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

FORM 10-K

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

For the fiscal year ended December 31, 2017

☐ 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 0-5576

SPHERIX INCORPORATED
(Exact name of Registrant as specified in its Charter)

Delaware (State or other jurisdiction of incorporation or organization)	52-0849320 (I.R.S. Employer Identification No.)
One Rockefeller Plaza, 11th Floor New York, NY 10020 (Address of principal executive offices)	703-992-9325 (Registrant's telephone number, including area code)

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

Title of each class	Name of each exchange on which registered
Common Stock ($0.0001 par value per share)	The NASDAQ Capital Market

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

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T 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 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. Yes ☒ No ☐

Indicate by check mark whether the Registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large Accelerated Filer ☐ Accelerated Filer ☐ Non-accelerated Filer (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. ☐

The aggregate market value of the voting stock held by non-affiliates of the registrant as of the last business day of the registrant's most recently completed second fiscal quarter ended June 30, 2017: $12,833,746 based upon the closing sale price of our common stock of $2.60 on that date. Common stock held by each officer and director and by each person known to own in excess of 5% of outstanding shares of our common stock has been excluded in that such persons may be deemed to be affiliates. The determination of affiliate status in not necessarily a conclusive determination for other purposes.

There were 8,517,120 shares of the Registrant's Common Stock outstanding as of March 28, 2018.

TABLE OF CONTENTS

PART I

SPECIAL CAUTIONARY NOTICE REGARDING FORWARD LOOKING STATEMENTS

This Annual Report on Form 10-K contains “forward looking statements” within the meaning of Section 27A of the Securities Act of 1933, as amended (the “Securities Act”) and Section 21E of the Securities Exchange Act of 1934, as amended (the “Exchange Act”). Forward looking statements are often identified by the words “will,” “may,” “believes,” “estimates,” “expects,” “intends,” “plans,” “projects” and words of similar import. Such words and expressions are intended to identify such forward-looking statements, but are not intended to constitute the exclusive means of identifying such statements. Such forward looking statements involve known and unknown risks, uncertainties and other factors, including those described in “Risk Factors” below that may cause our actual results, performance or achievements, or industry results, to be materially different from any future results, performance or achievements expressed or implied by such forward looking statements. Given these uncertainties, prospective investors are cautioned not to place undue reliance on such forward-looking statements.

All references in this Annual Report on Form 10-K to “we,” “us,” “our” and the “Company” refer to Spherix Incorporated, a Delaware corporation and its consolidated subsidiaries unless the context requires otherwise.

Item 1. BUSINESS.

General

Spherix Incorporated is a technology development company committed to the fostering of innovative ideas. To that end, we own patented and unpatented intellectual property in the technology sphere. Spherix Incorporated was formed in 1967 as a scientific research company and for much of our history pursued drug development, including through Phase III clinical studies, which were largely discontinued in 2012. In 2012 and 2013, we shifted our focus to being a firm that owns, develops, acquires and monetizes intellectual property assets. Such monetization includes, but is not limited to, acquiring IP from patent holders in order to maximize the value of the patent holdings by conducting and managing a licensing campaign, commercializing the IP, or through the settlement and litigation of patents. We intend to generate revenues and related cash flows from the granting of intellectual property rights for the use of patented technologies that we own, that we manage for others, or that others manage on our behalf by agreement. To date, we have generated minimal revenues and no assurance can be provided that our business model will be successful.

In addition to our patent monetization efforts, since the fourth quarter of 2017, we have been transitioning to a blockchain technology development company. The Company made no investments in new IP during 2017 and started the transition with its investment in Hoth Therapeutics, Inc. during the 3rd quarter of 2017, and with its entry into an agreement with DatChat, Inc. in March 2018. Since March 1, 2013, the Company has received limited funds from its IP monetization. See “Recent Developments”.

Patent Monetization Activities

In July 2013, we acquired 7 patents in the field of mobile communications from Rockstar Consortium US LP (“Rockstar”). This acquisition represented the first transaction believed to have been completed by Rockstar with any publicly traded company. Rockstar was launched in 2011 as an intellectual property licensing company to manage a patent portfolio related to the pre-bankruptcy technology and businesses of Nortel Networks (“Nortel”). Rockstar was formed by Apple, Inc., Microsoft Corporation, Sony Corporation, Blackberry Limited and LM Ericsson Telephone Company.

In September 2013, we acquired North South Holdings, Inc. (“North South”) and its 222 patents in the fields of wireless communications, satellite, solar, and radio frequency and 2 patents in the field of pharmaceutical distribution. The 222 patents were developed by Harris Corporation, a leader in defense communications and electronics and acquired by North South prior to our acquisition of North South.

In December 2013, we acquired an additional 101 patents and patent applications from Rockstar in consideration for approximately $60 million of our securities consisting of common stock and preferred stock. The patents had been developed by Nortel and acquired by Rockstar following Nortel’s bankruptcy in 2011. The December 2013 acquisition included patents covering internet access and video and data transmission, among other things. We believe that many of these Nortel/Rockstar patents are standard essential patents, meaning they potentially cover various industry standards in wide use (although there is no assurance that a court or third-party would agree with such description).

Since our shift in focus to an intellectual property monetization platform, we have not generated any significant revenues. We have incurred losses from operations for the years ended December 31, 2017 and 2016 of $3.8 million and $8.6 million, respectively. Our accumulated deficit was $145.1 million at December 31, 2017.

On November 23, 2015, we and RPX Corporation (“RPX”) entered into a Patent License Agreement (the “RPX License Agreement”) under which the Company granted RPX the right to sublicense various patent license rights to certain RPX clients. The consideration to the Company included: (i) the transfer to the Company for cancellation of its remaining outstanding Series I Redeemable Convertible Preferred Stock (the “Series I Preferred Stock”) then held by RPX, as to which a $5,000,000 mandatory redemption payment would have been due from the Company on or by December 31, 2015; (ii) the transfer to the Company for cancellation of 13%, or 57,076 shares, of its Series H Convertible Preferred Stock (the “Series H Preferred Stock”) then held by RPX, having a total carrying amount of $4,765,846 at the time the stock was issued to Rockstar; (iii) cancellation of the only outstanding security interest on 101 of the Company’s patents and patent applications acquired from Rockstar that originated at Nortel, which security interest had previously been transferred to RPX by Rockstar (“RPX Security Interest”); and (iv) $300,000 in cash to the Company.

In consideration of the above, we granted RPX the rights to grant: (i) to Juniper Networks, Inc. ("Juniper"), a non-sublicensable, non-transferrable sublicense solely to use the six patents that had been asserted against Juniper by the Company ("Asserted Patents"); and (ii) to Apple, Blackberry, Cisco, Google, Huawei, Ericsson, Microsoft and Sony, to the extent those parties did not already have licenses to our patents, a non-sublicensable, non-transferrable sublicense to use our existing portfolio. Prior to our ownership of the patents originating at Nortel, each of Apple, Blackberry, Ericsson, Microsoft and Sony had previously been granted full licenses to those patents. In addition, we separately granted Huawei a license with respect to Huawei's network routers and switches. We also granted RPX the rights to grant Cisco and Google a sublicense under patents transferred to us through November 23, 2017. We have since dismissed our then-existing litigations against Cisco and Juniper and Cisco requested dismissal of its two petitions requesting *inter partes* re-examination ("IPR") of certain of our patents at the Patent Trial and Appeal Board ("PTAB") of the United States Patent and Trademark Office.

Further, we agreed, until May 23, 2016 (the "Standstill Period") that: (a) we and RPX would engage in good faith negotiations for the grant of additional license rights to RPX's other members in exchange for additional consideration to us; (b) we would not divest, transfer, or exclusively license any of our current patents; (c) neither RPX nor any RPX affiliate would challenge, or knowingly and intentionally assist others in challenging, the validity, enforceability, or patentability of any of our patents in any court or administrative agency having jurisdiction to consider the issue; and (d) we would not bring an action against current RPX clients for patent infringement.

Following the Standstill Period, as a result of the release of the RPX Security Interest, the patents may be leveraged, divested, transferred or exclusively licensed in a manner that is beneficial to us and our stockholders. We retained the right to bring claims under the patents at any time against other parties who are not licensees or beneficiaries under the RPX License. We also retained rights, following the Standstill Period, to bring claims under the patents against current RPX clients who did not become licensees or beneficiaries during the Standstill Period and, with respect to Juniper, under all of the patents other than the six Asserted Patents.

In March 2016, we entered into an agreement (which was subsequently amended in April and May 2016) with Equitable IP Corporation ("Equitable") to facilitate the monetization of our patents (the "Monetization Agreement"). Pursuant to the Monetization Agreement, the Company is working together with Equitable to further develop and revise our ongoing litigation plan. See Note 5 to the Company's audited financial statements for additional details surrounding the Monetization Agreement.

On May 23, 2016, we and RPX, entered into a second, separate Patent License Agreement (the "Second RPX License") under which we granted RPX the right to sublicense various patent rights only to current RPX clients (as of May 23, 2016). In exchange for the rights we granted under the Second RPX License, we received the following consideration: (i) a cash payment made to us in May 2016 in the amount of $4,355,000; and (ii) cancellation of the remaining 381,967 shares of our outstanding Series H Convertible Preferred Stock currently held by RPX, having a total carrying amount of $31,894,244 at the time the stock was issued to Rockstar.

In consideration of the above, we granted RPX the rights to grant to its current clients: (i) a fully paid portfolio license, to the extent such parties did not already have licenses to the Company's patents; (ii) a covenant-not-to-sue current RPX clients for supply of chipsets; (iii) a standstill of litigation involving any patents acquired in the next five years.

In connection with the Second RPX License, we also granted to Alcatel-Lucent a license to the portfolio acquired from North South.

