the Intel appeal effective on December 7, 2017. Qualcomm filed its IPR proceeding on July 1, 2016, which was then later joined with Intel's IPRs in August 2016 by PTAB. On June 1, 2017, the PTAB ruled in favor of Intel/Qualcomm for all the challenged claims. On July 28, 2017, DSS Technology Management filed a notice of appeal of the PTAB's decision relating to U.S. Patent 6,784,552 with the Federal Circuit. A confidential patent license agreement was executed by DSS Technology Management on November 14, 2018, covering Samsung and Qualcomm. On December 12, 2018, DSS Technology Management and Samsung entered into a confidential release. On December 27, 2018, DSS Technology Management and Qualcomm entered into a confidential settlement agreement. The DSS Technology Management - Samsung District Court case was dismissed on December 17, 2018. The DSS Technology Management - Samsung Federal Circuit Appeal was dismissed on January 2, 2019. The Federal Circuit Appeal involving DSS Technology Management and Qualcomm was dismissed on January 16, 2019. The DSS Technology Management - Qualcomm District Court case was dismissed on January 16, 2019. As a result, all of DSS Technology Management's litigation matters originally filed in the District Court for the Eastern District of Texas have been resolved and are now dismissed.

On April 13, 2017, Document Security Systems, Inc. ("DSS") filed a patent infringement lawsuit against Seoul Semiconductor Co., Ltd. and Seoul Semiconductor, Inc. (collectively, "Seoul Semiconductor") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of DSS's Light-Emitting Diode ("LED") patents. DSS is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 7, 2017, DSS refiled its patent infringement complaint against Seoul Semiconductor in the United States District Court for the Central District of California, Southern Division. The case is currently pending. On December 3, 2017, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 6,949,771. On December 21, 2017, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 7,256,486. On January 25, 2018, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 7,524,087. Institution has been granted for each IPR. These challenged patents are the patents that are the subject matter of the infringement lawsuit which is still pending as of the date of this Report.

On April 13, 2017, the Company filed a patent infringement lawsuit against Everlight Electronics Co., Ltd. and Everlight Americas, Inc. (collectively, "Everlight") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of the Company's LED patents. The Company is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 8, 2017, the Company refiled its patent infringement complaint against Everlight in the United States District Court for the Central District of California. The case is currently pending as of the date of this Report. On June 8, 2018, Everlight filed IPR petitions challenging the validity of claims under U.S. Patent Nos. 7256486 and 7524087. On June 12, 2018, Everlight filed an IPR petition challenging the validity of claims under U.S. Patent No. 6949771, and on June 15, 2018, filed an IPR petition challenging the validity of claims under U.S. Patent No 7919787. These challenged patents are the patents that are the subject matter of the infringement lawsuit. On January 18, 2019, the Company and Everlight entered into a confidential settlement agreement resolving the litigation.

On April 13, 2017, DSS filed a patent infringement lawsuit against Cree, Inc. ("Cree") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of DSS's LED patents. DSS is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 8, 2017, DSS refiled its patent infringement complaint against Cree in the United States District Court for the Central District of California, and thereafter filed a first amended complaint for patent infringement against Cree in that same court on July 14, 2017. On June 6, 2018, Cree filed an IPR petition challenging the validity of claims under U.S. Patent No. 7256486. On June 7, 2018, Cree filed IPR petitions challenging the validity of claims under U.S. Patent Nos. 7524087 and 6949771. The 7256486 IPR filing has been terminated and joined with one filed by Seoul Semiconductor relating to the same patent. Cree has also filed for joinder with Nichia's IPR relating to 7256486. Institution has been denied for each of the other IPRs filed by Cree. These challenged patents are the patents that are the subject matter of the infringement lawsuit. The case is currently pending as of the date of this Report.

On July 13, 2017, DSS filed a patent infringement lawsuit against Osram GMBH, Osram OPTO Semiconductors GMBH & Co., and Osram Sylvania Inc. (collectively, "Osram") in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. DSS is seeking a judgment for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On February 21, 2018, DSS and Osram entered into a confidential settlement agreement ending the litigation between them. On March 14, 2018, the District Court case between the Company and Osram was dismissed.

On August 15, 2017, DSS filed a patent infringement lawsuit against Lite-On, Inc., and Lite-On Technology Corporation in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. DSS is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. The case is currently pending as of the date of this Report.

On December 7, 2017, DSS filed a patent infringement lawsuit against Nichia Corporation and Nichia America Corporation in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. The Company is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On May 10, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7919787. On May 11, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7652297. On May 25, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7524087. On May 29, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 6949771. On May 30, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7256486. The 6949771 IPR was denied institution, but the remaining IPRs were instituted by the PTAB. On December 10, 2018, Nichia refiled IPRs relating to 6949771, which are pending as of the date of this report. These challenged patents are the patents that are the subject matter of the infringement lawsuit. The case is currently pending as of the date of this Report.

In addition to the foregoing, we may become subject to other legal proceedings that arise in the ordinary course of business and have not been finally adjudicated. Adverse decisions in any of the foregoing may have a material adverse effect on our results of operations, cash flows or our financial condition. The Company accrues for potential litigation losses when a loss is probable and estimable.

ITEM 4 - MINE SAFETY DISCLOSURES

Not applicable.

Part II

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

Our common stock is listed on the NYSE American LLC Exchange, where it trades under the symbol "DSS"

The last reported sales price of our common stock on the NYSE American on March 1, 2019 was \$1.01.

Issued and Outstanding

Our certificate of incorporation authorizes 200,000,000 shares of common stock, par value \$0.02. As of March 1, 2019, we had 17,425,858 shares of common stock issued and outstanding.

As of December 31, 2018, securities issued and securities available for future issuance under our 2013 Employee, Director and Consultant Equity Incentive Plan (the "2013 Plan") is as follows:

<u>Plan Category</u>	<u>Restricted stock to be issued upon vesting</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance (under equity compensation Plans (excluding securities reflected in column (a & b))</u>
(a)	(b)	(c)	(d)	
Equity compensation plans approved by security holders 2013 Employee, Director and Consultant Equity Incentive Plan	-	782,655	\$ 6.66	262,511
Equity compensation plans not approved by security holders Contractual warrant grants for services	-	125,000	\$ 1.00	-
Total	-	907,655	\$ 5.88	262,511

The warrants listed in the table above were issued to third party service providers in partial or full payment for services rendered and in conjunction with third party funding agreements.

Recent Issuances of Unregistered Securities

On December 17, 2018, the Company sold 612,245 shares of its common stock to an accredited investor, at a price of \$0.98 per share. The issuance was deemed to be exempt from the registration requirements of the Securities Act of 1933 by virtue of Section 4(a)(2) thereof, as a transaction by an issuer not involving a public offering. All other Company sales of unregistered securities in 2018 have been previously reported in a quarterly report on Form 10-Q or in a current report on Form 8-K

Stockholders

As of March 1, 2019, we had 251 record holders of our common stock. This number does not include the number of persons whose shares are in nominee or in "street name" accounts through brokers.

Dividends

We did not pay dividends during 2018 or 2017. We anticipate that we will retain any earnings and other cash resources for investment in our business. The payment of dividends on our common stock is subject to the discretion of our board of directors and will depend on our operations, financial position, financial requirements, general business conditions, restrictions imposed by financing arrangements, if any, legal restrictions on the payment of dividends and other factors that our board of directors deems relevant.

Shares Repurchased by the Registrant

We did not purchase or repurchase any of our securities in the fiscal year ended December 31, 2018, including the fourth quarter.

ITEM 6 - SELECTED FINANCIAL DATA

Not applicable.

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

Cautionary Statement Regarding Forward-Looking Statements

The SEC encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions.

Forward-looking statements that may appear in this Annual Report, including without limitation, statements related to the Company's plans, strategies, objectives, expectations, intentions and adequacy of resources, are made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act and contain the words "believes," "anticipates," "expects," "plans," "intends" and similar words and phrases. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from the results projected in any forward-looking statement. In addition to the factors specifically noted in the forward-looking statements, other important factors, risks and uncertainties that could result in those differences include, but are not limited to, those discussed under Part I, Item 1A "Risk Factors" in this Annual Report. The forward-looking statements are made as of the date of this Annual Report, and we assume no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements. Investors should consult all of the information set forth in this Annual Report and the other information set forth from time to time in our reports filed with the Securities and Exchange Commission pursuant to the Securities Exchange Act of 1934, including our reports on Forms 10-Q and 8-K.

The following discussion and analysis provides information that our management believes is relevant to an assessment and understanding of our results of operations and financial condition. The discussion should be read in conjunction with the financial statements and footnotes included in Item 8 of this Annual Report.

Overview

Document Security Systems, Inc. (referred to in this report as "Document Security Systems", "DSS", "we", "us", "our" or "Company") was formed in New York in 1984. We specialize in fraud and counterfeit protection for all forms of printed documents and digital information. The Company holds numerous patents for optical deterrent technologies that provide protection of printed information from unauthorized scanning and copying. We operate two production facilities, consisting of a combined packaging and security printing facility, and a plastic card facility where we produce secure and non-secure documents for our customers. We license our anti-counterfeiting technologies to printers and brand-owners. In addition, we have a digital division which provides cloud computing services for our customers, including disaster recovery, back-up and data security services.

Prior to 2006, our primary revenue source in our document security division was derived from the licensing of our technology. In 2006, we began a series of acquisitions designed to expand our ability to produce products for end-user customers. In 2006, we acquired Plastic Printing Professionals, Inc. ("P3"), a privately held plastic cards manufacturer located in the San Francisco, California area. P3 is also referred to herein as the "DSS Plastics Group". In 2008, we acquired DPI of Rochester, LLC, a privately held commercial printer located in Rochester, New York, referred to herein as "Secuprint" or "DSS Printing Group". In 2010, we acquired Premier Packaging Corporation, a privately held packaging company located in Victor, New York. Premier Packaging Corporation is also referred to herein as "Premier Packaging" or the "DSS Packaging Group." In May 2011, we acquired ExtraDev, Inc., a privately held information technology and cloud computing company located in Rochester, New York. In 2016, ExtraDev, Inc. changed its name to DSS Digital Inc., and is also referred to herein as the "DSS Digital Group".

On July 1, 2013, we merged with DSS Technology Management, Inc. (formerly known as Lexington Technology Group, Inc.), a private intellectual property monetization company. DSS Technology Management, Inc. is also referred to in this report as "DSS Technology Management" or "DSSTM". DSS Technology Management is focused on extracting the economic benefits of intellectual property assets through acquiring or internally developing patents or other intellectual property assets (or interests therein) and then monetizing such assets through a variety of value enhancing initiatives. In July 2013, we completed the merger with Lexington Technology Group which was accounted for as a business combination in accordance with FASB ASC 805 Business Combinations.

In January 2018, the Company commenced international operations with its wholly owned subsidiary, DSS Asia Limited, in its office in Hong Kong. In December 2018, this division acquired Guangzhou Hotapps Technology Ltd, a Chinese company that enhances the Company's ability to do business in China. Guangzhou Hotapps Technology Ltd, did not have revenue but has two employees and a license to do business in China.

We do business in five operating segments: packaging and printing; plastics; digital; technology management, which includes our IP monetization business; and international; which includes our DSS Asia Ltd subsidiary.

RESULTS OF OPERATIONS FOR THE FISCAL YEARS ENDED DECEMBER 31, 2018 AND 2017

Revenue

	Year Ended December 31, 2018	Year Ended December 31, 2017	% change
Revenue			
Printed products	\$ 16,940,000	\$ 17,026,000	-1%
Technology sales, services and licensing	1,575,000	1,636,000	-4%
<i>Total revenue</i>	<i>\$ 18,515,000</i>	<i>\$ 18,662,000</i>	<i>-1%</i>

Revenue - For the year ended December 31, 2018, revenue decreased 1% to approximately \$18.5 million as compared to revenues for the year ended December 31, 2017. Printed products sales, which include sales of packaging, printing and plastic products, decreased 1% in 2018 as compared to 2017, driven by an increase in the sales of printing and packaging products of 3% offset by a decrease in sales of plastic card products of 11%. The Company's technology sales, services and licensing revenues decreased 4% in 2018, as compared to 2017, because of decreases in licensing royalties and recurring IT services, which more than offsets a \$260,000 increase in sales of digital authentication products.

Costs and Expenses

	Year Ended December 31, 2018	Year Ended December 31, 2017	% change
Costs and expenses			
Costs of goods sold, exclusive of depreciation and amortization	\$ 11,853,000	\$ 11,009,000	8%
Sales, general and administrative compensation	3,615,000	3,758,000	-4%
Depreciation and amortization	1,282,000	1,414,000	-9%
Professional fees	1,073,000	613,000	75%
Stock based compensation	132,000	215,000	-39%
Sales and marketing	559,000	401,000	39%
Rent and utilities	655,000	634,000	3%
Other operating expenses	909,000	738,000	23%
Research and development	146,000	106,000	38%
<i>Total costs and expenses</i>	<i>\$ 20,224,000</i>	<i>\$ 18,888,000</i>	<i>7%</i>

Costs of revenue sold, exclusive of depreciation and amortization includes all direct cost of the Company's printed products, including its packaging, printing and plastic ID card sales, materials, direct labor, transportation and manufacturing facility costs. In addition, this category includes all direct costs associated with the Company's technology sales, services and licensing including hardware and software that are resold, third-party fees, and fees paid to inventors or others as a result of technology licenses or settlements, if any. Costs of revenue increased 8% in 2018 as compared to 2017, primarily due to an increase in paperboard costs and outside service costs at our packaging division.

Sales, general and administrative compensation costs, decreased 4% in 2018 as compared to 2017, primarily due to the impact of an increase of approximately \$289,000 in compensation costs sharing amounts recognized by the Company in 2018 as compared to 2017. The cost sharing amounts relate to an intellectual property monetization program management arrangement the Company entered into in November of 2016, for which the Company received funds to offset certain of its compensation expenses associated with the monetization program and is recognizing those funds received from a third party over the estimated service period of the monetization program.

Depreciation and amortization include the depreciation of machinery and equipment used for production, depreciation of office equipment and building and leasehold improvements, amortization of software, and amortization of acquired intangible assets such as customer lists, trademarks, non-competition agreements and patents, and internally developed patent assets. Depreciation and amortization expense decreased by 9% during 2018, as compared to 2017, primarily due to the write-off of the semiconductor patents during 2018, in conjunction with the gain on extinguishment of liabilities described below.

Professional fees increased 75% in 2018 as compared to 2017, primarily due to an increase in legal fees associated with the Company's intellectual property litigation matters, and an increase in consulting costs incurred at the Company's DSS International division for its expansion into the Asia Pacific market.

Stock based compensation includes expense charges for all stock-based awards to employees, directors and consultants. Such awards include option grants, warrant grants, and restricted stock awards. Stock-based compensation costs decreased 39% in 2018 as compared to 2017 due to a general decrease in the number and value of equity compensation awards granted by the Company.

Sales and marketing costs, which includes internet and trade publication advertising, travel and entertainment costs, sales-broker commissions, and trade show participation expenses, increased 39% during 2018 as compared to 2017, primarily due to increased international travel costs associated with the Company's expansion into the Asia Pacific market.

Rent and utilities increased 3% during 2018 as compared to 2017 due to increases in rental costs for temporary warehousing space at the Company's packaging division.

Other operating expenses consist primarily of equipment maintenance and repairs, office supplies, IT support, bad debt expense and insurance costs. Other operating expenses increased 23% in 2018 compared to 2017 which primarily reflected increases in office, equipment rental and maintenance costs in 2018.

Research and development costs consist primarily of third-party research costs and consulting costs. During the year ended December 31, 2018, Research and development costs increased 38% as compared to the same period in 2017 primarily due to development costs related to the development of proprietary blockchain solutions for the Company's AuthentiGuard product line.