Under a separate agreement between us and RPX, we granted RPX the ability to grant to VTech Telecommunications Ltd. ("VTech") a sublicense for a fully paid portfolio license in exchange for an additional $20,000 in cash consideration.

The license granted under the terms of the RPX License described herein does not extend to entities/companies that are not clients of RPX and provide chipsets or other hardware to current RPX clients.

In January of 2017, we settled our patent litigation against Uniden Corporation and Uniden America Corporation (collectively "Uniden") and granted Uniden a license limited to the patents we originally asserted against Uniden and VTech, including U.S. Patent Nos. 5,581,599 (the "599 Patent"); 5,752,195; 5,892,814; 6,614,899; and 6,965,614. On July 25, 2017, after full briefing and oral argument, the Federal Circuit issued an order affirming the PTAB's decision finding invalid eight of the 15 asserted claims of the '599 Patent.

Recent Developments

Acquisition of shares of Hoth Therapeutics, Inc.

On June 30, 2017, we entered into a Securities Purchase Agreement (the "Purchase Agreement") with Hoth Therapeutics, Inc., a Nevada corporation ("Hoth"), for the purchase of an aggregate of 6,800,000 shares of common stock, par value $0.0001 (the "Shares"), of Hoth, for a purchase price of $675,000. As of June 30, 2017 and December 31, 2017, Hoth had approximately 17 million shares and 19 million shares of common stock issued and outstanding, respectively. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth's primary asset is a sublicense agreement with Chelexa Biosciences, Inc. ("Chelexa") pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema. Hoth intends to develop BioLexa's applications in the aesthetic dermatology field to help treat and reduce post-procedure infections, accelerate healing and improve clinical outcomes for patients undergoing procedures. Hoth will be implementing FDA testing procedures for BioLexa. In addition to the Purchase Agreement, the Company and Hoth entered into a Registration Rights Agreement, pursuant to which Hoth is obligated to register for resale on a registration statement on Form S-1 under the Securities Act, all of the shares, no later than June 30, 2018. Further, the Company, Hoth and Hoth's existing shareholders have entered into a Shareholders Agreement, pursuant to which Spherix shall have a right to appoint one director to the board of directors of Hoth for so long as the Company holds at least 10% of the issued and outstanding common stock of Hoth.

July 2017 Public Offering

On July 18, 2017, the Company entered into an underwriting agreement with Laidlaw & Company (UK) Ltd. with respect to the issuance and sale of an aggregate of 1,250,000 shares of the Company's common stock, par value $0.0001 per share, in a firm commitment underwritten public offering which closed on July 24, 2017. Each share was sold for a price of $2.00 for aggregate gross proceeds of $2,500,000, with net proceeds of approximately $2.1 million, after deducting the underwriting discounts and commissions (equivalent to 8% of gross proceeds) and other offering expenses.

DatChat Merger Agreement

The Merger

On March 12, 2018, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement"), by and among Spherix, Spherix Merger Subisdiary Inc., a Nevada corporation and a wholly-owned Subsidiary of Spherix ("Merger Sub"), DatChat, Inc., a Nevada corporation ("DatChat"), and Darin Myman in the capacity as the representative from and after the effective time of the Merger (the "Effective Time") for the stockholders of DatChat as of immediately prior to the Effective Time (the "Stockholder Representative").

Pursuant to the Merger Agreement, subject to the terms and conditions set forth therein, at the closing of the transactions contemplated by the Merger Agreement (the "Closing"), Merger Sub will merge with and into DatChat (the "Merger"), with DatChat continuing as the surviving corporation in the Merger. Subject to the terms and conditions set forth in the Merger Agreement, at the Effective Time: (i) all shares of capital stock of DatChat (the "DatChat Stock") issued and outstanding immediately prior to the Effective Time will be converted into the right to receive the Stockholder Merger Consideration (as defined below).

Merger Consideration

At or prior to the Closing, Spherix, the Stockholder Representative, and a mutually agreeable escrow agent (the "Escrow Agent"), shall enter into an Escrow Agreement, effective as of the Effective Time, in form and substance reasonably satisfactory to the Parties (the "Escrow Agreement"), pursuant to which Spherix shall deposit with the Escrow Agent from the Stockholder Merger Consideration (as defined below) the following numbers of shares of Spherix common stock (the sum of such amounts, the "Escrow Shares"): (i) a number of shares Spherix common stock equal to 10% of the Stockholder Merger Consideration shares (including any equity securities paid as dividends or distributions with respect to such shares or into which such shares are exchanged or converted, the " Indemnity Escrow Shares "), to be held in a segregated escrow account (the "Indemnity Escrow Account") and disbursed by the Escrow Agent and (ii) a number of shares Spherix common stock equal 90% of the Stockholder Merger Consideration shares (including any equity securities paid as dividends or distributions with respect to such shares or into which such shares are exchanged or converted, the " Distribution Escrow Shares "), to be held in a segregated escrow account (the "Distribution Escrow Account") and disbursed by the Escrow Agent. Each stockholder of DatChat at the Effective Time (each, a "DatChat Stockholder") shall receive its pro rata share of the Stockholder Merger Consideration, less its pro rata portion of the Escrow Shares held in the Escrow Account, based on the number of shares of DatChat Stock owned by such DatChat Stockholder as compared to the total number of shares of DatChat Stock owned by all DatChat Stockholders as of immediately prior to the Effective Time. The Indemnity Escrow Shares shall serve as a security for, and a source of payment of, the indemnity rights of the Spherix indemnified parties'. The Distribution Escrow Shares will be released from escrow over time in accordance with the schedule and restrictions as agreed upon by Spherix and the Stockholder Representative and set forth in the Escrow Agreement. As consideration for the Merger, Spherix shall deliver to the stockholders of DatChat an aggregate of 46,153,846 shares of Spherix common stock (the "Stockholder Merger Consideration"), with each share of Spherix common stock valued at $1.30 per share.

Representations and Warranties

The Merger Agreement contains customary representations and warranties by each of Spherix, DatChat and Merger Sub. Many of the representations and warranties are qualified by materiality or Material Adverse Effect. "Material Adverse Effect" as used in the Merger Agreement means any fact, event, occurrence, change or effect that has had or would reasonably be expected to have a material adverse effect on the business, properties, assets, liabilities, condition (financial or otherwise), operations, licenses or other franchises or results of operations of DatChat, or materially diminish the value of DatChat's capital stock, or does or would reasonably be expected to materially impair or delay the ability of DatChat to perform its obligations under the Merger Agreement or the ancillary documents or to consummate the transactions contemplated thereby, in each case subject to certain customary exceptions. Certain of the representations are subject to specified exceptions and qualifications contained in the Merger Agreement or in information provided pursuant to certain disclosure schedules to the Merger Agreement. The representations and warranties made by Spherix, Merger Sub and DatChat survive the Closing for a period of 18 months.

Indemnification

From and after the closing, DatChat Stockholders and their respective successors and assigns are required to severally indemnify Spherix, and its affiliates and officers, directors, managers, employees, successors and permitted assigns from and against any losses from (a) the breach of any of DatChat's representations and warranties, (b) the breach of any of DatChat's covenants, (c) any actions by persons or entities who were holders of equity securities (including options, warrants, convertible securities or other rights) of DatChat prior to the Closing arising out of the sale, purchase, termination, cancellation, expiration, redemption or conversion of any such securities (d) any liabilities for taxes arising prior to the closing or (e) any liability of DatChat incurred in the operation of the business on or prior to the closing

From and after the closing, Spherix, Merger Sub and their respective successors and assigns are required to severally indemnify DatChat, and its affiliates and officers, directors, managers, employees, successors and permitted assigns from and against any losses from (a) the breach of any of Spherix and Merger Sub's representations and warranties, and (b) the breach of any of Spherix and Merger Sub's covenants.

Except for fraud-based claims, indemnification claims are subject to an aggregate basket of $100,000 before any indemnification claims can be made, at which point all claims will be paid back to the first dollar. In any indemnification claim by a Spherix indemnified party the Stockholder Representative will represent the DatChat Stockholders.

Indemnification claims by a Spherix indemnified party will be limited to the escrow property in the Indemnity Escrow Account, first paid with the Indemnity Escrow Shares and then with any other escrow Property. The aggregate maximum amount of indemnification is capped at an amount equal to the value of 10% of the Stockholder Merger Consideration. The Indemnity Escrow Shares in the Escrow Account will be released to the DatChat Stockholders, on a pro rata basis, after the 18 month anniversary of the Closing Date, except for amounts withheld for unpaid or pending indemnification claims at that time. Such withheld amounts for unpaid or pending indemnification claims, if any remain after payment of the related indemnification claims, will be released to the DatChat Stockholders, on a pro rata basis, upon final resolution of all such pending indemnification claims.

Covenants of the Parties

Each party agreed in the Merger Agreement to use its commercially reasonable efforts to effect the Closing. The Merger Agreement also contains certain customary covenants by each of the parties during the period between the signing of the Merger Agreement and the earlier of the Closing or the termination of the Merger Agreement in accordance with its terms (the "Interim Period").

The Merger Agreement and the consummation of the transactions contemplated thereby requires the approval of both Spherix's stockholders and DatChat's stockholders. Spherix agreed, as promptly as practicable after the date of the Merger Agreement, to prepare, with the reasonable assistance of DatChat, and use its commercially reasonable efforts to file with the Securities and Exchange Commission (the "SEC"), a registration statement on Form S-4 (the "Registration Statement") in connection with the registration under the Securities Act of the issuance of shares of Spherix common stock to the DatChat stockholders, and containing a joint proxy statement/prospectus for the purpose of (i) Spherix soliciting proxies from the stockholders of Spherix to approve the Merger Agreement, the transactions contemplated thereby and related matters (the "Spherix Stockholder Approval") at a special meeting of Spherix's stockholders (the "Spherix Special Meeting") and (ii) DatChat soliciting proxies from the stockholders of DatChat to approve the Merger Agreement, the transactions contemplated thereby and related matters (the "DatChat Stockholder Approval") at a special meeting of DatChat's stockholders (the "DatChat Special Meeting").

Conditions to Consummation of the Merger

The obligations of the parties to consummate the Merger is subject to various conditions, including the following mutual conditions of the parties unless waived: (i) the effectiveness of the Registration Statement, (ii) the approval of the Merger Agreement and the transactions contemplated thereby and related matters by the requisite vote of Spherix's stockholders and DatChat's stockholders; (iii) receipt of requisite governmental approvals; (iv) no law or order preventing or prohibiting the Merger or the other transactions contemplated by the Merger Agreement; and (v) no pending litigation to enjoin or restrict the consummation of the Closing.

In addition, unless waived by DatChat, the obligations of DatChat to consummate the Merger are subject to the satisfaction of the following Closing conditions, in addition to customary certificates and other closing deliveries:

- The representations and warranties of Spherix being true and correct as of the date of the Merger Agreement and as of the Closing (subject to Material Adverse Effect);

- Spherix having performed in all material respects its obligations and complied in all material respects with its covenants and agreements under the Merger Agreement required to be performed or complied with on or prior the date of the Closing; and

- Absence of any Material Adverse Effect with respect to Spherix since the date of the Merger Agreement which is continuing and uncured.

Unless waived by Spherix, the obligations of Spherix and the Merger Sub to consummate the Merger are subject to the satisfaction of the following Closing conditions, in addition to customary certificates and other closing deliveries:

- The representations and warranties of DatChat being true and correct as of the date of the Merger Agreement and as of the Closing (subject to Material Adverse Effect);

- DatChat having performed in all material respects its obligations and complied in all material respects with its covenants and agreements under the Merger Agreement required to be performed or complied with on or prior to the Closing Date; and

- Absence of any Material Adverse Effect with respect to DatChat since the date of the Merger Agreement which is continuing and uncured.

Termination

The Merger Agreement may be terminated under certain customary and limited circumstances at any time prior to the Closing, including:

- by mutual written consent of Spherix and DatChat;

- by written notice by either Spherix or DatChat if the Closing has not occurred on or prior to November 15, 2018;

- by written notice by either Spherix or DatChat if a governmental authority of competent jurisdiction shall have issued an order or taken any other action permanently restraining, enjoining or otherwise prohibiting the transactions contemplated by the Merger Agreement, and such order or other action has become final and non-appealable;

- by written notice by either party of the other party's uncured breach (subject to certain materiality qualifiers);

- by written notice by Spherix if there has been a Material Adverse Effect on DatChat since the date of the Merger Agreement which is continuing and uncured;

- by written notice by Spherix or DatChat if Spherix holds the Spherix Special Meeting and it does not receive the Spherix Stockholder Approval; or

- by written notice by Spherix or DatChat if DatChat holds the DatChat Special Meeting and it does not receive the DatChat Stockholder Approval.

If the Merger Agreement is terminated, all further obligations of the parties under the Merger Agreement will terminate and will be of no further force and effect (except that certain obligations related to public announcements, confidentiality, and termination and certain general provisions will continue in effect), and no party will have any further liability to any other party thereto except for liability for any fraud claims or willful breach of the Merger Agreement prior to such termination.

In addition to entering into the Merger Agreement, the Company recently formed a wholly-owned subsidiary, Ether Mining Company, in the State of Delaware. The purpose of the subsidiary is to mine the cryptocurrency "Ether." Ether is a type of crypto token that fuels the Ethereum blockchain network, upon which DatChat's distributed network is being built.

March 2018 Shelf Takedown

On March 19, 2018, we closed a public offering of common stock for gross proceeds of approximately $3.0 million. The offering was a shelf takedown off of the our registration statement on Form S-3 (File No. 333-222488) and was conducted pursuant to a placement agency agreement (the "Place Agency Agreement") between us and Laidlaw, the sole placement agent, on a best-efforts basis with respect to the offering that was entered into on March 14, 2018. We sold 2,222,222 shares of its common stock in the offering at a purchase price of $1.35 per share. The material terms of the offering are described in a prospectus supplement which was filed by us with the Securities and Exchange Commission pursuant to Rule 424(b) under the Securities Act on March 16, 2018. The Placement Agency Agreement contains customary representations, warranties and agreements of the ours and Laidlaw. We also agreed in the Placement Agency Agreement to indemnify Laidlaw against certain liabilities.

TheBit Daily LLC Investment

On March 23, 2018, the Company purchased 8.0% of the issued and outstanding limited liability company membership interests of TheBit Daily LLC, a development stage media and education platform focused on the blockchain and cryptocurrency space, for a subscription price of $25,000.

Our principal executive offices are located at One Rockefeller Plaza, New York, NY 10020, our telephone number is (212) 745-1374, and our Internet website address www.spherix.com.

Our common stock trades on the NASDAQ Capital Market under the symbol SPEX.

Available Information

Our principal Internet address is www.spherix.com. We make available free of charge on www.spherix.com our annual, quarterly and current reports, and amendments to those reports, as soon as reasonably practicable after we electronically file such material with, or furnish it to, the Securities and Exchange Commission ("SEC"). You may also read and copy any materials we file with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC at http://www.sec.gov.

Our Business Model

We are a patent commercialization company focused on generating revenues from the monetization of intellectual property, or IP. Such monetization includes, but is not limited to, acquiring IP from patent holders in order to maximize the value of the patent holdings by conducting and managing a licensing campaign, or through the settlement and litigation of patents. We intend to generate revenues and related cash flows from the granting of intellectual property rights for the use of patented technologies that we own, that we manage for others, or that others manage on our behalf by agreement. To date, we have generated minimal revenues and no assurance can be provided that our business model will be successful.

We continually work to enhance our portfolio of intellectual property through acquisition and strategic partnerships. Our mission is to partner with inventors, or other entities, who own undervalued intellectual property. We then work with the inventors or other entities to commercialize the IP.

Our Products and Services

We acquire IP from patent holders in order to maximize the value of their patent holdings by conducting and managing a licensing campaign. Some patent holders have limited internal resources and/or expertise to effectively address the unauthorized use of their patented technologies or they simply make the strategic business decision to outsource their intellectual property licensing. They can include individual inventors, large corporations, universities, research laboratories and hospitals. Typically, we, or an operating subsidiary, acquire a patent portfolio in exchange for securities of the Company, an upfront cash payment, a percentage of our operating subsidiary's net recoveries from the licensing and enforcement of the portfolio, or a combination of the foregoing.

Competition

We encounter significant competition from others seeking to acquire interests in intellectual property assets and monetize such assets. This includes an increase in the number of competitors seeking to acquire the same or similar patents and technologies that we may seek to acquire. Most of our competitors have much longer operating histories, and significantly greater financial and human resources, than we do.

We also compete with venture capital firms, strategic corporate buyers and various industry leaders for technology acquisitions and licensing opportunities. Many of these competitors may have more financial and human resources than we do. As we become more successful, we may find more companies entering the market for similar technology opportunities, which may reduce our market share in one or more technology industries that we currently rely upon to generate future revenue.

Other companies may develop competing technologies that offer better or less expensive alternatives to our patented technologies that we may acquire and/or out-license. Many potential competitors may have significantly greater resources than we do. Technological advances or entirely different approaches developed by one or more of our competitors could render certain of the technologies owned or controlled by our operating subsidiaries obsolete and/or uneconomical.

Intellectual Property and Patent Rights

Our intellectual property is primarily comprised of trade secrets, patented know-how, issued and pending patents, copyrights and technological innovation.

The portfolio we are working with Equitable to monetize pursuant to the Monetization Agreement is currently comprised of over 290 patents and patent applications (the "Portfolio"). The Portfolio includes both U.S. and foreign patents and pending patent applications in the wireless communications and telecommunication sectors including data, optical and voice technology, antenna technology, Wi-Fi, base station functionality, and cellular.

Most of the patents in the Portfolio are publicly accessible on the Internet website of the U.S. Patent and Trademark Office at www.uspto.gov.

The lives of the patent rights in the Portfolio have a wide duration ranging from 2018 to 2026.

Patent Enforcement Litigation

We, Equitable or its subsidiaries may often be required to engage in litigation to enforce the patent rights associated with the Portfolio. Such patent enforcement related litigation typically involves allegations of infringement by third parties of certain of the patented technologies claimed in the Portfolio. The material litigations in which the patents are currently engaged are described in greater detail in Item 3 of this Annual Report.

Employees

As of December 31, 2017, we have three full-time employees, none of which are represented by a labor union or covered by a collective bargaining agreement.

Item 1A. RISK FACTORS.

Risks Related to Our Business

Because we have a limited operating history to evaluate our company, the likelihood of our success must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered by an early-stage company.

Since we have a limited operating history in our current business of patent licensing and monetization, it will make it difficult for investors and securities analysts to evaluate our business and prospects. You must consider our prospects in light of the risks, expenses and difficulties we face as an early stage company with a limited operating history. Investors should evaluate an investment in our securities in light of the uncertainties encountered by early stage companies in an intensely competitive industry and in which the potential licenses and/or defendants from which the Company seeks to obtain recoveries are largely well-capitalized companies with resources (financial and otherwise) significantly greater than the Company's. There can be no assurance that our efforts will be successful or that we will be able to become profitable.

We continue to incur operating losses and may not achieve profitability.