Other Income and Expenses

	Year Ended December 31, 2018	Year Ended December 31, 2017	% change
Other income and expense			
Interest income	\$ 9,000	\$ 4,000	125%
Interest expense	(145,000)	(223,000)	-35%
Amortization of deferred financing costs and debt discount	(47,000)	(154,000)	-69%
Impairment of investment	(160,000)	-	100%
Gain on extinguishment of liabilities, net	3,533,000	-	100%
<i>Total other income and expense</i>	<i>\$ 3,190,000</i>	<i>\$ (373,000)</i>	<i>955%</i>

The Company recognized interest income on the money market account in the amount of \$9,000 during the year ended December 31, 2018.

Interest expense decreased 35%, during the year ended December 31, 2018, as compared to the same period in 2017, due to a decrease in the total debt carried by the Company in 2018 as compared to 2017.

Amortized debt discount decreased 69% during the year ended December 31, 2018, as compared to the same period in 2017, due to a decrease in the total debt carried by the Company in 2018 as compared to 2017.

Impairment of investment During the 4th quarter of 2018, the Company determined that its investment in Singapore eDevelopment ("SED") was impaired due to the decline in the share price of SED, especially since November of 2018, which the Company believes was influenced by a general decline in equity markets in Asia caused by the tariff dispute between the United States and China. The Company has carried its investment in SED at costs in accordance with ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities" as the Company determined that these trading value of the SED share did not represent a readily determinable fair value due to a potential lack of liquidity of the SED shares due to a low average trading volume of the SED shares and the effect of the time restriction on the ability of the Company to sell the shares until September 17, 2019. As such, in response to the decline in the trading value of the SED shares in the fourth quarter of 2018, the Company performed an impairment test and determined an impairment of approximately \$160,000 was warranted.

Gain on extinguishment of liabilities, net On June 26, 2018, the Company reached an agreement with one of its third-party IP monetization co-investors that, among other things, discharged the amounts recorded as liabilities by the Company under an agreement executed in 2014. As a result this agreement, the Company recorded a gain of extinguishment of liabilities of \$3,714,129 to reflect the discharge of the notes, a write down of other current liabilities of \$114,000 to reflect the elimination of the contingent equity interests of \$459,000 offset by the repayment of the \$345,000 restricted cash, and the Company wrote-off the value of the underlying patents which had a net book value of \$295,470, all of which resulted in the a net gain on the extinguishment of liabilities of \$3,532,659 recorded in the period ended June 30, 2018.

Net Income (Loss) Per Share

	Year Ended December 31, 2018	Year Ended December 31, 2017	% change
Net income (loss)	\$ 1,465,000	\$ (578,000)	353%
Income (loss) per common share:			
Basic	\$ 0.09	\$ (0.04)	325%
Diluted	\$ 0.09	\$ (0.04)	325%
Shares used in computing income (loss) per common share:			
Basic	16,724,376	14,424,344	16%
Diluted	16,930,805	14,424,344	17%

During 2018, the Company had net income of \$1.5 million as compared to a net loss of \$578,000 in 2017, representing a 353% change. This achievement of net income in 2018 is primarily due to the impact of net gain from extinguishment of liabilities of approximately \$3.5 million which occurred during the second quarter of 2018, offset by the operating loss incurred during 2018.

Liquidity and Capital Resources

The Company has historically met its liquidity and capital requirements primarily through the sale of its equity securities and debt financings. As of December 31, 2018, the Company had cash of approximately \$2.4 million. In addition, the Company had \$800,000 available to its packaging division under a revolving credit line. As of December 31, 2018, the Company believes that it has sufficient cash to meet its cash requirements for at least the next 12 months from the filing date of this Annual Report. In addition, the Company believes that it will have access to sources of capital from the sale of its equity securities and debt financings.

Operating Cash Flow - During 2018, the Company expended approximately \$1.4 million for operations, which generally reflected by decreases in accrued expenses and other liabilities, and an increase in accounts receivable, offset by a decrease in inventory and an increase in accounts payable balances, respectively.

Investing Cash Flow - During 2018, the Company expended approximately \$1.0 million on equipment for its packaging and plastic card operations for various machinery, equipment, and software including a folder-gluer machine for packaging and laminating plates for plastic card operations. In addition, the Company expended approximately \$100,000 on intangible assets.

Financing Cash Flows - During 2018, the Company made aggregate principal payments on long-term debt of approximately \$1,188,000. In addition, the Company also received proceeds of approximately \$288,000 from the collection of a subscription receivable, \$502,000 in borrowings from the equipment lines of credit for its printing divisions, and approximately \$888,000 from the sale of the Company's common stock.

Continuing Operations and Going Concern – The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. This basis of accounting contemplates the recovery of our assets and the satisfaction of liabilities in the normal course of business. These Consolidated Financial Statements do not include any adjustments to the specific amounts and classifications of assets and liabilities, which might be necessary should we be unable to continue as a going concern. While the Company has approximately \$2.3 million in cash, and a positive working capital position of approximately \$1.1 million as of December 31, 2018, respectively, due to the fact that the Company has incurred negative cash flows from operating and investing activities over the past two years, and has projected that the Company will likely incur negative cash flows from operations in 2019, the Company has determined that it will likely need to raise capital in 2019 to continue as a going concern.

The expected use of cash for operations in 2019 will be primarily for funding operating losses, working capital, legal expenses associated with its intellectual property related litigation, and the costs associate with the global roll-out of the Company's AuthentiGuard product line. Historically, the Company has been able to obtain equity and/or debt-based financing, including most recently when the Company raised gross proceeds of \$951,000 in 2017 and \$1,176,000 in 2018 from the sale of its equity.

The Company's management intends to take actions necessary to continue as a going concern. Management's plans concerning these matters includes, among other things, continued growth among our operating segments including international expansion of our Authentiguard product, evaluating capital raising alternatives that will increase the Company's cash resources by at least \$2 million by the end of the second quarter of 2019, and tightly controlling operating costs and reducing spending growth rates wherever possible.

Based upon our current amount of cash on hand, management's historical ability to raise capital, and our ability to manage our cost structure and adjust operating plans if and as required, we have concluded that substantial doubt of our ability to continue as a going concern has been alleviated.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements that have, or are reasonably likely to have, an effect on our financial condition, financial statements, revenues or expenses.

Inflation

Although our operations are influenced by general economic conditions, we do not believe that inflation had a material effect on our results of operations during 2018 or 2017 as we are generally able to pass the increase in our material and labor costs to our customers or absorb them as we improve the efficiency of our operations.

Critical Accounting Policies

The preparation of financial statements and related disclosures in conformity with generally accepted accounting principles in the U.S. ("U.S. GAAP") requires management to make judgments, assumptions and estimates that affect the amounts reported in our consolidated financial statements and accompanying notes. The Company's consolidated financial statements for the fiscal year ended December 31, 2018 describe the significant accounting policies and methods used in the preparation of the consolidated financial statements.

Use of Estimates - The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires the Company to make estimates and assumptions that affect the amounts reported and disclosed in the financial statements and the accompanying notes. Actual results could differ materially from these estimates. On an ongoing basis, the Company evaluates its estimates, including those related to the accounts receivable, fair values of intangible assets and goodwill, useful lives of intangible assets and property and equipment, fair values of options and warrants to purchase the Company's common stock, deferred revenue and income taxes, among others. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Revenue Recognition - The Company adopted Accounting Standards Update 2014-09 (Topic 606) "Revenue from Contracts with Customers", effective January 1, 2018. Topic 606 did not have a material impact on the Company's Consolidated Financial Statements.

The Company sells printed products including packaging printing and fabrication, commercial and security printing and plastic cards and badges, including cards and badges integrated with technology such as RFID and smart chips. The Company also provides information technology services and digital authentication products and services to its customers. The Company recognizes its products and services revenue based on when the title passes to the customer or when the service is completed and accepted by the customer. Revenue is measured as the amount of consideration the Company expects to receive in exchange for shipped product or service provided. Sales and other taxes billed and collected from customers are excluded from revenue. Customers, including distributors, do not have a general right of return. The Company also derives revenue from royalties from third parties which are typically based on licensees' net sales of products that utilize the Company's technology, or on a per item usage of the technology on the customers' printed products. The Company recognizes license revenue at the time it is reported by the licensee. From time to time, the Company generates license revenues through litigation settlements. For these, the Company recognizes revenue upon the execution of the agreement, when collectability is reasonably assured, or upon receipt of the minimum upfront fee for term agreement renewals, and when all other revenue recognition criteria have been met. Certain of the Company's revenue arrangements provide for future royalties or additional required payments based on future licensee activities. Additional royalties are recognized in revenue upon resolution of the related contingency provided that all revenue recognition criteria, as described above, have been met. Amounts of additional royalties due under these license agreements, if any, cannot be reasonably estimated by management.

Goodwill - Goodwill is the excess of cost of an acquired entity over the fair value of amounts assigned to assets acquired and liabilities assumed in a business combination. Goodwill is subject to impairment testing at least annually and will be tested for impairment between annual tests if an event occurs or circumstances change that would indicate the carrying amount may be impaired. FASB ASC Topic 350 provides an entity with the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. If the two-step impairment test is necessary, a fair-value-based test is applied at the reporting unit level, which is generally one level below the operating segment level. The test compares the fair value of an entity's reporting units to the carrying value of those reporting units. This test requires various judgments and estimates. The Company estimates the fair value of the reporting unit using a market approach in combination with a discounted operating cash flow approach. Impairment of goodwill is measured as the excess of the carrying amount of goodwill over the fair values of recognized and unrecognized assets and liabilities of the reporting unit. An adjustment to goodwill will be recorded for any goodwill that is determined to be impaired. The Company tests goodwill for impairment at least annually in conjunction with preparation of its annual business plan, or more frequently if events or circumstances indicate it might be impaired. FASB ASU 2010-28 modifies Step 1 of the goodwill impairment test for reporting units with zero or negative carrying amounts. For those reporting units, an entity is required to perform Step 2 of the goodwill impairment test if it is more likely than not that a goodwill impairment exists. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist.

Other Intangible Assets and Patent Application Costs - Other intangible assets consists of costs associated with the application for patents, acquisition of patents and contractual rights to patents and trade secrets associated with the Company's technologies. The Company's patents and trade secrets are generally for document anti-counterfeiting and anti-scanning technologies and processes that form the basis of the Company's document security business. Patent application costs are capitalized and amortized over the estimated useful life of the patent, which generally approximates its legal life. In addition, intangible assets include customer lists and non-compete agreements obtained as a result of acquisitions. Intangible asset amortization expense is classified as an operating expense. The Company believes that the decision to incur patent costs is discretionary as the associated products or services can be sold prior to or during the application process. The Company accounts for other intangible amortization as an operating expense, unless the underlying asset is directly associated with the production or delivery of a product. Subsequent to acquisition of patents and trade secrets, legal and associated costs incurred in prosecuting alleged infringements of the patents will be recognized as expense when incurred. Costs incurred to renew or extend the term of recognized intangible assets, including patent annuities and fees, and patent defense costs are expensed as incurred. To date, the amount of related amortization expense for other intangible assets directly attributable to revenue recognized is not material.

Contingent Legal Expenses - Contingent legal fees are expensed in the consolidated statements of operations in the period that the related revenues are recognized. In instances where there are no recoveries from potential infringers, no contingent legal fees are paid; however, the Company may be liable for certain out of pocket legal costs incurred pursuant to the underlying legal services agreement that will be paid out from the proceeds from settlements or licenses that arise pursuant to an enforcement action, which will be expensed as legal fees in the period in which the payment of such fees is probable. Any unamortized patent acquisition costs will be expensed in the period in which a conclusion is reached in an enforcement action that does not yield future royalties potential.

Share-Based Payments - We measure compensation cost for stock awards at fair value and recognize compensation expense over the service period for which awards are expected to vest. The Company uses the Black-Scholes-Merton option pricing model for determining the estimated fair value for stock-based awards. The Black-Scholes-Merton model requires the use of subjective assumptions which determine the fair value of stock-based awards, including the option's expected term and the price volatility of the underlying stock. For equity instruments issued to consultants and vendors in exchange for goods and services, the Company determines the measurement date for the fair value of the equity instruments issued at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement.

Income Taxes - The Company recognizes estimated income taxes payable or refundable on income tax returns for the current year and for the estimated future tax effect attributable to temporary differences and carry-forwards. Measurement of deferred income items is based on enacted tax laws including tax rates, with the measurement of deferred income tax assets being reduced by available tax benefits not expected to be realized. We recognize penalties and accrued interest related to unrecognized tax benefits in income tax expense.

Recent Accounting Pronouncements - See Note 2 - Summary of Significant Accounting Policies in the notes to our consolidated financial statements in this Annual Report on Form 10-K for information regarding recent accounting pronouncements.

ITEM 7A - QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not applicable.

Financial Statements

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders
Document Security Systems, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Document Security Systems, Inc. and Subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive income (loss), changes in stockholders' equity and cash flows for the years then ended, and the related notes to the consolidated financial statement (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

/s/ Freed Maxick CPAs, P.C.

We have served as the Company's auditor since 2004.

Rochester, New York
March 15, 2019

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Balance Sheets
As of

	December 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash	\$ 2,317,659	\$ 4,188,623
Restricted cash	130,326	256,005
Accounts receivable, net of \$50,000 allowance for doubtful accounts	2,217,877	2,025,284
Inventory	1,563,593	1,651,246
Prepaid expenses and other current assets	285,580	261,324
Total current assets	6,515,035	8,382,482
Property, plant and equipment, net	5,014,494	4,805,640
Investment	324,930	484,930
Other assets	90,319	83,376
Goodwill	2,453,597	2,453,597
Other intangible assets, net	881,411	1,220,752
Total assets	\$ 15,279,786	\$ 17,430,777
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,347,491	\$ 728,652
Accrued expenses and deferred revenue	1,106,346	989,154
Other current liabilities	2,255,942	2,953,629
Short-term debt	-	3,645,760
Current portion of long-term debt, net	713,427	966,506
Total current liabilities	5,423,206	9,283,701
Long-term debt, net	1,721,936	1,734,171
Other long-term liabilities	391,325	1,501,064
Deferred tax liability, net	168,986	125,982
Commitments and contingencies (Note 12)		
Stockholders' equity		
Common stock, \$.02 par value; 200,000,000 shares authorized, 17,425,858 shares issued and outstanding (16,599,327 on December 31, 2017)	348,517	331,987
Additional paid-in capital	107,624,666	106,633,708
Subscription receivable, net	-	(300,000)
Accumulated other comprehensive loss	(7,052)	(23,069)
Accumulated deficit	(100,391,798)	(101,856,767)
Total stockholders' equity	7,574,333	4,785,859
Total liabilities and stockholders' equity	\$ 15,279,786	\$ 17,430,777

See accompanying notes.

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements of Operations and Comprehensive Income (Loss)
For the Years Ended December 31,

	<u>2018</u>	<u>2017</u>
Revenue:		
Printed products	\$ 16,940,262	\$ 17,026,247
Technology sales, services and licensing	1,574,820	1,635,625
Total revenue	18,515,082	18,661,872
Costs and expenses:		
Cost of revenue, exclusive of depreciation and amortization	11,853,499	11,008,882
Selling, general and administrative (including stock based compensation)	7,088,610	6,465,016
Depreciation and amortization	1,281,634	1,413,838
Total costs and expenses	20,223,743	18,887,736
Operating loss	(1,708,661)	(225,864)
Other income (expense):		
Interest income	8,634	4,209
Interest expense	(144,819)	(223,321)
Amortization of deferred financing costs and debt discount	(46,251)	(154,142)
Impairment of investment	(160,000)	-
Gain on extinguishment of liabilities, net	3,532,659	-
Income (loss) before income taxes	1,481,562	(599,118)
Income tax expense (benefit)	16,593	(20,962)
Net income (loss)	\$ 1,464,969	\$ (578,156)
Other comprehensive income:		
Interest rate swap gain	16,017	22,274
Comprehensive income (loss):	\$ 1,480,986	\$ (555,882)
Income (loss) per common share:		
Basic	\$ 0.09	\$ (0.04)
Diluted	\$ 0.09	\$ (0.04)
Shares used in computing income (loss) per common share:		
Basic	16,724,376	14,424,344
Diluted	16,930,805	14,424,344

See accompanying notes.

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements of Cash Flows
For the Years Ended December 31,

	2018	2017
Cash flows from operating activities:		
Net income (loss)	\$ 1,464,969	\$ (578,156)
Adjustments to reconcile net income (loss) to net cash used by operating activities:		
Depreciation and amortization	1,281,634	1,413,838
Stock based compensation	131,733	214,862
Paid in-kind interest	12,000	72,000
Change in deferred tax provision	9,673	80,363
Amortization of deferred financing costs and debt discount	46,251	154,142
Gain on settlement of legal expenses	-	(219,364)
Gain on extinguishment of liabilities, net	(3,532,659)	-
Impairment of investment	160,000	-
Decrease (increase) in assets:		
Accounts receivable	(192,593)	(134,303)
Inventory	87,653	(444,869)
Prepaid expenses and other current assets	(31,198)	51,409
Increase (decrease) in liabilities:		
Accounts payable	618,836	(893,431)
Accrued expenses	(113,793)	(60,791)
Other liabilities	(1,325,427)	(944,834)
Net cash used by operating activities	(1,382,921)	(1,289,134)
Cash flows from investing activities:		
Purchase of property, plant and equipment	(1,003,413)	(958,819)
Purchase of intangible assets	(100,138)	(11,552)
Net cash used by investing activities	(1,103,551)	(970,371)
Cash flows from financing activities:		
Payments of long-term debt	(1,188,081)	(818,332)
Borrowings from equipment lines of credit, net	502,155	522,000
Issuances of common stock, net of issuance costs	887,755	951,118
Receipt of subscription receivable, net of issuance costs	288,000	-
Net cash provided by financing activities	489,829	654,786
Net decrease in cash	(1,996,643)	(1,604,719)
Cash and restricted cash at beginning of year	4,444,628	6,049,347
Cash and restricted cash at end of year	\$ 2,447,985	\$ 4,444,628

See accompanying notes.

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity
For the Years Ended December 31, 2018 and 2017

	Common Stock		Additional Paid-in Capital	Subscription Receivable	Accumulated Other Comprehensive Loss	Accumulated Deficit	Total
	Shares	Amount					
Balance, December 31, 2016	13,502,653	\$ 270,053	\$ 104,338,002	\$ -	\$ (45,343)	\$ (101,278,611)	\$ 3,284,101
Issuance of common stock, net	2,946,674	58,934	2,083,844	(300,000)	-	-	1,842,778
Stock based payments, net of tax effect	150,000	3,000	211,862	-	-	-	214,862
Other comprehensive gain	-	-	-	-	22,274	-	22,274
Net loss	-	-	-	-	-	(578,156)	(578,156)
Balance, December 31, 2017	16,599,327	\$ 331,987	\$ 106,633,708	\$ (300,000)	\$ (23,069)	\$ (101,856,767)	\$ 4,785,859
Issuance of common stock, net	826,531	16,530	859,225	300,000	-	-	1,175,755
Stock based payments, net of tax effect	-	-	131,733	-	-	-	131,733
Other comprehensive gain	-	-	-	-	16,017	-	16,017
Net income	-	-	-	-	-	1,464,969	1,464,969
Balance, December 31, 2018	17,425,858	\$ 348,517	\$ 107,624,666	\$ -	\$ (7,052)	\$ (100,391,798)	\$ 7,574,333

See accompanying notes.

DOCUMENT SECURITY SYSTEMS, INC. AND SUBSIDIARIES

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - DESCRIPTION OF BUSINESS

Document Security Systems, Inc. (the "Company"), through two of its subsidiaries, Premier Packaging Corporation, which operates under the assumed name of DSS Packaging Group, and Plastic Printing Professionals, Inc., which operates under the name of DSS Plastics Group, operates in the security and commercial printing, packaging and plastic ID markets. The Company develops, markets, manufactures and sells paper and plastic products designed to protect valuable information from unauthorized scanning, copying, and digital imaging. The Company's subsidiary, DSS Digital Inc., which also operates under the name of DSS Digital Group, develops, markets and sells digital information services, including data hosting, disaster recovery and data back-up and security services. The Company's subsidiary, DSS Technology Management, Inc., manages, licenses and acquires intellectual property ("IP") assets for the purpose of monetizing these assets through a variety of value-enhancing initiatives, including, but not limited to, investments in the development and commercialization of patented technologies, licensing, strategic partnerships and commercial litigation. In 2018, the Company commenced operations in the Asia Pacific market through its subsidiary DSS Asia Limited, which was formed in 2017.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation - The consolidated financial statements include the accounts of Document Security System and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates - The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States requires the Company to make estimates and assumptions that affect the amounts reported and disclosed in the financial statements and the accompanying notes. Actual results could differ materially from these estimates. On an ongoing basis, the Company evaluates its estimates, including those related to the accounts receivable, inventory, fair values of investments, intangible assets and goodwill, useful lives of intangible assets and property and equipment, fair values of options and warrants to purchase the Company's common stock, deferred revenue and income taxes, among others. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Reclassifications - Certain prior year amounts have been reclassified to conform to the current year presentation.

Restricted Cash - As of December 31, 2018, cash of \$130,326 (\$256,005 - December 31, 2017) is restricted for payments of costs and expenses associated with one of the Company's IP monetization programs.

	December 31, 2018	December 31, 2017		December 31, 2017	December 31, 2016
Cash	\$ 2,317,659	\$ 4,188,623	Cash	\$ 4,188,623	\$ 5,871,738
Restricted Cash	130,326	256,005	Restricted Cash	256,005	177,609
Total	\$ 2,447,985	\$ 4,444,628	Total	\$ 4,444,628	\$ 6,049,347

Accounts Receivable - The Company extends credit to its customers in the normal course of business. The Company performs ongoing credit evaluations and generally do not require collateral. Payment terms are generally 30 days but up to net 60 for certain customers. The Company carries its trade accounts receivable at invoice amount less an allowance for doubtful accounts. On a periodic basis, the Company evaluates its accounts receivable and establishes an allowance for doubtful accounts based upon management's estimates that include a review of the history of past write-offs and collections and an analysis of current credit conditions. At December 31, 2018, the Company established a reserve for doubtful accounts of approximately \$50,000 (\$50,000 - 2017). The Company does not accrue interest on past due accounts receivable.

Inventory - Inventories consist primarily of paper, plastic materials and cards, pre-printed security paper, paperboard and fully-prepared packaging which and are stated at the lower of cost or net realizable value on the first-in, first-out ("FIFO") method. Packaging work-in-process and finished goods included the cost of materials, direct labor and overhead.

Property, Plant and Equipment - Property, plant and equipment are recorded at cost. Depreciation is computed using the straight-line method over the estimated useful lives or lease period of the assets whichever is shorter. Expenditures for renewals and betterments are capitalized. Expenditures for minor items, repairs and maintenance are charged to operations as incurred. Any gain or loss upon sale or retirement due to obsolescence is reflected in the operating results in the period the event takes place. Depreciation expense in 2018 was approximately \$795,000 (\$727,000 - 2017).

Investment - In accordance with ASC 325-20, the Company records its investment in common stock of Singapore eDevelopment Limited at cost, less impairment adjusted for subsequent observable price changes, as the fair market value of the investment is not readily determinable. The Company evaluates investment for indications of impairment at least annually.

Goodwill - Goodwill is the excess of cost of an acquired entity over the fair value of amounts assigned to assets acquired and liabilities assumed in a business combination. Goodwill is subject to impairment testing at least annually and will be tested for impairment between annual tests if an event occurs or circumstances change that would indicate the carrying amount may be impaired. Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 350 provides an entity with the option to first assess qualitative factors to determine whether the existence of events or circumstances leads to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the totality of events or circumstances, an entity determines it is not more likely than not that the fair value of a reporting unit is less than its carrying amount, then performing the two-step impairment test is unnecessary. If the two-step impairment test is necessary, a fair-value-based test is applied at the reporting unit level, which is generally one level below the operating segment level. The test compares the fair value of an entity's reporting units to the carrying value of those reporting units. This test requires various judgments and estimates. The Company estimates the fair value of the reporting unit using a market approach in combination with a discounted operating cash flow approach. Impairment of goodwill is measured as the excess of the carrying amount of goodwill over the fair values of recognized and unrecognized assets and liabilities of the reporting unit. An adjustment to goodwill will be recorded for any goodwill that is determined to be impaired. In determining whether it is more likely than not that a goodwill impairment exists, an entity should consider whether there are any adverse qualitative factors indicating that an impairment may exist.

Other Intangible Assets and Patent Application Costs - Other intangible assets consist of costs associated with the application for patents, acquisition of patents and contractual rights to patents and trade secrets associated with the Company's technologies. The Company's patents and trade secrets are generally for document anti-counterfeiting and anti-scanning technologies and processes that form the basis of the Company's document security business. Patent application costs are capitalized and amortized over the estimated useful life of the patent, which generally approximates its legal life. In addition, intangible assets include customer lists and non-compete agreements obtained because of acquisitions. Intangible asset amortization expense is classified as an operating expense. The Company believes that the decision to incur patent costs is discretionary as the associated products or services can be sold prior to or during the application process. The Company accounts for other intangible amortization as an operating expense, unless the underlying asset is directly associated with the production or delivery of a product. Subsequent to acquisition of patents and trade secrets, legal and associated costs incurred in prosecuting alleged infringements of the patents will be recognized as expense when incurred. Costs incurred to renew or extend the term of recognized intangible assets, including patent annuities and fees, and patent defense costs are expensed as incurred. To date, the amount of related amortization expense for other intangible assets directly attributable to revenue recognized is not material.

Impairment of Long-Lived Assets - The Company monitors the carrying value of long-lived assets for potential impairment and tests the recoverability of such assets whenever events or changes in circumstances indicate that the carrying amounts may not be recoverable. If a change in circumstance occurs, the Company performs a test of recoverability by comparing the carrying value of the asset or asset group to its undiscounted expected future cash flows. If cash flows cannot be separately and independently identified for a single asset, the Company will determine whether impairment has occurred for the group of assets for which the Company can identify the projected cash flows. If the carrying values are in excess of undiscounted expected future cash flows, the Company measures any impairment by comparing the fair value of the asset or asset group to its carrying value.

Fair Value of Financial Instruments - Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Fair Value Measurement Topic of the FASB ASC establishes a three-tier fair value hierarchy which prioritizes the inputs used in measuring fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). These tiers include:

- Level 1, defined as observable inputs such as quoted prices for identical instruments in active markets;
- Level 2, defined as inputs other than quoted prices in active markets that are either directly or indirectly observable such as quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in markets that are not active; and
- Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions, such as valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The carrying amounts reported in the balance sheet of cash, accounts receivable, prepaids, accounts payable and accrued expenses approximate fair value because of the immediate or short-term maturity of these financial instruments. The fair value of revolving credit lines notes payable and long-term debt approximates their carrying value as the stated or discounted rates of the debt reflect recent market conditions. Derivative instruments, as discussed below, are recorded as assets and liabilities at estimated fair value based on available market information. The fair value of investments carried at cost, less impairment however, the fair value is not considered readily determinable based on the lack of liquidity for the shares owned.

Derivative Instruments - The Company maintains an overall interest rate risk management strategy that incorporates the use of interest rate swap contracts to minimize significant fluctuations in earnings that are caused by interest rate volatility. The Company has an interest rate swap that changes variable rates into fixed rates on one Citizens Bank term loan relating to the Company's subsidiary, Premier Packaging. This swap qualifies as a Level 2 fair value financial instrument. This swap agreement is not held for trading purposes and the Company does not intend to sell this derivative swap financial instrument. The Company records the interest swap agreement on the balance sheet at fair value because the agreement qualifies as a cash flow hedge under accounting principles generally accepted in the United States of America. Gains and losses on these instruments are recorded in other comprehensive loss until the underlying transaction is recorded in earnings. When the hedged item is realized, gains or losses are reclassified from accumulated other comprehensive loss ("AOCI") to the consolidated statement of operations on the same line item as the underlying transaction. The valuations of the interest rate swaps have been derived from proprietary models of Citizens Bank, N.A. based upon recognized financial principles and reasonable estimates about relevant future market conditions and may reflect certain other financial factors such as anticipated profit or hedging, transactional, and other costs. The notional amounts of the swaps decrease over the life of the agreements. The Company is exposed to a credit loss in the event of nonperformance by the counter parties to the interest rate swap agreements. However, the Company does not anticipate non-performance by the counter parties. The cumulative net loss attributable to this cash flow hedge recorded in accumulated other comprehensive loss and other liability as of December 31, 2018 was approximately \$7,000 (\$23,000 - December 31, 2017).

As of December 31, 2018, the Company has an interest rate swap agreement for its debt with RBS Citizens, N.A. ("Citizens Bank") (see Note 7) which changes a variable rate into a fixed rate on a term loan as follows:

Notional Amount	Variable Rate	Fixed Cost	Maturity Date
\$ 869,864	5.5%	5.87%	August 30, 2021

Share-Based Payments - Compensation cost for stock awards are measured at fair value and the Company recognizes compensation expense over the service period for which awards are expected to vest. The Company uses the Black-Scholes-Merton option pricing model for determining the estimated fair value for stock-based awards. The Black-Scholes-Merton model requires the use of subjective assumptions which determine the fair value of stock-based awards, including the option's expected term and the price volatility of the underlying stock. For equity instruments issued to consultants and vendors in exchange for goods and services the Company determines the measurement date for the fair value of the equity instruments issued at the earlier of (i) the date at which a commitment for performance by the consultant or vendor is reached or (ii) the date at which the consultant or vendor's performance is complete. In the case of equity instruments issued to consultants, the fair value of the equity instrument is recognized over the term of the consulting agreement.

Revenue Recognition - Effective January 1, 2018, the Company adopted Topic 606 using the modified retrospective approach and applied the guidance to those contracts which were not completed as of January 1, 2018. Adoption of Topic 606 did not impact the timing of revenue recognition in the Company's Consolidated Financial Statements for the current or prior interim or annual periods. Accordingly, no adjustments have been made to opening retained earnings or prior period amounts.

The Company sells printed products including packaging printing and fabrication, commercial and security printing and plastic cards and badges, including cards and badges integrated with technology such as RFID and smart chips. The Company also provides information technology services and digital authentication products and services to its customers. The Company recognizes its products and services revenue based on when the title passes to the customer or when the service is completed and accepted by the customer. Revenue is measured as the amount of consideration the Company expects to receive in exchange for shipped product or service provided. Sales and other taxes billed and collected from customers are excluded from revenue. Customers, including distributors, do not have a general right of return. The Company also derives revenue from royalties from third parties which are typically based on licensees' net sales of products that utilize the Company's technology, or on a per item usage of the technology on the customers' printed products. The Company recognizes license revenue at the time it is reported by the licensee. From time to time, the Company generates license revenues through litigation settlements. For these, the Company recognizes revenue upon the execution of the agreement, when collectability is reasonably assured, or upon receipt of the minimum upfront fee for term agreement renewals, and when all other revenue recognition criteria have been met.

As of December 31, 2018, the Company had no unsatisfied performance obligations for contracts with an original expected duration of greater than one year. Pursuant to Topic 606, the Company has applied the practical expedient with respect to disclosure of the deferral and future expected timing of revenue recognition for transaction price allocated to remaining performance obligations. The Company elected the practical expedient allowing it to not recognize as a contract asset the commission paid to its salesforce on the sale of its products as an incremental cost of obtaining a contract with a customer but rather recognize such commission as expense when incurred as the amortization period of the asset that the Company would have otherwise recognized is one year or less.

Sales Commissions

Sales commissions are expensed as incurred for contracts with an expected duration of one year or less. There were no sales commissions capitalized as of December 31, 2018.

Shipping and Handling Costs

Costs incurred by the Company related to shipping and handling are included in cost of products sold. Amounts charged to customers pertaining to these costs are reflected as revenue.