Our loss from operations for the years ended December 31, 2017 and 2016 was $3.8 million and $8.6 million, respectively. Our net loss attributable to common stockholders for the years ended December 31, 2017 was $3.3 million and net income attributable to common stockholders for the years ended December 31, 2016 was $25.0 million. Our accumulated deficit was $145.1 million at December 31, 2017. We recognized $1.2 million and $877,000 in revenue in 2017 and 2016, respectively. Our ability to become profitable depends upon our ability to generate revenue from the monetization of intellectual property. We do not know when, or if, we will generate any revenue from such monetization. Even though our revenue may increase, we expect to incur significant additional losses while we grow and expand our business. We cannot predict if and when we will achieve profitability. Our failure to achieve and sustain profitability could negatively impact the market price of our common stock.

We expect to need additional capital to fund our growing operations and if we are unable to obtain sufficient capital, we may be forced to limit the scope of our operations.

We expect that for our business to grow we will need additional working capital. If adequate additional debt and/or equity financing is not available on reasonable terms or at all, we may not be able to continue to expand our business or pay our outstanding obligations, and we will have to modify our business plans accordingly. These factors would have a material adverse effect on our future operating results and our financial condition.

If we reach a point where we are unable to raise needed additional funds to continue as a going concern, we will be forced to cease our activities and dissolve the Company. In such an event, we will need to satisfy various creditors and other claimants, severance, lease termination and other dissolution-related obligations and we may not have sufficient funds to pay to our stockholders.

Further impairment charges could have a material adverse effect on our financial condition and results of operations.

We are required to assess goodwill for impairment if events occur or circumstances changed that would more likely than not reduce our enterprise fair value below its book value. In addition, we are required to test our finite-lived intangible assets for impairment if events occur or circumstances change that would indicate the remaining net book value of the finite-lived intangible assets might not be recoverable. These events or circumstances could include a significant change in the business climate, including a significant sustained decline in an entity's market value, legal factors, operating performance indicators, competition, sale or disposition of a significant portion of our business, potential government actions and other factors. As a result of decline in the market value of our common stock during the year ended December 31, 2016, we recorded a $2.7 million impairment charge to our intangible assets. If the fair value of our reporting units or finite intangible assets is less than their book value in the future, we could be required to record additional impairment charges. A continued decline of the market price of our common stock could result in additional impairment charges in the future. The amount of any impairment could be significant and could have a material adverse effect on our reported financial results for the period in which the charge is taken.

The focus of our business is to monetize intellectual property, including through licensing and enforcement. We may not be able to successfully monetize the patents or other licensed technology which we acquire and thus may fail to realize all of the anticipated benefits of such acquisition.

We acquired our patents and patent applications during 2013 in three transactions which significantly changed the focus of our business and operations. We currently own and license several hundred patent assets and although we may seek to commercialize and develop products, alone or with others, there is no assurance that we will be able to successfully commercialize or develop products and such commercialization and development is not a core focus of our business. There is significant risk involved in connection with our activities in which we seek to monetize the patent portfolios that we acquired from Rockstar and North South.

In March 2016, we entered into an agreement (which was subsequently amended) with Equitable to facilitate the monetization of our patents (the "Monetization Agreement"). Pursuant to the Monetization Agreement, we have worked together with Equitable to develop and revise our ongoing litigation plan. Under the Monetization Agreement, Equitable is obligated to use its best commercially reasonable efforts to monetize our patents. We will share net monetization revenue derived from all monetization activity equally with Equitable. To facilitate the litigation plan, approximately 186 of over 330 of our patents and applications have been assigned to Equitable, which will pay all maintenance and prosecution fees going forward. No assigned patents may be transferred by Equitable to a third party without our consent. In the event that all terms of the Monetization Agreement are met by December 2017, we will further assign approximately 140 additional patents and applications to Equitable for monetization. We have retained a grant-back license to practice all transferred patents.

Our business is commonly referred to as a non-practicing entity model (or "NPE") since we do not currently commercialize or develop products under the recently acquired patents. As an entity, we have limited prior experience as an NPE. The acquisition of the patents and an NPE business model could fail to produce anticipated benefits, or could have other adverse effects that we do not currently foresee. Failure to successfully monetize our patent assets or to operate an NPE business may have a material adverse effect on our business, financial condition and results of operations.

In addition, the acquisition of patent portfolios is subject to a number of risks, including, but not limited to the following:

- There is a significant time lag between acquiring a patent portfolio and recognizing revenue from those patent assets. During that time lag, material costs are likely to be incurred that would have a negative effect on our results of operations, cash flows and financial position, lagging any potential revenues generated by such activity; and

- The integration of a patent portfolio will be a time consuming and expensive process that may disrupt our operations. If our integration efforts are not successful, our results of operations could be harmed. In addition, we may not achieve anticipated synergies or other benefits from such acquisition.

- If we initiate a patent infringement suit against potential infringers, or if potential licensees initiate a declaratory judgment action or administrative review action against us, such potential infringers and/or licensees may successfully invalidate our patents, or a fact finder may find that the potential infringer's products do not infringe our patents. Thus, we may not successfully monetize the patents. These activities are inherently risky, time consuming and costly.

Therefore, there is no assurance that the monetization of the patent portfolios we acquire will be successful, will occur timely or in a timeframe that is capable of prediction or will generate enough revenue to recoup our investment.

We presently rely primarily on the patent assets we acquired from North South and Rockstar, which we are monetizing primarily through our agreement with Equitable. If we are unable to commercialize, license or otherwise monetize such assets and generate revenue and profit through those assets or by other means, there is a significant risk that our business will fail.

If our efforts to generate revenue from our patent portfolios acquired from Rockstar and North South fail, we will have incurred significant losses. We may not seek and may be unable to acquire additional assets and therefore may be wholly reliant on our present portfolios for revenue. If we are unable to generate revenue from our current assets and fail to acquire any additional assets, our business will likely fail.

In connection with our business, we may commence legal proceedings against certain companies whose size and resources could be substantially greater than ours. We expect such litigation to be time-consuming, lengthy and costly, which may adversely affect our financial condition and our ability to survive or operate our business, even if the patents are valid and the cases we bring have merit.

To license or otherwise monetize our intellectual property assets, we may be required to commence legal proceedings against certain large, well established and well-capitalized companies. We may allege that such companies infringe on one or more of our patents. Our viability could be highly 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. The defendants in litigation brought by us are likely to be much larger than us and have substantially more resources than we do, which would make success of our litigation efforts subject to factors other than the validity of our patents or infringement claims asserted. Furthermore, as a public company, our level of cash resources and ability to incur expenditures on enforcing infringement claims is available to the public, including the entities against whom we seek to enforce our patents, and defendants may engage in tactics in an effort for us to utilize our remaining resources. The inability to successfully enforce our patents against larger more well-capitalized companies could result in realization through settlement or election to not pursue certain infringers, or less value from our patents, and could result in substantially lower than anticipated revenue realized from infringements and lower settlement values.

We anticipate that legal proceedings against infringers of our patents may continue for several or more 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. In addition, courts and the laws are constantly changing in a manner that could increase our fees and expenses for pursuing infringers, and also could result in our assumption of legal fees of defendants if we are unsuccessful. 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. Potential defendants could challenge our patents and our actions by commencing lawsuits seeking declaratory judgments declaring our patents invalid, not infringed, or for improper or unlawful activities. If such defenses or counterclaims are successful, they may preclude our ability to obtain damages for infringement or derive licensing revenue from the patents. A negative outcome of any such litigation, or one or more claims contained within any such litigation, could materially and adversely impact our business. For example, on July 1, 2015, the United States District Court for the Eastern District of Virginia issued a Markman Order interpreting certain key claims in favor of the defendants in one of our actions against Verizon, resulting in the dismissal of our claims against Verizon with respect to one of our patents. Additionally, we anticipate that our legal fees and other expenses will be material and will negatively impact our financial condition and results of operations and may result in our inability to continue our business.

Parties who are alleged infringers of our patent rights may also challenge the validity of our patents in proceedings before the United States Patent and Trademark Office. These potential proceedings include *ex parte* reexaminations, *inter partes* review, or covered business method patent challenges. These proceedings could result in certain of our patent claims being dismissed or certain of our patents being invalidated. We would expend significant legal fees to defend against such actions.

Federal courts are becoming more crowded and, as a result, patent enforcement litigation is taking longer.

Our patent enforcement actions are almost exclusively prosecuted in federal court. Federal trial courts that hear our patent enforcement actions also hear criminal cases. Criminal cases always take priority over our actions. As a result, it is difficult to predict the length of time it will take to complete an enforcement action. Moreover, we believe there is a trend in increasing numbers of civil lawsuits and criminal proceedings before federal judges and, as a result, we believe that the risk of delays in our patent enforcement actions will have a greater effect on our business in the future unless this trend changes.

We have been the subject of litigation and, due to the nature of our business, may be the target of future legal proceedings that could have an adverse effect on our business and our ability to monetize our patents.

In the ordinary course of business, we, along with our wholly-owned subsidiaries, will initiate litigation against parties whom we believe have infringed on our intellectual property rights and technologies. The initiation of such litigation exposes us to potential counterclaims initiated by the defendants.

The Company may become subject to similar actions in the future which will be costly and time consuming to defend, the outcome of which are uncertain.

If we fail to maintain an effective system of internal controls over financial reporting, we may not be able to accurately report our financial results or prevent fraud and our business may be harmed and our stock price may be adversely impacted.

Effective internal controls over financial reporting are necessary for us to provide reliable financial reports and to effectively prevent fraud. Any inability to provide reliable financial reports or to prevent fraud could harm our business. The Sarbanes-Oxley Act of 2002 requires management to evaluate and assess the effectiveness of our internal control over financial reporting. In order to continue to comply with the requirements of the Sarbanes-Oxley Act, we are required to continuously evaluate and, where appropriate, enhance our policies, procedures and internal controls. If we fail to maintain the adequacy of our internal controls over financial reporting, we could be subject to litigation or regulatory scrutiny and investors could lose confidence in the accuracy and completeness of our financial reports. We cannot assure you that in the future we will be able to fully comply with the requirements of the Sarbanes-Oxley Act or that management will conclude that our internal control over financial reporting is effective. If we fail to fully comply with the requirements of the Sarbanes-Oxley Act, our business may be harmed and our stock price may decline.