Costs of revenue - Costs of revenue includes all direct cost of the Company's packaging, commercial and security printing and plastic ID card sales, primarily, paper, plastic, inks, dies, and other consumables, and direct labor, transportation and manufacturing facility costs. In addition, this category includes all direct costs associated with the Company's technology sales, services and licensing including hardware and software that is resold, third-party fees, and fees paid to inventors or others as a result of technology licenses or settlements, if any. Costs of revenue recorded in the DSS Technology Management group include contingent legal fees, inventor royalties, legal, consulting and other professional fees directly related to the Company's patent monetization, litigation and licensing activities. Amortization of patent costs and acquired technology are included in depreciation and amortization on the consolidated statement of operations. Costs of revenue do not include expenses related to product development, integration, and support. These costs are included in research and development, which is a component of selling, general and administrative expenses on the consolidated statement of operations. Legal costs are included in selling, general and administrative.

Contingent Legal Expenses - Contingent legal fees are expensed in the consolidated statements of operations in the period that the related revenues are recognized. In instances where there are no recoveries from potential infringers, no contingent legal fees are paid; however, the Company may be liable for certain out of pocket legal costs incurred pursuant to the underlying legal services agreement that will be paid out from the proceeds from settlements or licenses that arise pursuant to an enforcement action, which will be expensed as legal fees in the period in which the payment of such fees is probable. Any unamortized patent acquisition costs will be expensed in the period a conclusion is reached in an enforcement action that does not yield future royalties potential.

Advertising Costs – Generally consist of online, keyword advertising with Google with additional amounts spent on certain print media in targeted industry publications. Advertising costs were approximately \$37,000 in 2018 (\$23,000 – 2017).

Research and Development - Research and development costs are expensed as incurred. Research and development costs consist primarily of third-party research costs and consulting costs. The Company spent approximately \$146,000 and \$106,000 on research and development during 2018 and 2017, respectively. Research and development costs increased during 2018 as compared to 2017 due to development costs related to the development of proprietary blockchain solutions for the Company's AuthentiGuard product line.

Income Taxes - The Company recognizes estimated income taxes payable or refundable on income tax returns for the current year and for the estimated future tax effect attributable to temporary differences and carry-forwards. Measurement of deferred income items is based on enacted tax laws including tax rates, with the measurement of deferred income tax assets being reduced by available tax benefits not expected to be realized. We recognize penalties and accrued interest related to unrecognized tax benefits in income tax expense.

Earnings Per Common Share - The Company presents basic and diluted earnings per share. Basic earnings per share reflect the actual weighted average of shares issued and outstanding during the period. Diluted earnings per share are computed including the number of additional shares that would have been outstanding if dilutive potential shares had been issued and is calculated utilizing the treasury stock method. In a loss period, the calculation for basic and diluted earnings per share is the same, as the impact of potential common shares is anti-dilutive.

As of December 31, 2018, and 2017, there were 2,212,773 and 3,177,759, respectively, of common stock share equivalents potentially issuable under options, warrants, and restricted stock agreements that could potentially dilute basic earnings per share in the future. For the twelve-months ended December 31, 2018, based on the average market price of the Company's common stock during that period of \$1.27, 206,429 common stock equivalents were added to the basic shares outstanding to calculate dilutive earnings per share. Common stock equivalents were excluded from the calculation of diluted earnings per share for 2017 in which the Company had a net loss, since their inclusion would have been anti-dilutive.

Comprehensive Income (Loss) - Comprehensive income (loss) is defined as the change in equity of the Company during a period from transactions and other events and circumstances from non-owner sources. It consists of net income (loss) and other income and losses affecting stockholders' equity that, under U.S. GAAP, are excluded from net income (loss). The change in fair value of interest rate swaps was the only item impacting accumulated other comprehensive loss for the years ended December 31, 2018 and 2017.

Concentration of Credit Risk - The Company maintains its cash in bank deposit accounts, which at times may exceed federally insured limits. The Company believes it is not exposed to any significant credit risk as a result of any non-performance by the financial institutions.

During 2018, two customers accounted for 44% of our consolidated revenue. As of December 31, 2018, these two customers accounted for 38% of our trade accounts receivable balance. During 2017, these two customers accounted for 46% of our consolidated revenue. As of December 31, 2017, these two customers accounted for 38% of our trade accounts receivable balance.

Continuing Operations and Going Concern - The accompanying consolidated financial statements have been prepared assuming that we will continue as a going concern. This basis of accounting contemplates the recovery of our assets and the satisfaction of liabilities in the normal course of business. These Consolidated Financial Statements do not include any adjustments to the specific amounts and classifications of assets and liabilities, which might be necessary should we be unable to continue as a going concern. While the Company has approximately \$2.3 million in cash, and a positive working capital position of approximately \$1.1 million as of December 31, 2018, respectively, due to the fact that the Company has incurred negative cash flows from operating and investing activities over the past two years, and has projected that the Company will likely incur negative cash flows from operations in 2019, the Company has determined that it will likely need to raise capital in 2019 to continue as a going concern.

The expected use of cash for operations in 2019 will be primarily for funding operating losses, working capital, legal expenses associated with its intellectual property related litigation, and the costs associated with the global roll-out of the Company's AuthentiGuard product line. Historically, the Company has been able to obtain equity and/or debt-based financing, including most recently when the Company raised gross proceeds of \$951,000 in 2017 and \$1,176,000 in 2018 from the sale of its equity.

The Company's management intends to take actions necessary to continue as a going concern. Management's plans concerning these matters includes, among other things, continued growth among our operating segments including international expansion of our AuthentiGuard product, evaluating capital raising alternatives that will increase the Company's cash resources by at least \$2 million by the end of the second quarter of 2019, and tightly controlling operating costs and reducing spending growth rates wherever possible.

Based upon our current amount of cash on hand, management's historical ability to raise capital, and our ability to manage our cost structure and adjust operating plans if and as required, we have concluded that substantial doubt of our ability to continue as a going concern has been alleviated.

Recent Accounting Pronouncements - In February 2016, the FASB issued ASU 2016-02, "Leases", which requires that lessees recognize a right-to-use asset and related lease liability for all significant financing and operating leases not considered short-term leases and specifies where in the statement of cash flows the related lease payments are to be presented. The guidance is effective for years beginning after December 15, 2018 and early adoption is permitted. The Company has adopted the new lease standard effective January 1, 2019. The impact of adoption will be the recognition of a right-to-use asset and corresponding lease liability on the Company's consolidated balance sheet. Adoption of the new lease standard did not have a significant impact on the Company's consolidated statement of income.

In January 2017, the FASB issued ASU 2017-04, "Intangibles – Goodwill and Other (Topic 350) – Simplifying the Test for Goodwill Impairment", which eliminates the two-step process that required identification of potential impairment and a separate measure of the actual impairment. The annual assessment of goodwill impairment will be determined by using the difference between the carrying amount and the fair value of the reporting unit. The standards update is effective for goodwill impairment tests in fiscal years beginning after December 15, 2019. The Company is currently assessing the impact that adopting this new accounting standard will have on its Consolidated Financial Statements.

Recently Adopted Accounting Pronouncements –

In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments", which clarifies the treatment of several types of cash receipts and payments for which there was diversity in practice. This update is effective for annual periods beginning after December 15, 2017, and interim periods within those fiscal years, with early adoption permitted, including adoption in an interim period. The Company adopted this standard during the three months ended March 31, 2018. The adoption did not have a material impact on the Company's Consolidated Financial Statements.

In November 2016, the FASB issued ASU 2016-18, "Statement of Cash Flows", regarding the presentation of restricted cash on the statement of cash flows. The standards update requires that the reconciliation of the beginning and end of period cash amounts shown in the statement of cash flows include restricted cash. When restricted cash is presented separately from cash and cash equivalents on the balance sheet, a reconciliation is required between the amounts presented on the statement of cash flows and the balance sheet. Also, the new guidance requires the disclosure of information about the nature of the restrictions. The Company adopted the standard as of January 1, 2018 on a retrospective basis, wherein the statement of cash flow of each period presented was adjusted to reflect the effects of applying the new guidance.

In May 2017, the FASB issued ASU 2017-09, "Compensation – Stock Compensation (Topic 718) – Scope of Modification Accounting", which provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. ASU 2017-09 is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years, and early adoption is permitted, including in an interim period. ASU 2017-09 is to be applied on a prospective basis to an award modified on or after the adoption date. The Company adopted this standard during the quarter ended March 31, 2018. The new accounting standard did not have a material impact on the Company's Consolidated Financial Statements.

In February 2018, the FASB issued ASU 2018-03, "Technical Corrections and Improvements to Financial Instruments (Subtopic 825-10) – Recognition and Measurement of Financial Assets and Financial Liabilities". This update was issued to clarify certain narrow aspects of guidance concerning the recognition of financial assets and liabilities established in ASU No. 2016-01, "Financial Instruments—Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities". This includes an amendment to clarify that an entity measuring an equity security using the measurement alternative may change its measurement approach to a fair valuation method in accordance with Topic 820, Fair Value Measurement, through an irrevocable election that would apply to that security and all identical or similar investments of the same issued. The update is effective for fiscal years beginning after December 15, 2017 and interim periods within those fiscal years beginning after June 15, 2018. The adoption of this standard did not have a material impact on the Company's Consolidated Financial Statements.

NOTE 3 – INVENTORY

Inventory consisted of the following at December 31:

	Inventory	
	December 31, 2018	December 31, 2017
Finished Goods	\$ 1,144,695	\$ 965,757
WIP	339,091	383,270
Raw Materials	79,807	302,219
	<u>\$ 1,563,593</u>	<u>\$ 1,651,246</u>

NOTE 4 - INVESTMENT

On September 12, 2017, the Company and Hengfai Business Development Pte Ltd. (“HBD”) entered into a Securities Exchange Agreement whereby the Company agreed to issue and sell to HBD 683,000 shares of its common stock, which had a market value on that date of \$484,930, in exchange for 21,196,552 ordinary shares and an existing three-year warrant to purchase up to 105,982,759 of ordinary shares at an exercise price of SGD\$0.040 (US\$0.0298) per share of Singapore eDevelopment Limited (“SED”), a company incorporated in Singapore and publicly-listed on the Singapore Exchange Limited. The SED shares and warrants were owned by HBD. One of the directors of the Company, Mr. Heng Fai Ambrose Chan, is a related party to each of HBD and SED. The shares and warrants are restricted for two years after the agreement date. At the time of the investment, the cost of the investment was determined to be the fair value of the Company’s common stock issued in the transaction, which was determined to have the most readily determinable fair value. In 2018, the Company adopted ASU No. 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities.” The Company has carried its investment in SED at costs in accordance with ASU No. 2016-01, as the Company determined that these trading value of the SED share did not represent a readily determinable fair value due to a potential lack of liquidity of the SED shares due to a low average trading volume of the SED shares and the effect of the time restriction on the ability of the Company to sell the shares until September 17, 2019. During the 4th quarter of 2018, the Company determined that its investment in Singapore eDevelopment (“SED”) was impaired due to the decline in the share price of SED, especially since November of 2018, which the Company believes was influenced by a general decline in equity markets in Asia caused by the tariff dispute between the United States and China. As such, in response to the decline in the trading value of the SED shares in the fourth quarter of 2018, the Company performed an impairment test and determined an impairment of approximately \$160,000 was warranted.

NOTE 5 - PROPERTY PLANT AND EQUIPMENT

Property, plant and equipment consisted of the following at December 31:

	Estimated Useful Life	<u>2018</u>	<u>2017</u>
Machinery and equipment	5-10 years (2)	\$ 7,723,763	\$ 6,796,617
Building and improvements	39 years	1,923,027	1,923,027
Land		185,000	185,000
Leasehold improvements	See (1)	760,286	722,984
Furniture and fixtures	7 years	94,364	71,903
Software and websites	3 years	187,511	171,007
		<u>10,873,951</u>	<u>9,870,538</u>
Total cost		10,873,951	9,870,538
Less accumulated depreciation		<u>5,859,457</u>	<u>5,064,898</u>
Property, plant, and equipment, net		<u>\$ 5,014,494</u>	<u>\$ 4,805,640</u>

(1) Expected lease term between 3 and 10 years.

(2) Included in machinery and equipment are costs of approximately \$550,000 related to equipment in process that will be placed into service in 2019. Depreciation of the machinery and equipment will begin once the asset is placed into service.

NOTE 6 - INTANGIBLE ASSETS AND GOODWILL

During 2018 and 2017, the Company spent approximately \$20,000 and \$12,000, respectively, on capitalized patent prosecution costs.

On June 26, 2018, the Company entered into an agreement with Fortress Credit Co LLC ("Fortress"), which among other things transferred to Fortress all of the remaining economic rights to certain of the Company's semi-conductor related patents (See Note 7). As a result, the Company wrote-off these patents which had an aggregated gross cost of \$2,655,000 and a net unamortized carrying amount of \$295,470 on the agreement date.

On July 31, 2018, the Company entered into a Non-Compete Letter Agreement (the "Agreement") with its former President and Chief Executive Officer of its wholly owned subsidiary, Premier Packaging Corporation. The Agreement called for payments of \$16,000 per month, for a period of 19 months, as consideration for the two-year non-competition and non-solicitation restrictive covenants. The Company recorded the aggregate cost of the Agreement of \$304,000 as an intangible asset to be amortized over the 24-month period commencing August 1, 2018.

On October 24, 2018, the Company's subsidiary, DSS Asia Limited acquired Guangzhou Hotapps Technology Ltd., ("Guangzhou Hotapps") a Chinese company, in exchange for a 2-year, \$100,000 unsecured promissory note. In connection with this acquisition, the Company acquired the license to do business in China to which the Company allocated a value of \$85,734 as well as a related deferred tax liability of \$33,333 due to outside basis differences and recorded as an intangible asset that it will amortize over a five-year period.

Intangible assets are comprised of the following:

	Useful Life	December 31, 2018			December 31, 2017		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Acquired intangibles - customer lists, licenses and non-compete agreements	5-10 years	1,284,065	823,884	460,181	1,997,300	1,810,750	186,550
Acquired intangibles - patents and patent rights		500,000	500,000	-	3,155,000	2,603,942	551,058
Patent application costs	Varied (1)	1,168,155	746,925	421,230	1,148,017	664,873	483,144
		<u>\$ 2,952,220</u>	<u>\$ 2,070,809</u>	<u>\$ 881,411</u>	<u>\$ 6,300,317</u>	<u>\$ 5,079,565</u>	<u>\$ 1,220,752</u>

(1) Patent application costs are amortized over their expected useful life which is generally the remaining legal life of the patent. As of December 31, 2018, the weighted average remaining useful life of these assets in service was approximately 6.9 years.

Amortization expense for the year ended December 31, 2018 amounted to approximately \$487,000 (\$687,000 –2017).

Approximate expected amortization for each of the five succeeding fiscal years is as follows:

Year	Amount
2019	\$ 345,100
2020	\$ 209,800
2021	\$ 100,100
2022	\$ 101,500
2023	\$ 42,700

Goodwill

The Company performed its annual goodwill impairment test as of December 31, 2018. The Company has goodwill attributed to two of its reporting units which are its Packaging and Plastics reporting units respectively. The Company performed the first step of the goodwill impairment test by comparing the fair value of each of its reporting units with their carrying amounts including goodwill. In performing this step, the Company determined estimates of fair value using a discounted cash flow model for each of these reporting units. The Company determined that its Packaging and Plastic reporting units each had fair values in excess of their carrying value and therefore, did not have an indication of goodwill impairment.

There are inherent assumptions and estimates used in developing future cash flows requiring management’s judgment in applying these assumptions and estimates to the analysis of identifiable intangibles and asset impairment including projecting revenues, timing and amount of claim or settlements related to patent infringement cases, royalty rates, interest rates, and the cost of capital. Many of the factors used in assessing fair value are outside the Company’s control and it is reasonably likely that assumptions and estimates will change in future periods. These changes can result in future impairments.

The changes in the carrying amount of goodwill for the years ended December 31, 2018 and 2017 are as follows:

	<u>Packaging</u>	<u>Plastics</u>	<u>Total</u>
Balance as of January 1, 2017			
Goodwill	\$ 1,768,648	\$ 684,949	\$ 2,453,597
Accumulated impairment losses	-	-	-
	<u>1,768,648</u>	<u>684,949</u>	<u>2,453,597</u>
Balance as of December 31, 2017			
Goodwill	1,768,648	684,949	2,453,597
Accumulated impairment losses	-	-	-
	<u>1,768,648</u>	<u>684,949</u>	<u>2,453,597</u>
Balance as of December 31, 2018			
Goodwill	1,768,648	684,949	2,453,597
Accumulated impairment losses	-	-	-
	<u>\$ 1,768,648</u>	<u>\$ 684,949</u>	<u>\$ 2,453,597</u>

NOTE 7 – SHORT TERM AND LONG-TERM DEBT

Revolving Credit Lines - The Company's subsidiary Premier Packaging Corporation ("Premier Packaging") has a revolving credit line with Citizens Bank ("Citizens") of up to \$800,000 that bears interest at 1 Month LIBOR plus 3.75% (6.10% as of December 31, 2018) and has a maturity date of May 31, 2019. As of December 31, 2018, and December 31, 2017, the revolving line had a balance of \$0.

On July 26, 2017, Premier Packaging entered into a Loan Agreement and accompanying Term Note Non-Revolving Line of Credit Agreement with Citizens pursuant to which Citizens agreed to lend up to \$1,200,000 to permit Premier Packaging to purchase equipment from time to time that it may need for use in its business. The aggregate principal balance outstanding under the Equipment Acquisition Line of Credit shall bear interest thereon at a per annum rate of 2% above the LIBOR Advantage Rate until the Conversion Date (as defined in the attached Term Note Non-Revolving Line of Credit). As of December 31, 2018, the line had a balance of \$339,600.

On December 1, 2017, Plastic Printing Professionals entered into a Loan Agreement and accompanying Term Note Non-Revolving Line of Credit Agreement with Citizens Bank pursuant to which Citizens agrees to lend up to \$800,000 for the purpose of enabling Plastic Printing Professionals to purchase equipment from time to time that it may need for use in its business. Advances may be made under this Equipment Acquisition Line of Credit, from time to time, from December 1, 2017 until December 1, 2018. Effective on the Conversion Date, the interest rate payable on the aggregate principal balance outstanding shall be adjusted to a fixed rate equal to 2% above Citizens' cost of funds on the Conversion Date as determined by Citizens. Prior to the Conversion Date, interest on the outstanding principal balance shall be due and payable in arrears monthly commencing the month following the date of the first advance. After the Conversion Date, the aggregate principal balance may be repaid in (i) up to 84 installments comprised of principal and interest for new equipment or (ii) up to 60 installments comprised of principal and interest for used equipment. As of December 31, 2018, the balance of the equipment line was \$684,554 (\$522,000 at December 31, 2017). As of the date of this report, the Company had not yet converted the \$684,554 into a term note.

Long-Term Debt - On December 30, 2011, the Company issued a \$575,000 convertible note that was initially due on December 29, 2013 and carries an interest rate of 10% per annum. The note is secured by the assets of Company's wholly-owned subsidiary, Secuprint Inc. Interest is payable quarterly, in arrears. In conjunction with the issuance of the convertible note, the Company determined a beneficial conversion feature existed amounting to approximately \$88,000, which was recorded as a debt discount to be amortized over the term of the note. On May 24, 2013, the Company amended the convertible note to extend the maturity date of the note from December 29, 2013 to December 29, 2015. The change in the fair value of the embedded conversion option exceeded 10% of the carrying value of the original debt and, therefore, the Company accounted for this restructuring as an extinguishment in accordance with FASB ASC 470-50 "Debt Modifications and Extinguishments". The note was written up to its fair value on the date of modification of approximately \$650,000 and the premium recorded in excess of its face value was amortized over the remaining life of the note. On February 23, 2015, the Company entered into Convertible Promissory Note Amendment No. 2 to extend the maturity date to December 30, 2016, eliminate the conversion feature, and to institute principal payments in the amount of \$15,000 per month plus interest through the extended maturity date, and a balloon payment of \$230,000 due on the extended maturity date. On April 12, 2016, the Company entered into Convertible Promissory Note Amendment No. 3 to extend the maturity date to May 31, 2017 and change the balloon payment to \$155,000 due on the extended maturity date. On May 31, 2017, the Company entered into Convertible Promissory Note Amendment No. 4 to extend the maturity date to April 30, 2018 at which point the note is scheduled to be paid in full. In exchange for the extension, the Company also issued the lender an additional consideration of 18,000 shares of the Company's common stock which had a fair value of \$17,640. As of December 31, 2018, the balance of the term loan was \$0 (\$50,000 at December 31, 2017).

On May 24, 2013, the Company entered into a promissory note in the principal sum of \$850,000 to purchase three printing presses that were previously leased by the Company's wholly-owned subsidiary, Secuprint Inc., and carries an interest rate of 9% per annum. The note is secured by the assets of Company's wholly-owned subsidiary, Secuprint Inc. Interest is payable quarterly, in arrears. The Company also issued the lender as additional consideration a five-year warrant to purchase up to 60,000 shares of the Company's common stock at an exercise price of \$3.00 per share. The warrant was valued at approximately \$69,000 using the Black-Scholes-Merton option pricing model with a volatility of 60.0%, a risk-free rate of return of 0.89% and zero dividend and forfeiture estimates. In conjunction with the issuance of the warrants, the Company recorded a discount on debt of approximately \$69,000 that was amortized over the original term of the note. The note was set to mature on May 24, 2014, but its maturity date was extended on May 2, 2014 to May 24, 2015 by the lender. In exchange for the extension, the Company also issued the lender as additional consideration a five-year warrant to purchase up to 40,000 shares of the Company's common stock at an exercise price of \$1.50 per share. The warrant was valued at approximately \$29,000 using the Black-Scholes-Merton option pricing model with a volatility of 70.0%, a risk-free rate of return of 1.53% and zero dividend and forfeiture estimates. In conjunction with the issuance of the warrants, the Company recorded expense for modification of debt of approximately \$29,000. On February 23, 2015, the Company entered into Promissory Note Amendment No. 2 to extend the maturity date to May 31, 2016 and to institute principal payments in the amount of \$15,000 per month plus interest through the extended maturity date, and a balloon payment of \$610,000 due on the extended maturity date. On April 12, 2016, the Company entered into Promissory Note Amendment No. 3 to extend the maturity date to May 31, 2017 and change the balloon payment to \$430,000 due on the extended maturity date. On May 31, 2017, the Company entered into Convertible Promissory Note Amendment No. 4 to extend the maturity date to December 31, 2018. In exchange for the extension, the Company also issued the lender as additional consideration 18,000 shares of the Company's common stock which had a fair value of \$17,640. As of December 31, 2018, the balance of the term loan was \$0 (\$325,000 at December 31, 2017).

Term Loan Debt - On July 19, 2013, Premier Packaging entered into an equipment loan with People's Capital and Leasing Corp. ("Peoples Capital") for a printing press. The loan is secured by the printing press. The loan was for \$1,303,900, repayable over a 60-month period which commenced when the equipment was placed in service in January 2014. The loan bears interest at 4.84% and is payable in equal monthly installments of \$24,511. As of December 31, 2018, the loan had a balance of \$0 (\$286,560 at December 31, 2017).

On April 28, 2015, Premier Packaging entered into a term note with Citizens for \$525,000, repayable over a 60-month period. The loan bears interest at 3.62% and is payable in equal monthly installments of \$9,591 until April 28, 2020. Premier Packaging used the proceeds of the term note to acquire a HP Indigo 7800 Digital press. The loan is secured by the printing press. As of December 31, 2018, the loan had a balance of \$149,542 (\$257,007 at December 31, 2017).

Promissory Notes - On August 30, 2011, Premier Packaging purchased the packaging plant it occupies in Victor, New York, for \$1,500,000, which was partially financed with a \$1,200,000 promissory note obtained from Citizens Bank ("Promissory Note"). The Promissory Note calls for monthly payments of principal and interest in the amount of \$7,658, with interest calculated as 1 Month LIBOR plus 3.15% (5.5% at December 31, 2018). Concurrently with the transaction, the Company entered into an interest rate swap agreement to lock into a 5.87% effective interest rate for the life of the loan. The Promissory Note matures in August 2021 at which time a balloon payment of the remaining principal balance will be due. As of December 31, 2018, the Promissory Note had a balance of \$869,865 (\$915,107 at December 31, 2017).

On December 6, 2013, Premier Packaging entered into a Construction to Permanent Loan with Citizens Bank for up to \$450,000 that was converted into a promissory note upon the completion and acceptance of building improvements to the Company's packaging plant in Victor, New York. In May 2014, the Company converted the loan into a \$450,000 note payable in monthly installments over a 5-year period of \$2,500 plus interest calculated at a variable rate of 1 Month Libor plus 3.15% (5.5% at December 31, 2018), which payments commenced on July 1, 2014. The note matures in July 2019 at which time a balloon payment of the remaining principal balance of \$300,000 is due. As of December 31, 2018, the note had a balance of \$315,000 (\$345,000 at December 31, 2017).

The Citizens Bank credit facilities to each of the Company's subsidiaries, Premier Packaging and Plastic Printing Professionals, contain various covenants including fixed charge coverage ratio, tangible net worth and current ratio covenants. For the year December 31, 2018, both Premier Packaging and Plastic Printing Professionals were in compliance with the covenants.

On October 24, 2018, the Company's subsidiary, DSS Asia Limited entered into a \$100,000 unsecured promissory note with HotApps International Pte Ltd in conjunction with the acquisition of Guangzhou Hotapps Technology Ltd., a Chinese subsidiary of HotApps International Pte Ltd, by DSS Asia Limited. The promissory note does not accrue interest and is payable in full on October 24, 2020.

A summary of scheduled principal payments of long-term debt, not including revolving lines of credit and other debt which can be settled with non-monetary assets, subsequent to December 31, 2018 are as follows:

Year	Amount
2019	\$ 713,427
2020	427,069
2021	959,343
2022	221,811
2023	136,911
Total	\$ 2,458,561

Other Debt - On February 13, 2014, the Company's subsidiary, DSS Technology Management, Inc. ("DSSTM"), entered into an Investment Agreement (the "Agreement") dated February 13, 2014 (the "Effective Date") with Fortress Credit Co LLC, as collateral agent (the "Collateral Agent" or "Fortress"), and certain investors (the "Investors"), pursuant to which DSSTM contracted to receive a series of advances up to \$4,500,000 (collectively, the "Advances"). Under the terms of the Agreement, on the Effective Date, DSSTM issued and sold a promissory note in the amount of \$1,791,000, fixed return equity interests in the amount of \$199,000, and contingent equity interests in the amount of \$10,000, to each of the Investors, and in return received \$2,000,000 in proceeds. To secure the Advances, DSSTM placed a lien in favor of the Investors on ten semi-conductor patents (the "Patents") and assigned to the Investors certain funds recoverable from successful patent litigation involving these Patents, including settlement payments, license fees and royalties on the Patents. DSSTM is a plaintiff in various ongoing patent infringement lawsuits involving certain of the Patents.

On March 27, 2014, DSSTM received an additional \$1,000,000 under the Agreement comprised of a promissory note for \$900,000 and fixed and contingent equity interests of \$100,000. On September 5, 2014, DSSTM received the remaining \$1,500,000 under the Agreement comprised of a promissory note for \$1,350,000 and fixed and contingent return interests of \$150,000. On May 23, 2016, DSSTM remitted \$495,000 in proceeds received from the sale of patent assets (Note 6) to Fortress under the terms of the Agreement. On September 20, 2016, DSSTM remitted \$125,250 in proceeds received from a settlement to Fortress as repayment of the note principal balance under the terms of the Agreement.

The Agreement defines certain events as Events of Default, one of which is the failure by DSSTM, on or before the second anniversary of the Effective Date, to make payments to the Investors equal to the outstanding Advances. On February 13, 2016, being the second anniversary date of the Effective Date, DSSTM had failed to make these payments and was therefore in default of the Agreement. On December 2, 2016, the parties entered into a First Amendment to Investment Agreement and Certain Other Documents (the "Amendment"). The purpose of the Amendment was to vacate DSSTM's ongoing non-payment default under the Agreement, and to amend certain provisions of the Agreement.

The Agreement also was amended to add expenses in the amount of \$150,000 to DSSTM's payment obligation, payable on the Maturity Date. This amount was recorded as debt issuance costs and was being amortized on a straight-line basis through the amended maturity date of February 13, 2018. The Amendment added a provision whereby DSSTM was required to deposit \$300,000 on or before March 2, 2017 and (ii) a further sum of \$300,000 on or before March 2, 2018, into a deposit account (collectively, the "Deposit"). The March 2, 2017 and March 2, 2018 deposits were made in a timely manner. The Deposit funds were restricted to pay certain expenses, consisting of out-of-pocket expenses incurred in connection with certain existing patent litigation matters and other patent litigation matters which may occur after the Amendment Effective Date (the "Qualified Expenses"). In the Event of Default, the Investors would apply the then remaining Deposit to the then outstanding Obligations, if any.

Additionally, per the Amendment, DSSTM agrees to pay to the Investors an amount equal to 25% of any amounts received by DSSTM for any and all types of monetization activities related to certain of its patents covering systems and methods of using low power wireless peripheral devices (collectively, "BlueTooth Patents"), but only until the Investors have received payments under the Agreement totaling the sum of (i) the Capitalized Expenses plus (ii) payments of principal and interest on the Notes totaling the sum of (x) \$4,500,000 (consisting of the previously made Advances) plus (y) additional amounts, if any, advanced by the Investors pursuant to the Agreement. In addition to the monetization interest granted the Investors in the BlueTooth Patents, DSSTM also granted the Collateral Agent and the Investors a security interest in certain of DSSTM's unencumbered semiconductor patents to further collateralize the amounts owed under the Agreement.

As of February 13, 2018, DSSTM had made aggregate principal payments of \$794,283 on the notes. On February 13, 2018, the Maturity Date, DSS Technology Management defaulted by failing to pay the investors an amount equal to (x) two times the aggregate amount of all advances made by the investors as of such date plus (y) the Capitalized Expenses. The sole recourse available to the investors under the Agreement, as amended, was the establishment of a special purpose entity controlled by the investors which would take ownership of the collateral consisting of the patents covered under the amended Agreement. Each of the investors and the collateral agent had contractually agreed that they would not, individually or collectively, seek to enforce any monetary judgment with respect to or against any assets of the Company other than the patents and the monetization payments and the remaining deposit. On June 26, 2018, the parties agreed that the amounts due under the Agreement having an aggregate remaining balance of \$3,714,129 as of the Maturity Date, are discharged, without the assignment to the Investors of any of the collateral that secured the repayment under the Agreement. In addition, the Company confirmed its obligation to pay the Investors \$345,000 that remained from an aggregate of \$600,000 that had been deposited and restricted to cover expenses related to the IP monetization activities. Furthermore, the parties agreed that in the event there are any future recoveries by DSSTM with respect to monetization activities relating to the collateralized patents or applicable proceed rights set forth in the Agreement, the contractual payment provisions of the original Agreement will apply, and the Investors will be entitled to receive payment of such proceeds. As a result of this agreement, the Company paid \$345,000 from restricted cash and recorded a gain of extinguishment of liabilities of \$3,372,129 to reflect the discharge of the notes, wrote off contingent equity interests of \$459,000 eliminated by the agreement, and wrote-off the underlying patents which had an aggregated gross cost of \$2,655,000 and an net unamortized carrying amount of \$295,470 on the agreement date, all of which resulted in the a net gain on the extinguishment of liabilities of \$3,532,659 recorded 2018. As of December 31, 2018, the balance of the term loan was \$0 (\$3,702,129 at December 31, 2017).

NOTE 8 – OTHER LIABILITIES

On November 14, 2016, the Company entered into a Proceeds Investment Agreement (the “Agreement”) with Brickell Key Investments LP (“BKI”). Pursuant to the Agreement, BKI financed an aggregate of \$13,500,000 in a patent purchase and monetization program to be implemented and managed by the Company (the “Financing”). Pursuant to the Agreement, \$3,000,000 of the Financing was used to cover the Company’s purchase of a portfolio of U.S. and foreign LED patents and a license from Intellectual Discovery Co., Ltd., a Korean company (collectively, the “LED Patent Portfolio”), resulting in a basis in these assets of \$0. A total of \$6,000,000 of the Financing was directed by BKI to attorneys to cover anticipated attorneys’ fees and out-of-pocket expenses for legal proceedings that may transpire relating to enforcement of the LED Patent Portfolio. This amount is not included in the Company’s financial statements as the Company has no control over these funds, which are segregated and escrowed in the attorneys’ trust account.