Our assessment, testing and evaluation of the design and operating effectiveness of our internal control over financial reporting resulted in our conclusion that, as of December 31, 2017, our internal control over financial reporting was not effective, due to our lack of segregation of duties, and lack of controls in place to ensure that all material transactions and developments impacting the financial statements are reflected. We can provide no assurance as to conclusions of management with respect to the effectiveness of our internal control over financial reporting in the future.

We may seek to internally develop additional new inventions and intellectual property, which would take time and 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.

Part of our business may include the internal development of new inventions or intellectual property that we will seek to monetize. For example, as a result of our acquisition of certain shares of common stock of Hoth Therapeutics, Inc. ("Hoth") in June 2017, we have indirectly acquired certain sublicensing rights for BioLexa products developed by Chelexa Biosciences, Inc., for the treatment of eczema. Hoth is developing BioLexa's applications in the aesthetic dermatology field to help treat and reduce post-procedure infections, accelerate healing and improve clinical outcomes for patients undergoing procedures and also intends to implement FDA testing procedures for BioLexa. Should we choose to assist in the development of BioLexa's applications and/or internally develop any other inventions or intellectual property, such aspect of our business will require significant capital and will take time to achieve. Such activities may also distract our management team from its present business initiatives, which could have a material and adverse effect on our business. There is also the risk that our initiatives in this regard would not yield any viable new inventions or technology, which would lead to a loss of 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 upon, 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 have independently developed and/or patented (or may in the future independently develop and patent) similar or alternative technologies, or duplicate our technologies;
- other companies may design around technologies we have developed; and
- enforcement of our patents could 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 we 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 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.

We may be reliant on third parties to generate revenue for us.

In early 2016, we entered into a Monetization Agreement pursuant to which other more well-capitalized entities have the right to enforce our patent portfolio in exchange for royalties from enforcement proceeds. We may also enter into similar such agreements in the future. These agreements generally do not impose any affirmative obligation on the part of our contractual counterparties to enforce any rights under our patents. If these counterparties do seek to enforce rights under our patents, legal proceedings against infringers of our patents may continue for several or more years and it may be a significant period of time before we derive any income from these arrangements. These arrangements may also preclude us from enforcing these patents ourselves. Failure of these third parties to successfully enforce our patents may have an adverse effect on our revenues.

Our ability to raise additional capital may be adversely affected by certain of our agreements.

Our ability to raise additional capital for use in our operating activities may be adversely impacted by the terms of a securities purchase agreement, dated as of July 15, 2015 (the "Securities Purchase Agreement"), between us and the investors who purchased securities in our July 2015 offering of our common stock and warrants for the purchase of our common stock. The Securities Purchase Agreement provides that, until the warrants issued thereunder are no longer outstanding, we will not effect or enter into a variable rate transaction, which includes issuances of securities whose prices or conversion prices may vary with the trading prices of or quotations for the shares of our common Stock at any time after the initial issuance of such securities, as well as the entry into agreements where our stock would be issued at a future-determined price. These warrants may remain outstanding as late as January 22, 2021, when the warrants expire in accordance with their terms. These restrictions may have an adverse impact on our ability to raise additional capital, or to use our cash to make certain payments that we are contractually obligated to make.

New legislation, regulations or court rulings related to enforcing patents could harm our new line of business and operating results, or could cause us to change our business model.

If Congress, the United States Patent and Trademark Office or courts implement new legislation, regulations or rulings that impact the patent enforcement process or the rights of patent holders, these changes could negatively affect our business. For example, limitations on the ability to bring patent enforcement claims, limitations on potential liability for patent infringement, lower evidentiary standards for invalidating patents, increases in the cost to resolve patent disputes and other similar developments could negatively affect our ability to assert our patent or other intellectual property rights.

On December 5, 2013, the United States House of Representatives passed a patent reform titled the "Innovation Act" by a vote of 325-91. Representative Bob Goodlatte, with bipartisan support, introduced the Innovation Act on October 23, 2013. The Innovation Act, as passed by the House, has a number of major changes. Some of the changes include a heightened pleading requirement for the filing of patent infringement claims. It requires a particularized statement with detailed specificity regarding how each asserted claim term corresponds to the functionality of each accused instrumentality. The Innovation Act, as passed by the House, also includes fee-shifting provisions which provide that, unless the non-prevailing party of a patent infringement litigation positions were objectively reasonable, such non-prevailing party would have to pay the attorney's fees of the prevailing party.

The Innovation Act also calls for discovery to be limited until after claim construction. The patent infringement plaintiff must also disclose anyone with a financial interest in either the asserted patent or the patentee and must disclose the ultimate parent entity. When a manufacturer and its customers are sued at the same time, the suit against the customer would be stayed as long as the customer agrees to be bound by the results of the case.

On April 29, 2014, the U.S. Supreme Court relaxed the standard for fee shifting in patent infringement cases. Section 285 of the Patent Act provides that attorneys' fees may be awarded to a prevailing party in a patent infringement case in "exceptional cases."

In *Octane Fitness, LLC v. Icon Health & Fitness, Inc.,* the Supreme Court overturned the U.S. Court of Appeals for the Federal Circuit decisions limiting the meaning of "exceptional cases." The U.S. Supreme Court held that an exceptional case "is simply one that stands out from others with respect to the substantive strength of a party's litigation position" or "the unreasonable manner in which the case was litigated." The U.S. Supreme Court also rejected the "clear and convincing evidence" standard for making this inquiry. The Court held that the standard should be a "preponderance of the evidence."

In *Highmark Inc. v. Allcare Health Mgmt. Sys., Inc.,* the U.S. Supreme Court held that a district court's grant of attorneys' fees is reviewable by the U.S. Court of Appeals for the Federal Circuit only for "abuse of discretion" by the district court instead of the de novo standard that gave no deference to the district court.

This pair of decisions lowered the threshold for obtaining attorneys' fees in patent infringement cases and increased the level of deference given to a district court's fee-shifting determination.

These two cases will make it much easier for district courts to shift a prevailing party's attorneys' fees to a non-prevailing party if the district court believes that the case was weak or conducted in an abusive manner. Defendants that get sued for patent infringement by non-practicing entities may elect to fight rather than settle the case because these U.S. Supreme Court decisions make it much easier for defendants to get attorneys' fees.

On June 19, 2014, the U.S. Supreme Court decided *Alice Corp. v. CLS Bank International* in which the Court addressed the question of whether patents related to software are patent eligible subject matter. The Supreme Court did not rule that patents related to software were per se invalid or that software-related inventions were unpatentable. The Supreme Court outlined a test that the courts and the USPTO must apply in determining whether software-related inventions qualify as patent eligible subject matter.

Following in the wake of the Supreme Court's *Alice* decision, the lower courts have operated with a lack of guidance regarding patent eligibility. The Court of Appeals for the Federal Circuit, which has exclusive jurisdiction over patent appeals, has increasingly entered one-sentence orders under Federal Rule of Civil Procedure 36, in which it upholds decisions of patent invalidity with no guidance as to why invalidity was upheld. For example, in each of the following appeals from the U.S. district courts involving substantial issues under the *Alice* doctrine, the Federal Circuit entered a Rule 36 order, saying only in one sentence that the district court record supported the entry of judgment below.

1. *Becton Dickinson and Co. v. Baxter Int'l Inc*., Appeal No. 15-1918 (decided May 9, 2016) re: remote pharmacy monitoring.

2. *IP Learn-Focus, LLC. v. Microsoft Corp*., Appeal No. 15-1863 (decided July 11, 2016) re: a computer learning system comprising particular combinations of different types of sensors (e.g. optical sensors, nonoptical sensors and imaging sensors) and software programming, applied to MS's Kinect device.

3. *Novo Tranforma Techs. L.L.C. v. Sprint Spectrum, L. P*., Appeal No. 15-2012 (decided September 23, 2016) re: a payload delivery system that eliminates the incompatibility between different communication services employing different media for communicating information.

4. *Broadband iTV Inc. v. Hawaiian Tele., Inc.*, Appeal No. 16-1082 (decided September 26, 2016) re: automated control of video-on-demand technology.

5. *Blue Spike LLC v. Google, Inc*., Appeal No. 16-1054 (decided October 10, 2016) re: alternatives to digital watermarking by creating a "Signal Abstract", a smaller digital representation of the digital signal that can be used for identification purposes.

6. *Concaten, Inc. v. AmeriTrak Fleet Solutions, LLC*, Appeal No. 16-1112 (decided October 11, 2016) re: a snow management system where real-time data is collected from a plurality of working snowplows and that data was then used to optimize the routing and operation of subsequent snowplow operations.

7. *GT Nexus, Inc. v. Inttra, Inc*., Appeal No. 16-1267 (decided October 11, 2016) re: a computer network architecture called "common carrier system" that integrates existing automated carrier booking and tracking systems and enables multiple shippers and multiple carriers to communicate across a common platform.

8. *Netflix Inc. v. Rovi Corp*., Appeal No. 15-1917 (decided November 7, 2016) re: automated viewing recommendations and book-marking in interactive program guides.

9. *American Needle, Inc. v. Zazzle Inc.*, Appeal No. 16-1550 (decided November 10, 2016) re: selling objects online using a two-dimensional format to preview merchandise in three dimensions.

10. *Personalized Media Commc'n LLC v. Amazon.com, Inc.*, Appeal No. 15-2008 (decided December 7, 2016) re: seven distinct network control applications from seven different and patentably distinct patents.