In addition, on November 14, 2016, the Company received \$4,500,000 of the Financing, which was required to be used by the Company to pay for the defense of *Inter Partes Review* or other similar proceedings that may be filed from time to time by defendants with the U.S. Patent & Trademark Office relating to the LED Patent Portfolio, with excess amounts available for general working capital needs. As of December 31, 2018, an aggregate of approximately \$2,054,000 is recorded as other liabilities by the Company, of which approximately \$1,780,000 is classified as short-term. Of this amount, the Company allocated \$2,500,000 which it subsequently adjusted to \$1,500,000 for the payment of estimated future *Inter Partes Review* costs. The Company will reduce this liability as it pays legal and other expenses related to the *Inter Partes Review* matters involving the LED Patent Portfolio as incurred. The remaining \$955,350 in other liabilities is allocated to working capital, which the Company is amortizing this amount on a pro-rata basis over the expected remaining life of the monetization period of the LED Patent Portfolio through November 31, 2019. For this amount, the Company reduced the liability with an offset to selling, general and administrative costs by \$47,500 per month from January 2017 through July 2017, \$80,000 per month through March 2018, and \$86,500 per month for the remainder of 2018. During the year ended December 31, 2018, there was \$371,000 of *Inter Partes Review* costs and an aggregate of \$1,021,650 was recorded as a reduction of the liability allocated to working capital.

On July 8, 2013, the Company’s subsidiary, DSS Technology Management, purchased two patents for \$500,000 covering certain methods and processes related to Bluetooth devices. In conjunction with the patent purchases, DSS Technology Management entered into a Proceed Right Agreement with certain investors pursuant to which DSS Technology Management initially received \$250,000 of a total of \$750,000 which it will ultimately receive thereunder, subject to certain payment milestones, in exchange for 40% of the proceeds which it receives, if any, from the use, sale or licensing of the two patents. As of December 31, 2018, the Company had received an aggregate of \$750,000 (\$650,000 in 2017) from the investors pursuant to the agreement of which approximately \$476,000 was in other liabilities in the consolidated balance sheets (\$432,000 as December 31, 2017). The Company will reduce the liability as it pays legal and other expenses related to its litigation involving the Bluetooth patents, for which the amount is available to be used for 50% of all such expenses.

As described in Note 7, on February 13, 2014, DSSTM entered into an Investment Agreement with Fortress. Pursuant to this agreement, an aggregate of \$459,000 of fixed and contingent equity interests received are recorded in current liabilities. The liabilities under the agreement matured on February 13, 2018. Per the agreement, the Investors have the right to take ownership of the patents as settlement of the liabilities upon maturity. On June 26, 2018, the parties entered into an agreement (see Note 7 “Other Debt”) which among other things eliminated the Company’s obligation for the fixed and contingent equity interests under the agreement.

NOTE 9 - STOCKHOLDERS’ EQUITY

On August 26, 2016, the Company affected a one-for-four reverse stock split of the Company’s common stock. All references in this report to the number of shares of our common stock and to related per-share prices (including references to periods prior to the effective date of the reverse stock split) reflect this reverse stock split.

Sales of Equity – On August 30, 2017, the Company sold 1,200,000 shares of unregistered common stock and five-year warrants to purchase up to an aggregate of 240,000 additional shares of the Company’s common stock at an exercise price of \$1.00 to a total of two related party accredited investors for an aggregate purchase price of \$900,000, of which \$300,000 was recorded as a subscription receivable as of December 31, 2017 in the stockholders equity section. On March 29, 2018, the Company received the payment of the \$300,000 subscription receivable from the investor, which is presented net of \$12,000 of financing costs.

On November 1, 2017, the Company issued 500,000 shares of its common stock, and a three-year warrant to purchase up to 125,000 additional shares of the Company’s common stock at an exercise price of \$1.00 per share, along with a cash payment of \$125,000, to Nix, Patterson & Roach LLP (“NPR”), a law firm, for the purpose of settling all accrued and outstanding billed and unbilled invoices for expenses owed by the Company to NPR of approximately \$714,000 in connection with various litigation matters handled by NPR on behalf of the Company. The warrants had an estimated aggregate fair value of approximately \$40,000 which was determined by utilizing the Black-Scholes-Merton option pricing model with a volatility of 89.1%, a risk free rate of return of 2.0% and zero dividend and forfeiture estimates. The aggregate estimated fair value of the cash payment and equity instruments issued to NPR was approximately \$495,000 which resulted in a reduction of approximately \$219,000 of legal expense recorded by the Company, and presented in general and administrative expenses on the Company’s financial statements, in conjunction with the agreement.

On July 3, 2018, the Company sold 214,286 shares of its common stock, par value \$0.02 per share, to a related party accredited investor, Heng Fai Holdings Limited. The purchase price was \$1.40 per share, for total proceeds of \$300,000.

On December 17, 2018, the Company sold 612,245 shares of its common stock, par value \$0.02 per share, to a related party accredited investor, Heng Fai Holdings Limited. The purchase price was \$0.98 per share, for total proceeds of \$600,000.

Stock Warrants –The following is a summary with respect to warrants outstanding and exercisable at December 31, 2018 and 2017 and activity during the years then ended:

	2018		2017	
	Warrants	Weighted Average Exercise Price	Warrants	Weighted Average Exercise Price
Outstanding at January 1:	2,645,090	\$ 10.98	2,812,515	\$ 11.20
Granted during the year	-	-	391,667	1.00
Lapsed/terminated	(1,214,974)	19.20	(559,092)	5.11
Outstanding at December 31:	1,430,116	\$ 4.00	2,645,090	\$ 10.98
Exercisable at December 31:	1,430,116	\$ 4.00	2,645,090	\$ 10.98
Weighted average months remaining		27.9		24.3

The Company did not issue any warrants in 2018. In 2017, the Company received an aggregate of approximately \$336,000 in proceeds from the exercise of warrants for 394,091 shares of the Company’s common stock.

Stock Options - On June 20, 2013 the Company’s shareholders adopted the 2013 Employee, Director and Consultant Equity Incentive Plan (the “2013 Plan”). The 2013 Plan provides for the issuance of up to a total of 1,500,000 shares of common stock authorized to be issued for grants of options, restricted stock and other forms of equity to employees, directors and consultants. Under the terms of the 2013 Plan, options granted thereunder may be designated as options which qualify for incentive stock option treatment (“ISOs”) under Section 422A of the Internal Revenue Code, or options which do not qualify (“NQSOs”).

The following is a summary with respect to options outstanding at December 31, 2018 and 2017 and activity during the years then ended:

	2018			2017		
	Number of Options	Weighted Average Exercise Price	Weighted Average Life Remaining (in years)	Number of Options	Weighted Average Exercise Price	Weighted Average Life Remaining (in years)
Outstanding at January 1:	482,667	10.72		635,597	9.33	
Granted	405,000	1.38		-	-	
Lapsed/terminated	(105,012)	4.96		(152,930)	9.67	
Outstanding at December 31:	782,655	6.66	3.2	482,667	10.72	3.3
Exercisable at December 31:	490,988	8.30	2.8	478,500	9.29	3.3
Expected to vest at December 31:	291,667	1.41	4.5	4,167	1.00	3.3
Aggregate intrinsic value of outstanding options at December 31:	\$ -			\$ 10,000		
Aggregate intrinsic value of exercisable options at December 31:	\$ -			\$ 6,667		
Aggregate intrinsic value of options expected to vest at December 31:	\$ -			\$ 3,333		

During the year ended December 31, 2018, the Company issued an aggregate of 405,000 options to purchase the Company's common stock at between \$1.30 and \$1.55 per share with a term of five years to employees at its technology, corporate and printed products divisions, as well as independent board members. For 265,000 options granted during 2018 the options vest pro-ratably as follows: 1/3 on the grant date, 1/3 on the first anniversary of the grant date and 1/3 on the second anniversary of the grant date. For the remaining 140,000 options granted during 2018 the options vest pro-ratably as follows: 1/3 on the first anniversary of the grant date, 1/3 on the second anniversary of the grant date and 1/3 on the third anniversary of the grant date.

The fair value of each option award is estimated on the date of grant utilizing the Black-Scholes-Merton Option Pricing Model. The Company estimates the expected volatility of the Company's common stock at the grant date using the historical volatility of the Company's common stock over the most recent period equal to the expected stock option term.

The following table shows our weighted average assumptions used to compute the share-based compensation expense for stock options and warrants granted during the year ended December 31, 2018. There were no options or warrants granted for compensation during the year ended December 31, 2017.

Volatility	98.20%
Expected option term	3.6 years
Risk-free interest rate	2.7%
Expected forfeiture rate	0.0%
Expected dividend yield	0.0%

The aggregate grant date fair value of options that vested during 2018 was approximately \$122,000 (\$417 -2017). There were no options exercised during 2018 or 2017.

Restricted Stock - Restricted common stock may be issued under the Company's 2013 Plan for services to be rendered which may not be sold, transferred or pledged for such period as determined by our Compensation Committee and Management Resources. Restricted stock compensation cost is measured as the stock's fair value based on the quoted market price at the date of grant. The restricted shares issued reduce the amount available under the employee stock option plans. Compensation cost is recognized only on restricted shares that will ultimately vest. The Company estimates the number of shares that will ultimately vest at each grant date based on historical experience and adjust compensation cost and the carrying amount of unearned compensation based on changes in those estimates over time. Restricted stock compensation cost is recognized ratably over the requisite service period which approximates the vesting period. An employee may not sell or otherwise transfer unvested shares and, if employment is terminated prior to the end of the vesting period, any unvested shares are surrendered to us. The Company has no obligation to repurchase any restricted stock.

The following is a summary of activity of restricted stock during the years ended at December 31, 2018 and 2017:

	Shares	Weighted - average Grant Date Fair Value
Restricted shares outstanding, December 31, 2016	231,000	\$ 0.56
Restricted shares granted	150,000	0.84
Restricted shares vested	(331,000)	0.84
Restricted shares outstanding, December 31, 2017	50,000	\$ 0.64
Restricted shares granted	-	
Restricted shares vested	(50,000)	0.64
Restricted shares outstanding, December 31, 2018	-	\$ -

The Company did not grant any restricted stock in 2018. On January 12, 2017, the Company issued an aggregate of 150,000 shares of restricted stock to members of the Company's management team of which 100,000 vested on May 17, 2017 and had an aggregated grant date fair value of approximately \$126,000. The remaining 50,000 vested if the Company achieved adjusted earnings before interest, taxes, depreciation and amortization (EBITDA) of at least \$500,000 and a stock trading price of at least \$1.00 per share by the close of the fourth quarter of 2017, both of which were achieved. These restricted shares vested in 2018.

Stock-Based Compensation - The Company records stock-based payment expense related to these options based on the grant date fair value in accordance with FASB ASC 718. Stock-based compensation includes expense charges for all stock-based awards to employees, directors and consultants. Such awards include option grants, warrant grants, and restricted stock awards. During 2018, the Company had stock compensation expense of approximately \$132,000 or \$0.01 basic earnings per share (\$215,000; \$0.01 basic earnings per share - 2017). As of December 31, 2018, there was approximately \$203,000 of total unrecognized compensation costs related to options granted under the Company's stock option plans, which the Company expects to recognize over a period of thirty four months.

NOTE 10 - INCOME TAXES

Following is a summary of the components giving rise to the income tax provision (benefit) for the years ended December 31:

The provision (benefit) for income taxes consists of the following:

	<u>2018</u>	<u>2017</u>
Currently payable:		
Federal	\$ -	\$ (16,694)
State	6,920	8,572
Total currently payable	<u>6,920</u>	<u>(8,122)</u>
Deferred:		
Federal	458,446	(410,402)
State	67,451	(58,001)
Foreign	(92,690)	-
Total deferred	<u>433,207</u>	<u>(468,403)</u>
Less: increase in allowance	(423,534)	524,381
Plus: effect of tax change	-	(68,818)
Net deferred	<u>9,673</u>	<u>(12,840)</u>
Total income tax provision (benefit)	<u>\$ 16,593</u>	<u>\$ (20,962)</u>

Individual components of deferred taxes are as follows:

	<u>2018</u>	<u>2017</u>
Deferred tax assets:		
Net operating loss carry forwards	\$ 10,135,005	\$ 10,173,774
Equity issued for services	152,240	146,029
Goodwill and other intangibles	788,288	828,506
Investment in pass-through entity	11,499	11,575
Deferred revenue	472,466	807,959
Other	<u>470,780</u>	<u>522,937</u>
Gross deferred tax assets	12,030,278	12,490,780
Deferred tax liabilities:		
Goodwill and other intangibles	33,333	-
Depreciation and amortization	31,512	62,288
Investment in pass-through entity	-	-
Gross deferred tax liabilities	<u>64,845</u>	<u>62,288</u>
Less: valuation allowance	<u>(12,134,419)</u>	<u>(12,554,474)</u>
Net deferred tax liabilities	<u>\$ (168,986)</u>	<u>\$ (125,982)</u>

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to, (1) reducing the U.S. federal corporate tax rate from 35 percent to 21 percent; (2) elimination of the corporate alternative minimum tax (AMT) and changing how existing AMT credits can be realized; and (3) changing rules related to usage and limitation of net operating loss carryforwards created in tax years beginning after December 31, 2017. The effect of the rate change attributable to the Tax Act on the Company's effective tax rate was 11.5% (or \$68,818) decrease in the net deferred tax liability.

The Tax Act repeals the corporate alternative minimum tax (AMT) and permits existing minimum tax credits carryovers to offset the regular tax liability for any tax year. Further, the credit is refundable for any tax year beginning after December 31, 2017 and before December 31, 2020 in an amount equal to 50 percent of the excess of the minimum tax credit over regular liability. Any remaining credit will be fully refundable for the year ended December 31, 2021. As of December 31, 2018, the Company had \$93,201 of minimum tax credit recorded as a deferred tax asset, which was reclassified as to a current and non-current receivable of \$46,600 and \$46,601 respectively.

The Company has approximately \$46.6 million in federal net operating loss carryforwards (“NOLs”) available to reduce future taxable income, which will expire at various dates from 2022 through 2037. Due to the uncertainty as to the Company’s ability to generate sufficient taxable income in the future and utilize the NOLs before they expire and any other deferred tax assets, the Company has recorded a valuation allowance accordingly. The Company’s NOLs are subject to annual limitations as a result of a change in its equity ownership as defined under the Internal Revenue Code Section 382. These limitations, as applicable, could further limit the use of the NOLs. The valuation allowance for deferred tax assets decreased by approximately \$424,000 in the year ended December 31, 2018. The decrease in the valuation allowance was primarily due to taxable income in the current year.

The Company has adopted the provisions of ASU 2016-09 as of the beginning of the year which requires recognition through opening retained earnings of any pre-adoption date NOL carryforwards from nonqualified stock options and other employee share-based payments (e.g., restricted shares and share appreciation rights), as well as recognition of all income tax effects from share-based payments arising on or after January 1, 2017 (our adoption date) in income tax expense. In light of the Company’s valuation allowance on its deferred tax assets there was no adjustment required to its retained earnings nor was there any windfall tax benefit to recognize in the Company’s income tax provision.

The differences between the United States statutory federal income tax rate and the effective income tax rate in the accompanying consolidated statements of operations are as follows:

	<u>2018</u>	<u>2017</u>
Statutory United States federal rate	21.0%	34.0%
State income taxes net of federal benefit	4.0	5.5
Permanent differences	2.2	0.8
Other	0.7	-
Foreign taxes	1.7	-
Tax rate change	-	11.5
Change in valuation reserves	<u>(28.5)</u>	<u>(48.3)</u>
Effective tax rate	<u>1.1%</u>	<u>3.5%</u>

The Company recognizes interest accrued and penalties related to unrecognized tax benefits in tax expense. During the years ended December 31, 2018 and 2017, the Company recognized no interest and penalties.