11. *MacroPoint LLC v. FourKites Inc*., Appeal No. 16-1286 (decided December 8, 2016) re: five vehicle tracking applications.

12. *Voxathon LLC v. FCA US LLC*, Appeal No. 16-1614 (decided December 9, 2016) re: technology for allowing drivers to access telephone calls through vehicle entertainment and data systems.

Several of the parties receiving these Rule 36 judgments have requested re-hearings, asking the Federal Circuit to provide Section 101 guidance *en banc*, but to date, none of these requests have taken up by the Court of Appeals.

On January 20, 2015, the U.S. Supreme Court decided another patent case, *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.* In *Teva*, the Court overturned the long-standing practice that claim construction decision made by district courts were given de novo review on appeal. Instead, the Supreme Court held that when claim construction is based on extrinsic evidence, a district court's findings of subsidiary facts are to be reviewed for clear error, while its ultimate claim construction is to be reviewed de novo. This change in how claim construction decisions are reviewed on appeal may have an impact on how parties handle patent litigation in the district courts. This could increase our litigation expenses. The full impact of the *Teva* decision on patent litigation at the district court level is yet to be determined.

On May 26, 2015, the U.S. Supreme Court decided *Commil USA LLC v. Cisco Systems, Inc.* In this case, the Supreme Court held that a good faith belief that a patent is invalid does not provide an accused infringer with a defense against a charge of inducing patent infringement. The Court stated that permitting such a defense would undermine the statutory presumption of validity enjoyed by issued U.S. patents under 35 U.S.C. § 282. The long-term effect of this ruling is yet to be seen as it is implemented by the district courts. However, this ruling has eliminated a defense available to parties accused of inducing patent infringement. This result could be beneficial to our patent enforcement efforts.

On December 1, 2015, the Federal Rules of Civil Procedure were amended to require a heightened pleading standard for a plaintiff when filing a patent infringement complaint. Prior to the amendment, patent complaints could follow the general pleading provided in the model patent complaint provided by Form 18. Form 18 has now been eliminated. Patent infringement complaints must now satisfy the pleading standards established by the Supreme Court's landmark decisions in *Twombly* and *Iqbal*, which require a patent plaintiff to demonstrate that its claims are "plausible." It may likely result in more challenges to the sufficiency of patent complaints, which will increase the cost of litigation. This requirement may also impact the amount of research that is required before a patent infringement complaint can be filed.

On May 22, 2017, the U.S. Supreme Court decided TC Heartland LLC v. Kraft Foods Group Brands LLC. In this case, the Supreme Court held that venue in patent cases is governed by 28 U.S.C. § 1400(b) and that patent infringement suits may only be brought in the district where the defendant is incorporated or where the defendant has committed acts of infringement and has a regular and established place of business. Prior to this decision, it had been appropriate as a matter of venue to bring a patent action in any district where the defendant was subject to personal jurisdiction. This ruling is expected to limit the number of districts in which a given defendant may be sued for patent infringement.

It is impossible to determine the extent of the impact of any new laws, regulations or initiatives that may be proposed, or whether any of the proposals will become enacted as laws in their current or modified forms. Compliance with any new or existing laws or regulations could be difficult and expensive, decrease the value of our intellectual property portfolio, increase the risk of unlicensed infringement of our intellectual property, or otherwise affect the manner in which we conduct our business and negatively impact our business, prospects, financial condition and results of operations.

Regulatory developments and pending litigation may render our business model less profitable and may have a material adverse effect on our results of operations.

We may negotiate with leading technology companies to invest in, aggregate and acquire or in-license additional portfolios of patents and other intellectual property for monetization. Recent regulatory developments, as well as pending litigation in the industry that is continuing to establish new laws and rules for the licensing and/or assertion of patents, may make this business model more difficult to execute, more risky and/or less profitable. As noted, new draft legislation, if proposed and passed by Congress, might place more significant hurdles to the enforcement of our patent rights, allow defendants increased opportunities to challenge our patents in court and in the USPTO, and increase the risks and costs of patent litigation for all parties, including us. In addition, in various pending litigation and appeals in the United States Federal courts, various arguments and legal theories are being advanced to potentially limit the scope of damages a patent licensing company such as we might be entitled to. While we reject many of these arguments as improperly limiting the rights granted to legitimate patent holders under the Constitution and US patent laws, any one of these pending cases could result in new legal doctrines that could make our patent portfolios less valuable or more costly to enforce.

In addition, competition authorities in various countries and regions, as well as judicial actions in the United States and abroad are examining the rights and obligations of holders of standard essential patents (SEPs), and in some cases imposing restrictions and further obligations on the licensing and enforcement of SEPs. These changes in law and/or regulation may make our licensing programs more difficult, may render some or all SEP patents held by us unenforceable, or impose other restrictions, costs, impediments or harm to our patent portfolios.

We are exploring and evaluating strategic alternatives and there can be no assurance that we will be successful in identifying, or completing any strategic alternative or that any such strategic alternative will yield additional value for shareholders.

Our management and Board of Directors has commenced a review of strategic alternatives which could result in, among other things, a sale, a merger, consolidation or business combination, asset divestiture, partnering or other collaboration agreements, or potential acquisitions or recapitalizations, in one or more transactions, or continuing to operate with our current business plan and strategy. For example, on March 12, 2018, we entered into an agreement and plan of merger with DatChat, Inc. ("DatChat"), pursuant to which we will acquire 100% ownership of DatChat, which is a privately held personal privacy platform focused on encrypted communication, internet security and digital rights management. There can be no assurance that the exploration of strategic alternatives will result in the identification or consummation of any transaction, and there can be no assurance that the transaction with DatChat will close. In addition, we may incur substantial expenses associated with identifying and evaluating potential strategic alternatives. The process of exploring strategic alternatives may be time consuming and disruptive to our business operations and if we are unable to effectively manage the process, our business, financial condition and results of operations could be adversely affected. We also cannot assure you that any potential transaction or other strategic alternative, if identified, evaluated and consummated, will provide greater value to our shareholders than that reflected in the current stock price. Any potential transaction would be dependent upon a number of factors that may be beyond our control, including, among other factors, market conditions, industry trends, the interest of third parties in our business and the availability of financing to potential buyers on reasonable terms.

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 are critical to our business plan, are often time consuming, complex and costly to consummate. We may elect to not pursue any additional patents while we focus our efforts on monetizing our existing assets. 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 expect to incur significant operating expenses and will likely be required to raise capital during the negotiations even if the acquisition is ultimately not consummated, or if we determine to acquire additional patents or other assets. Even if we are able to acquire particular patent assets, there is no guarantee that we will generate sufficient revenue related to those patent assets to offset the acquisition costs, and we may be required to pay significant amounts of deferred purchase price if we monetize those patents above certain thresholds. While we will seek to conduct confirmatory due diligence on the patent assets we are considering for acquisition, we may acquire patent assets from a seller who does not have complete analysis of infringements or claims, have valid or sole title or ownership to those assets, or otherwise provides us with flawed ownership rights, including invalid or unenforceable assets. In those cases, we may be required to spend significant resources to defend our interest in the patent assets and, if we are not successful, our acquisition may be worthless, in which case we could lose part or all of our investment in the assets.

We may also identify patent or other intellectual property assets that cost more than we are prepared to spend with our own capital resources. We may incur significant costs to organize and negotiate a structured acquisition that does not ultimately result in an acquisition of any patent assets or, if consummated, proves to be unprofitable for us. Acquisitions involving issuance of our securities could be dilutive to existing stockholders and could be at prices lower than those prices reflected in the trading markets. These higher costs could adversely affect our operating results and, if we incur losses, the value of our securities will decline. The integration of acquired assets may place a significant burden on management and our internal resources. The diversion of management attention and any difficulties encountered in the integration process could harm our business.

In addition, we may acquire patents and technologies that are in the early stages of adoption. Demand for some of these technologies will likely be untested and may be subject to fluctuation based upon the rate at which our licensees or others adopt our 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 can be realized through licensing or other activities.

We may be unsuccessful at integrating future acquisitions.

If we find appropriate opportunities in the future, we may acquire businesses to strategically increase the number of patents in our portfolio and pursue monetization. For example, on June 30, 2017, we acquired a stake in Hoth Therapeutics, Inc. ("Hoth"), a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth has a sublicense from Chelexa Biosciences, Inc. to use Chelexa's BioLexa products for the treatment of eczema and such sublicense includes the right to further sublicense to third parties to make, use, have made, import, offer for sale and sell BioLexa products. There can be no guarantee that Hoth will be successful in its efforts to monetize its sublicense agreement with Chelexa. In addition, on March 12, 2018, we entered into an agreement and plan of merger with DatChat, pursuant to which we will acquire 100% ownership of DatChat, which is a privately held personal privacy platform focused on encrypted communication, internet security and digital rights management. There can be no guarantee that we will be successful in closing the transaction contemplated by the agreement with DatChat or that we will be successful in managing the operations of DatChat, which includes a recently launched messaging application for mobile smart phones that allows users to control sent messages on the recipient's phone, among other capabilities.

As we acquire businesses or substantial stakes in certain businesses, the process of integration may produce unforeseen operating difficulties and expenditures, fail to result in expected synergies or other benefits and absorb significant attention of our management that would otherwise be available for the ongoing development of our business. In addition, in the event of any future acquisitions, we may record a portion of the assets we acquire as goodwill, other indefinite-lived intangible assets or finite-lived intangible assets. We do not amortize goodwill and indefinite-lived intangible assets, but rather review them for impairment on an annual basis or whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The recoverability of goodwill and indefinite-lived intangible assets is dependent on our ability to generate sufficient future earnings and cash flows. Changes in estimates, circumstances or conditions, resulting from both internal and external factors, could have a significant impact on our fair valuation determination, which could then have a material adverse effect on our business, financial condition and results of operations. We cannot guarantee that we will be able to identify suitable acquisition opportunities, consummate any pending or future acquisitions or that we will realize any anticipated benefits from any such acquisitions.