The Company files income tax returns in the U.S. federal jurisdiction and various states. The tax years 2015-2018 generally remain open to examination by major taxing jurisdictions to which the Company is subject.

Certain amounts in the note above and the associated amounts included in the balance sheet as of December 31, 2017 have been reclassified to conform to the December 31, 2018 presentation.

NOTE 11 - DEFINED CONTRIBUTION PENSION PLAN

The Company maintains a qualified employee savings plans (the “401(k) Plan”) that qualifies as a deferred salary arrangement under Section 401(k) of the Internal Revenue Code and which covers all eligible employees. Employees generally become eligible to participate in the 401(k) Plan two months following the employee’s hire date. Employees may contribute a percentage of their earnings, subject to the limitations of the Internal Revenue Code. Until December 31, 2017, the Company matched up to 50% of the employee’s contribution up to a maximum match of 3%. The total matching contributions for 2018 were approximately \$136,000 (\$103,000 -2017). Commencing on January 1, 2018, the Company matched 100% of the first 1% of employee contributions, then 50% of additional contributions up to an aggregate maximum match of 3.5%.

NOTE 12 – COMMITMENTS AND CONTINGENCIES

Facilities - Our corporate group and digital division together occupy approximately 5,700 square feet of commercial office space located at 200 Canal View Boulevard, Rochester, New York under a lease that expires in December 2020, at a rental rate of approximately \$6,100 per month. Our Plastics division leases approximately 15,000 square feet under a lease that expires January 1, 2024 for approximately \$19,400 per month. Our DSS Asia division leases commercial office space in Hong Kong under a lease that expires November 30, 2020 for approximately \$3,382 per month. In addition, the Company owns a 40,000 square foot packaging and printing plant in Victor, New York, a suburb of Rochester, New York. The Company believes that it can negotiate renewals or similar lease arrangements on acceptable terms when our current leases expire. We believe that our facilities are adequate for our current operations.

Equipment Leases – From time to time, the Company leases certain production and office equipment, digital and offset presses, laminating and finishing equipment for its various printing operations. The leases may be capital leases or operating leases and are generally for a term of 36 to 60 months. As of December 31, 2018, and 2017, the Company did not have any capitalized leases.

The following table summarizes the Company's lease commitments.

	Operating Leases		
	Equipment	Facilities	Total
Payments made in 2018	\$ 64,972	\$ 263,580	\$ 328,552
Future minimum lease commitments:			
2019	\$ 23,370	\$ 347,116	\$ 370,486
2020	12,555	343,963	356,518
2021	7,751	265,630	273,381
2022	1,176	254,682	255,858
Thereafter	-	262,322	262,322
Total future minimum lease commitments	\$ 44,852	\$ 1,473,713	\$ 1,518,565

Employment Agreements - The Company has employment or severance agreements with five members of its management team with terms ranging from one to five years through December 2019. The employment or severance agreements provide for severance payments in the event of termination for certain causes. As of December 31, 2018, the minimum severance payments under these employment agreements are, in aggregate, approximately \$510,000.

Legal Proceedings - On November 26, 2013, DSSTM filed suit against Apple, Inc. ("Apple") in the United States District Court for the Eastern District of Texas, for patent infringement (the "Apple Litigation"). The complaint alleges infringement by Apple of DSSTM's patents that relate to systems and methods of using low power wireless peripheral devices. DSSTM is seeking a judgment for infringement, injunctive relief, and compensatory damages from Apple. On October 28, 2014, the case was stayed by the District Court pending a determination of Apple's motion to transfer the case to the Northern District of California. On November 7, 2014, Apple's motion to transfer the case to the Northern District of California was granted. On December 30, 2014, Apple filed two Inter Partes Review ("IPR") petitions with the Patent Trial and Appeal Board ("PTAB") for review of the patents at issue in the case. The PTAB instituted the IPRs on June 25, 2015. The California District Court then stayed the case pending the outcome of those IPR proceedings. Oral arguments of the IPRs took place on March 15, 2016, and on June 17, 2016, PTAB ruled in favor of Apple on both IPR petitions. DSSTM then filed an appeal with the U.S. Court of Appeals for the Federal Circuit (the "Federal Circuit") seeking reversal of the PTAB decisions. Oral arguments for the appeal were held on August 9, 2017. On March 23, 2018, the Federal Circuit reversed the PTAB, finding that the PTAB erred when it found the claims of U.S. Patent No. 6,128,290 to be unpatentable. The Federal Circuit affirmed its decision on July 12, 2018, when it denied Apple's petition for panel rehearing of the Federal Circuit's Opinion and Judgment issued on March 23, 2018. On July 27, 2018, the District Court judge lifted the Stay resuming the litigation. The patent assets underlying this matter had no carrying value as of the date of the PTAB decision and therefore, there were no impairment considerations because of that earlier PTAB decision.

On February 16, 2015, DSSTM filed suit in the United States District Court, Eastern District of Texas, against defendants Intel Corporation, Dell, Inc., GameStop Corp., Conn's Inc., Conn Appliances, Inc., NEC Corporation of America, Wal-Mart Stores, Inc., Wal-Mart Stores Texas, LLC, and AT&T, Inc. The complaint alleges patent infringement and seeks judgment for infringement of two of DSSTM's patents, injunctive relief and money damages. On December 9, 2015, Intel filed IPR petitions with PTAB for review of the patents at issue in the case. Intel's IPRs were instituted by PTAB on June 8, 2016. On June 1, 2017, the PTAB ruled in favor of Intel for all the challenged claims. On July 28, 2017, DSSTM filed a notice of appeal of the PTAB's decision relating to U.S. Patent 6,784,552 with the Federal Circuit. Oral arguments for the appeal are scheduled for December 6, 2018. On January 8, 2019, DSSTM entered into a confidential settlement agreement with Intel Corporation, Dell Inc., GameStop Corp, Conn's Inc., Conn Appliances, Inc., Wal-Mart Stores, Inc., Wal-Mart Stores Texas, LLC and AT&T Mobility LLC (collectively, the "Defendants"). The Federal Circuit Appeal involving DSSTM and Intel was dismissed on January 16, 2019, and the District Court case against the Defendants was dismissed, as to all the Defendants, on February 5, 2019.

On July 16, 2015, DSS Technology Management filed three separate lawsuits in the United States District Court for the Eastern District of Texas alleging infringement of certain of its semiconductor patents. The defendants are SK Hynix et al., Samsung Electronics et al., and Qualcomm Incorporated. Each respective complaint alleges patent infringement and seeks judgment for infringement, injunctive relief and money damages. On November 12, 2015, SK Hynix filed an IPR petition with PTAB for review of the patent at issue in their case. SK Hynix's IPR was instituted by the PTAB on May 11, 2016. On August 16, 2016, DSS Technology Management and SK Hynix entered into a confidential settlement agreement ending the litigation between them. The pending SK Hynix IPR was then terminated by mutual agreement of the parties on August 31, 2016. On March 18, 2016, Samsung also filed an IPR petition, which was instituted by the PTAB. On September 20, 2017, PTAB ruled in favor of Samsung for all the challenged claims relating to U.S. Patent 6,784,552. DSS Technology Management then appealed this PTAB ruling to the Federal Circuit on November 17, 2017. The Federal Circuit joined this appeal with the Intel appeal effective on December 7, 2017. Qualcomm filed its IPR proceeding on July 1, 2016, which was then later joined with Intel's IPRs in August 2016 by PTAB. On June 1, 2017, the PTAB ruled in favor of Intel/Qualcomm for all the challenged claims. On July 28, 2017, DSS Technology Management filed a notice of appeal of the PTAB's decision relating to U.S. Patent 6,784,552 with the Federal Circuit. A confidential patent license agreement was executed by DSS Technology Management on November 14, 2018, covering Samsung and Qualcomm. On December 12, 2018, DSS Technology Management and Samsung entered into a confidential release. On December 27, 2018, DSS Technology Management and Qualcomm entered into a confidential settlement agreement. The DSS Technology Management - Samsung District Court case was dismissed on December 17, 2018. The DSS Technology Management - Samsung Federal Circuit Appeal was dismissed on January 2, 2019. The Federal Circuit Appeal involving DSS Technology Management and Qualcomm was dismissed on January 16, 2019. The DSS Technology Management - Qualcomm District Court case was dismissed on January 16, 2019. As a result, all of DSS Technology Management's litigation matters originally filed in the District Court for the Eastern District of Texas have been resolved and are now dismissed.

On April 13, 2017, the Company filed a patent infringement lawsuit against Seoul Semiconductor Co., Ltd. and Seoul Semiconductor, Inc. (collectively, "Seoul Semiconductor") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of the Company's Light-Emitting Diode ("LED") patents. The Company is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 7, 2017, the Company refiled its patent infringement complaint against Seoul Semiconductor in the United States District Court for the Central District of California, Southern Division. The case is currently pending. On December 3, 2017, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 6,949,771. This IPR was instituted by the PTAB on June 7, 2018. On December 21, 2017, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 7,256,486. This IPR was instituted by the PTAB on June 21, 2018. On January 25, 2018, Seoul Semiconductor filed an IPR challenging the validity of certain claims of U.S. Patent No. 7,524,087. This IPR was instituted by the PTAB on July 27, 2018. These challenged patents are the patents that are the subject matter of the infringement lawsuit which is still pending as of the date of this Report.

On April 13, 2017, the Company filed a patent infringement lawsuit against Everlight Electronics Co., Ltd. and Everlight Americas, Inc. (collectively, "Everlight") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of the Company's LED patents. The Company is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 8, 2017, the Company refiled its patent infringement complaint against Everlight in the United States District Court for the Central District of California. The case is currently pending as of the date of this Report. On June 8, 2018, Everlight filed IPR petitions challenging the validity of claims under U.S. Patent Nos. 7256486 and 7524087. On June 12, 2018, Everlight filed an IPR petition challenging the validity of claims under U.S. Patent No. 6949771, and on June 15, 2018, filed an IPR petition challenging the validity of claims under U.S. Patent No 7919787. These challenged patents are the patents that are the subject matter of the infringement lawsuit. On January 18, 2019, the Company and Everlight entered into a confidential settlement agreement resolving the litigation which was not material to the Company.

On April 13, 2017, the Company filed a patent infringement lawsuit against Cree, Inc. ("Cree") in the United States District Court for the Eastern District of Texas, alleging infringement of certain of the Company's LED patents. The Company is seeking a judgement for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On June 8, 2017, the Company refiled its patent infringement complaint against Cree in the United States District Court for the Central District of California, and thereafter filed a first amended complaint for patent infringement against Cree in that same court on July 14, 2017. The case is currently pending as of the date of this Report. On June 6, 2018, Cree filed an IPR petition challenging the validity of claims under U.S. Patent No. 7256486. On June 7, 2018, Cree filed IPR petitions challenging the validity of claims under U.S. Patent Nos. 7524087 and 6949771. The 7256486 IPR filing has been terminated and joined with one filed by Seoul Semiconductor relating to the same patent. Cree has also filed for joinder with Nichia's IPR relating to 7256486. Institution has been denied for each of the other IPRs filed by Cree. These challenged patents are the patents that are the subject matter of the infringement lawsuit. The case is currently pending as of the date of this report.

On July 13, 2017, DSS filed a patent infringement lawsuit against Osram GMBH, Osram OPTO Semiconductors GMBH & Co., and Osram Sylvania Inc. (collectively, "Osram") in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. DSS is seeking a judgment for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. On February 21, 2018, the Company and Osram executed a confidential settlement agreement ending the litigation between them. On March 14, 2018, the District Court case between the Company and Osram was dismissed.

On August 15, 2017, DSS filed a patent infringement lawsuit against Lite-On, Inc., and Lite-On Technology Corporation in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. The Company is seeking a judgment for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. The case is currently pending as of the date of this Report.

On December 7, 2017, DSS filed a patent infringement lawsuit against Nichia Corporation and Nichia America Corporation in the United States District Court for the Central District of California, alleging infringement of certain of DSS's LED patents. The Company is seeking a judgment for infringement of the patents along with other relief including, but not limited to, money damages, costs and disbursements. The case is currently pending as of the date of this Report. On May 10, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7919787. On May 11, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7652297. On May 25, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7524087. On May 29, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 6949771. On May 30, 2018, Nichia filed an IPR petition challenging the validity of claims under U.S. Patent No. 7256486. The 6949771 IPR was denied institution, but the remaining IPRs were instituted by the PTAB. On December 10, 2018, Nichia refiled IPRs relating to 6949771, which are pending as of the date of this report. These challenged patents are the patents that are the subject matter of the infringement lawsuit.

In addition to the foregoing, we may become subject to other legal proceedings that arise in the ordinary course of business and have not been finally adjudicated. Adverse decisions in any of the foregoing may have a material adverse effect on our results of operations, cash flows or our financial condition. The Company accrues for potential litigation losses when a loss is probable and estimable.

Contingent Litigation Payments – The Company retains the services of professional service providers, including law firms that specialize in intellectual property licensing, enforcement and patent law. These service providers are often retained on an hourly, monthly, project, contingent or a blended fee basis. In contingency fee arrangements, a portion of the legal fee is based on predetermined milestones or the Company's actual collection of funds. The Company accrues contingent fees when it is probable that the milestones will be achieved, and the fees can be reasonably estimated. As of December 31, 2018, the Company had not accrued any contingent legal fees pursuant to these arrangements.

Contingent Payments – The Company is party to certain agreements with funding partners who have rights to portions of intellectual property monetization proceeds that the Company receives. As of December 31, 2018, there are no contingent payments due.

NOTE 13 - SUPPLEMENTAL CASH FLOW INFORMATION

Supplemental cash flow information for the years ended December 31:

	<u>2018</u>	<u>2017</u>
Cash paid for interest	\$ 133,000	\$ 127,000
Non-cash investing and financing activities:		
Gain from change in fair value of interest rate swap derivatives	\$ 16,000	\$ 10,000
Common Stock issued for investment	-	485,000
Elimination of contingent liabilities through agreement	459,000	-
Purchase of intangible assets to be paid in installments	304,000	-
Purchase of intangible assets with term note inclusive of tax	119,065	-

NOTE 14 - SEGMENT INFORMATION

The Company's businesses are organized, managed and internally reported as five operating segments. Two of these operating segments, Packaging and Printing, and Plastics are engaged in the printing and production of paper, cardboard and plastic documents with a wide range of features, including the Company's patented technologies and trade secrets designed for the protection of documents against unauthorized duplication and altering. The three other operating segments, DSS Digital Group, DSS Technology Management, and DSS International, which was added in 2017, are engaged in various aspects of developing, acquiring, selling and licensing technology assets and are grouped into one reportable segment called Technology.

Approximate information concerning the Company's operations by reportable segment for the years ended December 31, 2018 and 2017 is as follows. The Company relies on intersegment cooperation and management does not represent that these segments, if operated independently, would report the results contained herein:

<u>Year Ended December 31, 2018</u>	<u>Packaging and Printing</u>	<u>Plastics</u>	<u>Technology</u>	<u>Corporate</u>	<u>Total</u>
Revenue	\$ 12,957,000	\$ 3,983,000	\$ 1,575,000	\$ -	\$ 18,515,000
Depreciation and amortization	775,000	159,000	346,000	2,000	1,282,000
Interest expense	(89,000)	(24,000)	(13,000)	(19,000)	(145,000)
Amortized Debt Discount	(2,000)	-	(22,000)	(22,000)	(46,000)
Stock based compensation	6,000	-	99,000	27,000	132,000
Income tax benefit	-	-	-	17,000	17,000
Net Income (loss)	785,000	28,000	1,761,000	(1,109,000)	1,465,000
Capital Expenditures	643,000	305,000	54,000	1,000	1,003,000
Identifiable assets	9,643,000	3,492,000	1,085,000	1,060,000	15,280,000
<u>Year Ended December 31, 2017</u>	<u>Packaging and Printing</u>	<u>Plastics</u>	<u>Technology</u>	<u>Corporate</u>	<u>Total</u>
Revenue	\$ 12,556,000	\$ 4,470,000	\$ 1,636,000	\$ -	\$ 18,662,000
Depreciation and amortization	663,000	134,000	614,000	3,000	1,414,000
Interest Expense	(107,000)	-	(62,000)	(54,000)	(223,000)
Amortized Debt Discount	(1,000)	-	(131,000)	(22,000)	(154,000)
Stock based compensation	-	-	40,000	175,000	215,000
Income tax benefit	-	-	-	(21,000)	(21,000)
Net Income (loss)	1,453,000	385,000	(1,219,000)	(1,197,000)	(578,000)
Capital Expenditures	439,000	520,000	-	-	959,000
Identifiable assets	9,331,000	2,933,000	1,725,000	3,442,000	17,431,000

International revenue, which consists of sales to customers with operations in Canada, Western Europe, Latin America, Africa, the Middle East and Asia comprised 3.4% of total revenue for 2018 (3.2% - 2017). Revenue is allocated to individual countries by customer based on where the product is shipped. The Company had no long-lived assets in any country other than the United States for any period presented.

The following tables disaggregate our business segment revenues by major source.

Printed Products Revenue Information:

Twelve months ended December 31, 2018

Packaging Printing and Fabrication	\$	11,741,000
Commercial and Security Printing		1,241,000
Technology Integrated Plastic Cards and Badges		1,354,000
Plastic Cards, Badges and Accessories		2,604,000
Total Printed Products	\$	<u>16,940,000</u>

Twelve months ended December 31, 2017

Packaging Printing and Fabrication	\$	11,450,000
Commercial and Security Printing		1,105,000
Technology Integrated Plastic Cards and Badges		1,902,000
Plastic Cards, Badges and Accessories		2,569,000
Total Printed Products	\$	<u>17,026,000</u>

Technology Sales, Services and Licensing Revenue Information:

Twelve months ended December 31, 2018

Information Technology Sales and Services	\$	345,000
Digital Authentication Products and Services		772,000
Royalties from Licensees		458,000
Total Technology Sales, Services and Licensing	\$	<u>1,575,000</u>

Twelve months ended December 31, 2017

Information Technology Sales and Services	\$	458,000
Digital Authentication Products and Services		512,000
Royalties from Licensees		666,000
Total Technology Sales, Services and Licensing	\$	<u>1,636,000</u>

NOTE 15 – SUBSEQUENT EVENTS

On February 18, 2019, the Company entered into a \$500,000 Convertible Promissory Note (the "Note") with LiquidValue Development Pte Ltd in the principal sum of \$500,000 convertible into shares of the Company's Common stock at a conversion price of \$1.12 per share. The Note carries a fixed interest rate of 8% per annum and has a term of 12-months. Accrued interest is payable in cash in arrears on the last day of each calendar quarter, with the first interest payment due on June 30, 2019, and remains payable until the Note is paid in full or is converted. The proceeds of the note were used to purchase a license to distribute anti-keylogging spyware product in Asia from Advanced Cyber Security Corp. and to fund the costs of the initial set-up of the Company's marketing and distribution infrastructure for the product line.

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

None.

ITEM 9A - CONTROLS AND PROCEDURES

Evaluation of Disclosure Controls and Procedures

An evaluation was carried out under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) and Rule 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the year covered by this Report. Based on their evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were not effective as of such date.

Management's Annual Report on Internal Control over Financial Reporting

Our management, including our Chief Executive Officer and Principal Financial Officer, assessed the effectiveness of the Company's internal control over financial reporting as of December 31, 2018. In making this assessment, our management used the framework established in "Internal Control—Integrated Framework" promulgated by the Committee of Sponsoring Organizations of the Treadway Commission in 2013, commonly referred to as the "COSO" criteria. Based on our assessment, we concluded that, as of December 31, 2018, our internal control over financial reporting was not effective based on those criteria.

In connection with management's assessment of our internal control over financial reporting described above, management has identified the following weakness in the Company's internal control over financial reporting as of December 31, 2018:

The Company did not maintain a sufficient complement of qualified accounting personnel and controls associated with segregation of duties.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

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 rules of the Securities and Exchange Commission that permit us to provide only management's report in this annual report.

Remediation of the Material Weaknesses

The Company is in the process of remediating the material weaknesses in order to strengthen our overall internal controls. Such remediation plan includes the following:

- The Company has hired a Vice President of Finance for its Printed Products group, who will also be utilized to assist in the Company's financial reporting process.
- The Company has hired an accounting firm to assist with its internal control evaluation with the intention of creating plans and recommendations for reconfiguration of existing staff roles and staff additions within the Company's financial reporting department.
- Enhancing the timeliness, formality and rigor of our financial statement preparation, review and reporting process.
- Enhancing our review process for significant accounts, transactions and reconciliations to provide controls to mitigate segregation of duties issues.

The Company is committed to maintaining a strong internal control environment and believes that these remediation efforts will represent significant improvements in our controls. The Company has started to implement these steps, however, some of these steps will take time to be fully integrated and confirmed to be effective and sustainable. Additional controls may also be required over time. Until the remediation steps set forth above are fully implemented and tested, the material weaknesses described above will continue to exist.

Changes in Internal Control over Financial Reporting

While changes in the Company's internal control over financial reporting occurred during the quarter ended December 31, 2018 as the Company began implementation of the remediation steps described above, we believe that there were no changes in the Company's internal control over financial reporting during the quarter ended December 31, 2018, that have materially affected, or are reasonably likely to materially affect, the Company's internal control over financial reporting.

ITEM 9B - OTHER INFORMATION

We intend to hold our 2019 Annual Meeting of Stockholders sometime between May and June of 2019.

PART III

ITEM 10 - DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by this Item will be contained in our Proxy Statement for our 2019 Annual Stockholders Meeting (the "Proxy Statement"), which we intend to file with the Securities and Exchange Commission within 120 days after December 31, 2018, and which will be incorporated by reference herein.

We have adopted codes of business conduct and ethics for all of our employees, including our principal executive officer, principal financial officer, principal accounting officer, and directors. Our codes of business conduct and ethics are available on our Web site at www.dsssecure.com.

Our Web site and the information contained therein or incorporated therein are not intended to be incorporated into this Annual Report on Form 10-K or our other filings with the SEC.

ITEM 11 - EXECUTIVE COMPENSATION

The information required by this Item will be contained in our Proxy Statement and incorporated by reference herein.

ITEM 12 - SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information required by this Item will be contained in our Proxy Statement and incorporated by reference herein.

ITEM 13 - CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be contained in our Proxy Statement and incorporated by reference herein.

ITEM 14 - PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item will be contained in our Proxy Statement and incorporated by reference herein.

PART IV

ITEM 15 – EXHIBITS, FINANCIAL STATEMENT SCHEDULES

(b) Exhibits

Exhibit	Description
3.1	Certificate of Incorporation of Document Security Systems, Inc., as amended (incorporated by reference to exhibit 3.1 to Form 8-K dated August 25, 2016).
3.2	Fourth Amended and Restated By-laws of Document Security Systems, Inc. (incorporated by reference to exhibit 3.1 to Form 8-K dated June 22, 2018).
10.1	Document Security Systems, Inc. 2013 Employee, Director and Consultant Equity Incentive Plan (incorporated by reference to Annex H to Proxy Statement/Prospectus contained in the Registration Statement on Form S-4 originally filed with the SEC on November 26, 2012).
10.2	Investment Agreement dated as of February 13, 2014 by and among DSS Technology Management, Inc., Document Security Systems, Inc., Fortress Credit Co LLC and the Investors named therein (incorporated by reference to exhibit 10.1 to Form 8-K dated February 18, 2014).
10.3	Form of Securities Purchase Agreement for September 2015 Financing (incorporated by reference to exhibit 10.1 to Form 8-K dated September 17, 2015).
10.4	Form of Common Stock Purchase Warrant for September 2015 Financing (incorporated by reference to exhibit 10.2 to Form 8-K dated September 17, 2015).
10.5	Form of amended Securities Purchase Agreement for September 2015 Financing (incorporated by reference to exhibit 10.1 to Form 8-K dated October 2, 2015).
10.6	Form of amended Securities Purchase Agreement (incorporated by reference to exhibit 10.1 to Form 8-K dated November 30, 2015).
10.7	Patent Purchase Agreement between Document Security Systems, Inc. and Intellectual Discovery Co., Ltd. dated November 10, 2016 (incorporated by reference to exhibit 10.28 to Form 10-K dated March 28, 2017).
10.8	Patent License Agreement between Document Security Systems, Inc. and Intellectual Discovery Co., Ltd. dated November 10, 2016 (incorporated by reference to exhibit 10.29 to Form 10-K dated March 28, 2017).
10.9	Proceeds Investment Agreement between Document Security Systems, Inc. and Brickell Key Investments LP dated November 14, 2016 (incorporated by reference to exhibit 10.30 to Form 10-K dated March 28, 2017).
10.10	Common Stock Purchase Warrant between Document Security Systems, Inc. and Brickell Key Investments LP dated November 14, 2016 (incorporated by reference to exhibit 10.31 to Form 10-K dated March 28, 2017).
10.11	First Amendment to Investment Agreement and Certain Other Documents between DSS Technology Management, Inc., Document Security Systems, Inc., Fortress Credit Co LLC and Investors dated December 2, 2016 (incorporated by reference to exhibit 10.32 to Form 10-K dated March 28, 2017).
10.12	Form of Loan Agreement between Premier Packaging Corporation and Citizens Bank, N.A. (incorporated by reference to exhibit 10.1 to Form 8-K dated July 28, 2017).
10.13	Form of Term Note Non-Revolver Line of Credit Agreement between Premier Packaging Corporation and Citizens Bank, N.A. (incorporated by reference to exhibit 10.2 to Form 8-K dated July 28, 2017).
10.14	Form of Security Agreement between Premier Packaging Corporation and Citizens Bank, N.A. (incorporated by reference to exhibit 10.3 to Form 8-K dated July 28, 2017).
10.15	Form of Common Stock Purchase Warrant (incorporated by reference to exhibit 4.1 to Form 8-K dated September 6, 2017).
10.16	Form of Securities Purchase Agreement (incorporated by reference to exhibit 10.1 to Form 8-K dated September 6, 2017).
10.17	Employment Agreement dated September 11, 2017 (incorporated by reference to exhibit 10.1 to Form 8-K dated September 13, 2017).
10.18	Securities Exchange Agreement, dated September 12, 2017, between Document Security Systems, Inc. and Hengfai Business Development Pte. Ltd. (incorporated by reference to exhibit 10.1 to Form 8-K dated September 15, 2017).
10.19	Form of Loan Agreement between Plastic Printing Professionals, Inc. and Citizens Bank, N.A. (incorporated by reference to exhibit 10.1 to Form 8-K dated December 6, 2017).
10.20	Form of Term Note Non-Revolver Line of Credit Agreement between Plastic Printing Professionals, Inc. and Citizens Bank, N.A. (incorporated by reference to exhibit 10.2 to Form 8-K dated December 6, 2017).
10.21	Form of Security Agreement between Plastic Printing Professionals, Inc. and Citizens Bank, N.A. (incorporated by reference to exhibit 10.3 to Form 8-K dated December 6, 2017).

- 10.22 [Consulting Agreement between Document Security Systems, Inc. and Pamela Avallone \(incorporated by reference to exhibit 10.1 to Form 8-K dated February 16, 2018\).](#)
- 10.23 [Non-Compete Letter Agreement between Document Security Systems, Inc. and Robert Bzdick dated July 31, 2018 \(incorporated by reference to exhibit 10.1 to Form 8-K dated August 3, 2018\).](#)
- 10.24 [Equipment Purchase Agreement between Premier Packaging Corporation and Bobst North America Inc., dated December 7, 2018 \(incorporated by reference to exhibit 10.1 to Form 8-K dated December 10, 2018\).](#)
- 10.25 [Convertible Promissory Note between Document Security Systems, Inc. and LiquidValue Development Pte Ltd dated February 18, 2019 \(incorporated by reference to exhibit 10.1 to Form 8-K dated February 22, 2019\).](#)
- 21.1 [Subsidiaries of Document Security Systems, Inc.*](#)
- 23.1 [Consent of Freed Maxick CPAs, P.C.*](#)
- 31.1 [Rule 13a-14\(a\)/15d-14\(a\) Certification of Chief Executive Officer.*](#)
- 31.2 [Rule 13a-14\(a\)/15d-14\(a\) Certification of Chief Financial Officer.*](#)
- 32.1 [Certification of Chief Executive Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*](#)
- 32.2 [Certification of Chief Financial Officer pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*](#)
- 101.INS XBRL Instance Document*
- 101.SCH XBRL Taxonomy Extension Schema Document*
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document*
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document*
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document*
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document*

* Filed herewith

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.

DOCUMENT SECURITY SYSTEMS, INC.

March 15, 2019

By: /s/ Jeffrey Ronaldi
Jeffrey Ronaldi
Chief Executive Officer
(Principal Executive Officer)

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

March 15, 2019

By: /s/ Jeffrey Ronaldi
Jeffrey Ronaldi
Chief Executive Officer and Chairman of the Board
(Principal Executive Officer)

March 15, 2019

By: /s/ Philip Jones
Philip Jones
Chief Financial Officer (Principal Financial Officer)

March 15, 2019

By: /s/ Heng Fai Ambrose Chan
Heng Fai Ambrose Chan
Director and CEO of DSS International, Inc.

March 15, 2019

By: /s/ Joseph Sanders
Joseph Sanders
Director

March 15, 2019

By: /s/ Pamela Avallone
Pamela Avallone
Director

March 15, 2019

By: /s/ Clark Marcus
Clark Marcus
Director

March 15, 2019

By: /s/ Frank Heuszel
Frank Heuszel
Director

March 15, 2019

By: /s/ Daniel DelGiorno
Daniel DelGiorno
Director

SUBSIDIARIES OF REGISTRANT

Name	State of Incorporation
DSS Administrative Group, Inc.	(New York)
Plastic Printing Professionals, Inc.	(New York)
Secuprint Inc.	(New York)
Premier Packaging Corporation	(New York)
DSS Digital Inc.	(New York)
DSS Technology Management, Inc.	(Delaware)
DSS International Inc.	(Nevada)
DSS Asia Limited	(Hong Kong)
DSS Cyber Security Pte Ltd	(Singapore)

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the Registration Statement (No. 333-190870) on Form S-8 of Document Security Systems, Inc. of our report dated March 15, 2019, relating to the consolidated financial statements of Document Security Systems, Inc. and Subsidiaries, appearing in the Annual Report on Form 10-K of Document Security Systems, Inc. for the year ended December 31, 2018.

/s/ FREED MAXICK CPAs, P.C.

Rochester, New York

March 15, 2019

RULE 13a-14(a)/15d-14(a) CERTIFICATION OF CHIEF EXECUTIVE OFFICER

I, Jeffrey Ronaldi, certify that:

1. I have reviewed this annual report on Form 10-K of Document Security Systems, Inc. for the year ended December 31, 2018.

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

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

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

- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2019

/s/ Jeffrey Ronaldi

Jeffrey Ronaldi
Chief Executive Officer
(Principal Executive Officer)

RULE 13a-14(a)/15d-14(a) CERTIFICATION OF CHIEF FINANCIAL OFFICER

I, Philip Jones, certify that:

1. I have reviewed this annual report on Form 10-K of Document Security Systems, Inc. for the year ended December 31, 2018.

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

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

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

- a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
- b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
- c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
- d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):

- a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
- b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 15, 2019

/s/ Philip Jones

Philip Jones

Chief Financial Officer

(Principal Financial and Accounting Officer)

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

In connection with the Annual Report of Document Security Systems, Inc. (the "Company") on Form 10-K for the year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jeffrey Ronaldi, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my 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 result of operations of the Company.

Date: March 15, 2019

/s/ Jeffrey Ronaldi

Jeffrey Ronaldi

Chief Executive Officer

(Principal Executive Officer)

CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO

18 U.S.C. SECTION 1350,

AS ADOPTED PURSUANT TO

SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report of Document Security Systems, Inc. (the "Company") on Form 10-K for the year ended December 31, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Philip Jones, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my 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 result of operations of the Company.

Date: March 15, 2019

/s/ Philip Jones

Philip Jones

Chief Financial Officer

(Principal Financial and Accounting Officer)