If the merger is completed, the Company may not be able to successfully integrate the business of DatChat and realize the anticipated benefits of the merger.

Realization of the anticipated benefits in the merger with DatChat will depend on our ability to successfully integrate our businesses and operations with DatChat. We will be required to devote significant management attention and resources to integrating its business practices, operations, and support functions. The process of integrating DatChat's operations could cause an interruption of, or loss of momentum in, our business and financial performance, and in DatChat's business and financial performance as well. The diversion of management's attention and any delays or difficulties encountered in connection with the merger and the integration of the two companies' operations could have an adverse effect on the business, financial results.

Our stockholders will have a reduced ownership and voting interest after the merger and will exercise less influence over our management and policies than they did prior to the Merger.

Our stockholders currently have the right to vote in the election of our board of directors on other matters affecting us. When the merger occurs, because of the issuance of shares of common stock to the DatChat shareholders, our current stockholders will hold a percentage ownership of the post-merger company that is much smaller than the stockholder's current percentage ownership of ours. Because of this, our current stockholders will have less influence over the management and policies of the Company than they now have after the consummation of the merger.

The merger with DatChat is subject to certain conditions to closing that could result in the merger not being completed or being delayed, either of which could negatively impact its stock price and future business and results of operations.

Completion of the merger is subject to a number of customary conditions, including, but not limited to, the approval of the merger Agreement by the stockholders of DatChat and ours, and the effectiveness of an Form S-4 registration statement to be filed by us with the SEC to register the shares of our common stock to be issued in connection with the Merger. In addition, if any governmental authority shall have enacted, issued, promulgated or enforced any law or order which has the effect of making the transactions or agreements contemplated by the Merger Agreement illegal or which otherwise prevents or prohibits consummation of the transactions contemplated by the Merger Agreement, DatChat may elect not to consummate the Merger. There is no assurance that we will satisfy the conditions necessary for completion of the merger. If any of the conditions to the merger are not satisfied or, where waiver is permissible, waived, the merger will not be consummated. Failure to complete the merger would prevent us from realizing the anticipated benefits of the merger. We have already and expects to continue to incur significant costs associated with transaction fees, professional services, taxes and other costs related to the merger. In the event that the merger is not completed, we will remain liable for these costs and expenses. In addition, the current market price of our common stock may reflect a market assumption that the merger will occur, and a failure to complete the merger could result in a negative perception by the market of ours generally and a resulting decline in the market price of the our common stock. Any delay in the consummation of the merger or any uncertainty about the consummation of the merger could also negatively impact our stock price and future business and results of operations. The merger may not be consummated, there may be a delay in the consummation of the merger or the merger may not be consummated on the terms contemplated by the Merger Agreement.

If we are unable to successfully monetize our patent assets, or if we cannot obtain sufficient capital to see our legal proceedings to fruition, our business model may be subject to change.

Our current business model of monetizing patent assets primarily through litigation against companies infringing on our intellectual property results in the potential for sporadic income. This makes us dependent on successful outcomes of our litigation claims, as well as obtaining financing from third-party sources to fund these litigations. If we are unable to generate revenue and are unable to raise additional capital on commercially reasonable terms, or if changes in law make our current business model infeasible, then we may determine to change our business model in a manner that would be anticipated to generate revenue on a more regular basis. If we determine to change our business model, it may be difficult to predict our future prospects. Furthermore, we may incur significant expenses in any such shift in business model, or our management may have to devote significant resources into developing, or may not be well suited for, any such new business model.

We have ongoing financial obligations to certain stockholders under the terms of our acquisition of certain patents from Rockstar. Our failure to comply with our obligations to these stockholders could have a material adverse effect on the value of our assets, our financial performance and our ability to sustain operations.

Rockstar is entitled to receive a contingent recovery percentage of future profits from licensing, settlements and judgments against defendants with respect to patents purchased by us from Rockstar. In particular, once we recover a certain amount of proceeds pertaining to the patents acquired from Rockstar in July 2013, which amount will not exceed $8.0 million, net of certain expenses, we will be required to make a payment of up to $13.0 million to Rockstar within six months of such recovery. Furthermore, once we recover a certain level of proceeds pertaining to each portfolio of patents we acquired from Rockstar, we will be required to make participation payments to RPX which, depending on how much we recover, could range from 30% of the amount we recover to 70% of the amount we recover in any given quarter, net of certain expenses. Our ability to fund these payments, as well as other payments that may become due in respect of our additional acquisition of patents from Rockstar in December 2013, will depend on the liquidity of our assets, recoveries, alternative demands for cash resources and access to capital at the time. Furthermore, our obligation to fund these payments could materially adversely impact our liquidity and financial position.

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, finance a portion of the acquisition price or have an obligation to make contingent payments upon recovery of value from those assets. These types of debt financing, deferred payment or contingent 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, and, 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 also finance our activities by issuance of debt which could require interest and amortization payments which we may not have the ability to repay, in which case we could be in default under the terms of loan agreements. We may pledge our assets as collateral and if we are in default under our agreements, we could lose our assets through foreclosure or similar processes or become insolvent or bankrupt in which case investors could lose their entire investment.

Any failure to maintain or protect our patent assets or other intellectual property rights could significantly impair our return on investment from such assets and harm our brand, our business and our operating results.

Our ability to operate our new line of business and compete in the intellectual property market largely depends on the superiority, uniqueness and value of our acquired patent assets and other intellectual property. To protect our proprietary rights, we will rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements with our employees and third parties, and protective contractual provisions. No assurances can be given that any of the measures we undertake to protect and maintain our assets will have any measure of success.

We are required to spend significant time and resources to maintain the effectiveness of our assets by paying maintenance fees and making filings with the USPTO. We may acquire patent assets, including patent applications, which require us to spend resources to prosecute the applications with the USPTO prior to issuance of patents. Further, there is a material risk that patent related claims (such as, for example, infringement claims (and/or claims for indemnification resulting therefrom), unenforceability claims, or invalidity claims) will be asserted or prosecuted against us, and such assertions or prosecutions could materially and adversely affect our business. For instance, in connection with *inter partes* review in our now-settled litigations with VTech and Uniden, the Patent Trial and Appeals Board has found that certain portions of the claims relating to certain of our patents are invalid. Regardless of whether any such claims are valid or can be successfully asserted, defending such claims could cause us to incur significant costs and could divert resources away from our other activities.

Despite our efforts to protect our intellectual property rights, any of the following or similar occurrences may reduce the value of our intellectual property:

- our applications for patents, trademarks and copyrights may not be granted and, if granted, may be challenged or invalidated;
- issued trademarks, copyrights, or patents may not provide us with any competitive advantages when compared to potentially infringing other properties;
- our efforts to protect our intellectual property rights may not be effective in preventing misappropriation of our technology; or
- our efforts may not prevent the development and design by others of products or technologies similar to or competitive with, or superior to those we acquire and/or prosecute.

Moreover, we may not be able to effectively protect our intellectual property rights in certain foreign countries where we may do business or enforce our patents against infringers in foreign countries. If we fail to maintain, defend or prosecute our patent assets properly, the value of those assets would be reduced or eliminated, and our business would be harmed.

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 depends significantly on worldwide economic conditions, and the United States and world economies have recently experienced 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 our failure to do so could cause material harm to our business.

If we are not able to protect our intellectual property from unauthorized use, it could diminish the value of our products and services, weaken our competitive position and reduce our revenue.

Our success depends in large part on our ability to identify unauthorized use of our intellectual property. We believe that our trade secrets and non-patented technology may be key to identifying and differentiating our products and services from those of our competitors. We may be required to spend significant resources to monitor and police our intellectual property rights. If we fail to successfully enforce our intellectual property rights, the value of our products and services could be diminished and our competitive position may suffer.

We rely on a combination of copyright, trademark and trade secret laws, confidentiality procedures and licensing arrangements to establish and protect our proprietary rights. Third-parties could copy or otherwise obtain and use our property without authorization or develop similar information and property independently, which may infringe upon our proprietary rights. We may not be able to detect infringement and may lose competitive position in the market before we do so, including situations which may damage our ability to succeed in licensing negotiations or legal proceedings such as patent infringement cases we may bring. In addition, competitors may design around our technologies or develop competing technologies. Intellectual property protection may also be unavailable or limited in some foreign countries.

If we resort to legal proceedings to enforce our intellectual property rights, the proceedings could be burdensome and expensive. In addition, our proprietary rights could be at risk if we are unsuccessful in, or cannot afford to pursue, those proceedings, or that contingent fees could be a significant portion of our recovery. We will also rely on trade secrets and contract law to protect some of our proprietary technology. We will enter into confidentiality and invention agreements with inventors, employees and consultants and common interest agreements with parties associated with our litigation efforts. Nevertheless, these agreements may not be honored and they may not effectively protect our right to our privileged, confidential or proprietary information or our patented or un-patented trade secrets and know-how. Others may independently develop substantially equivalent proprietary information and techniques or otherwise gain access to our trade secrets and know-how.

If we fail to manage our existing assets and patent inventory and third-party relationships (such as attorneys and experts) effectively, our revenue and profits could decline and should we fail to acquire additional revenues from license fees, our growth could be impeded.

Our success depends in part on our ability to manage our existing portfolios of patent assets and manage our third-party relationships necessary to monetize our assets effectively. Our attorneys and experts are not bound by long-term contracts that ensure us consistent access to expertise necessary to enforce our patents, which is crucial to our ability to generate license revenues and prosecute infringers. In addition, attorneys and experts can change the cost of the services they provide, such as contingent fees that we are required to pay, and our arrangements often require an increasing percentage of recoveries to be devoted to attorney's fees depending on the length of time or stage of the case prior to settlement or recovery, reducing the residual amount available to us following conclusion of a case. If an attorney, seller, inventor or expert decides not to provide needed assistance in connection with a case, or provides assistance to prospective licensees or defendants, we may not be able to timely replace this expertise with that from other sources or prevent such assistance to others from damaging our claims and prospects for recovery or licensing thus resulting in potentially lost cases, opportunities, or revenues and potentially diminishing the value of our patent assets. The ability to utilize attorneys, sellers' personnel, inventors or experts will depend on various factors, some of which are beyond our control.

We may be unable to issue securities under our shelf registration statement, which may have an adverse effect on our liquidity.

We have filed a shelf registration statement on Form S-3 with the SEC. The registration statement, which has been declared effective, was filed in reliance on Instruction I.B.6. of Form S-3, which imposes a limitation on the maximum amount of securities that we may sell pursuant to the registration statement during any twelve-month period. At the time we sell securities pursuant to the registration statement, the amount of securities to be sold plus the amount of any securities we have sold during the prior twelve months in reliance on Instruction I.B.6. may not exceed one-third of the aggregate market value of our outstanding common stock held by non-affiliates as of a day during the 60 days immediately preceding such sale as computed in accordance with Instruction I.B.6. Whether we sell securities under the registration statement will depend on a number of factors, including availability of our existing S-3 under the 1/3 limitation calculations set forth in Instruction I.B.6 of Form S-3, the market conditions at that time, our cash position at that time and the availability and terms of alternative sources of capital. Furthermore, Instruction I.B.6. of Form S-3 requires that the issuer have at least one class of common equity securities listed and registered on a national securities exchange. If we are not able to maintain compliance with applicable NASDAQ rules, we will no longer be able to rely upon that Instruction. If we cannot sell securities under our shelf registration, we may be required to utilize more costly and time-consuming means of accessing the capital markets, which could materially adversely affect our liquidity and cash position.

Risks Related to Ownership of Our Common Stock

We face evolving regulation of corporate governance and public disclosure that may result in additional expenses and continuing uncertainty.

As a public company, we incur significant legal, accounting and other expenses. The Sarbanes-Oxley Act of 2002, or SOX, the Dodd-Frank Wall Street Reform and Consumer Protection Act, the listing requirements of The NASDAQ Global Market and other applicable securities rules and regulations impose various requirements on public companies, including establishment and maintenance of effective disclosure and financial controls and corporate governance practices. Our management and other personnel devote a substantial amount of time towards maintaining compliance with these requirements. These rules, regulations and standards are subject to varying interpretations, and, as a result, their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs necessitated by ongoing revisions to disclosure and governance practices. We intend to invest the resources necessary to comply with evolving laws, regulations and standards, and this investment may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If our efforts to comply with new or changed laws, regulations and standards differ from the activities intended by regulatory or governing bodies, regulatory authorities may initiate legal proceedings against us, which could be costly and time-consuming, and our reputation and business may be harmed.

Our common stock may be delisted from The NASDAQ Capital Market if we fail to comply with continued listing standards.

Our common stock is currently traded on The NASDAQ Capital Market under the symbol "SPEX." If we fail to meet any of the continued listing standards of The NASDAQ Capital Market, our common stock could be delisted from The NASDAQ Capital Market. These continued listing standards include specifically enumerated criteria, such as:

- a $1.00 minimum closing bid price;
- stockholders' equity of $2.5 million;
- 500,000 shares of publicly-held common stock with a market value of at least $1 million;
- 300 round-lot stockholders; and
- compliance with NASDAQ's corporate governance requirements, as well as additional or more stringent criteria that may be applied in the exercise of NASDAQ's discretionary authority.

On March 24, 2015, we received a deficiency notice from NASDAQ that the bid price of our common stock no longer met NASDAQ's continued listing requirements. According to the notice, in order to regain compliance with the NASDAQ listing rules, our common stock would need to have a closing bid price of at least $1.00 per share for at least 10 consecutive trading days no later than September 21, 2015. On September 22, 2015, we received a letter from NASDAQ granting us an additional 180 days, or until March 21, 2016, to regain compliance. On March 4, 2016, our common stock underwent a 1-for-19 reverse stock split. As of the close of trading on March 17, 2016, the closing bid price of our common stock was at least $1.00 per share for 10 consecutive trading days and, accordingly, we regained compliance with NASDAQ's continued listing requirements. There can be no assurance that we will be able to remain in compliance in the future. In particular, our share price may continue to decline for a number of reasons, including many that are beyond our control. See "*Our share price may be volatile and there may not be an active trading market for our common stock*".

If we fail to comply with NASDAQ's continued listing standards, we may be delisted and our common stock will trade, if at all, only on the over-the-counter market, such as the OTC Bulletin Board or OTCQX market, and then only if one or more registered broker-dealer market makers comply with quotation requirements. In addition, delisting of our common stock could depress our stock price, substantially limit liquidity of our common stock and materially adversely affect our ability to raise capital on terms acceptable to us, or at all. Further, delisting of our common stock would likely result in our common stock becoming a "penny stock" under the Exchange Act.

Our share price may be volatile and there may not be an active trading market for our common stock.

There can be no assurance that the market price of our common stock will not decline below its present market price or that there will be an active trading market for our common stock. The market prices of technology or technology related companies have been and are likely to continue to be highly volatile. Fluctuations in our operating results and general market conditions for technology or technology related stocks could have a significant impact on the volatility of our common stock price. We have experienced significant volatility in the price of our common stock. From January 1, 2016 through December 31, 2017, the share price of our common stock (on a split-adjusted basis) ranged from a high of $3.92 to a low of $0.87. The reason for the volatility in our stock is not well understood and may continue. Factors that may have contributed to such volatility include, but are not limited to:

- developments regarding regulatory filings;
- our funding requirements and the terms of our financing arrangements;
- technological innovations;
- introduction of new technologies by us or our competitors;
- material changes in existing litigation;
- changes in the enforceability or other matters surrounding our patent portfolios;
- government regulations and laws;
- public sentiment relating to our industry;
- developments in patent or other proprietary rights;
- the number of shares issued and outstanding;
- the number of shares trading on an average trading day;
- performance of companies in the non-performing entity space generally;

- announcements regarding other participants in the technology and technology related industries, including our competitors;
- block sales of our shares by stockholders to whom we have sold stock in private placements, or the cessation of transfer restrictions with respect to those shares; and
- market speculation regarding any of the foregoing.

We could fail in future financing efforts or be delisted from The NASDAQ Capital Market if we fail to receive stockholder approval when needed.

We are required under the NASDAQ rules to obtain stockholder approval for any issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding before the issuance of such securities sold at a discount to the greater of book or market value in an offering that is not deemed to be a "public offering" by NASDAQ. Funding of our operations and acquisitions of assets may require issuance of additional equity securities that would comprise more than 20% of the total shares of our common stock outstanding, but we might not be successful in obtaining the required stockholder approval for such an issuance. If we are unable to obtain financing due to stockholder approval difficulties, such failure may have a material adverse effect on our ability to continue operations.

Our shares of common stock are thinly traded and, as a result, stockholders may be unable to sell at or near ask prices, or at all, if they need to sell shares to raise money or otherwise desire to liquidate their shares.

Our common stock has been "thinly-traded" meaning that the number of persons interested in purchasing our common stock at or near ask prices at any given time may be relatively small or non-existent. This situation is attributable to a number of factors, including the fact that we are a small company that is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our shares until such time as we become more seasoned and viable. Our trading volumes are further adversely affected by the 1-for-19 reverse stock split that was effective as of March 4, 2016. In addition, we believe that due to the limited number of shares of our common stock outstanding, an options market has not been established for our common stock, limiting the ability of market participants to hedge or otherwise undertake trading strategies available for larger companies with broader shareholder bases which prevents institutions and others from acquiring or trading in our securities. Consequently, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give stockholders any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained.

Because of the Rights Agreement and "anti-takeover" provisions in our Certificate of Incorporation and Bylaws, a third party may be discouraged from making a takeover offer that could be beneficial to our stockholders.

Effective as of January 24, 2013, we adopted a shareholder rights plan which was amended and restated as of June 9, 2017. The effect of this rights plan and of certain provisions of our Certificate of Incorporation, By-Laws, and the anti-takeover provisions of the Delaware General Corporation Law, could delay or prevent a third party from acquiring us or replacing members of our Board of Directors, or make more costly any attempt to acquire control of the Company, even if the acquisition or the Board designees would be beneficial to our stockholders. These factors could also reduce the price that certain investors might be willing to pay for shares of the common stock and result in the market price being lower than it would be without these provisions.

In addition, defendants in actions seeking to enforce our patents may seek to influence our Board of Directors and stockholders by acquiring positions in the Company to force consideration of settlement or licensing proposals that may be less desirable than other outcomes such as litigation with respect to our monetization or patent enforcement activities. The effect of such influences on our Company or our corporate governance could reduce the value of our monetization activities and have an adverse effect on the value of our assets. The effect of anti-takeover provisions could impact the ability of prospective defendants to obtain influence in the Company or representation on the Board of Directors or acquire a significant ownership position and such result may have an adverse effect on the Company and the value of its securities.

Dividends on our common stock are not likely.

During the last five years, we have not paid cash dividends on our common stock, and we do not anticipate paying cash dividends on our common stock in the foreseeable future. Investors must look solely to the potential for appreciation in the market price of the shares of our common stock to obtain a return on their investment.

It may be difficult to predict our financial performance because our quarterly operating results may fluctuate.

Our revenues, operating results and valuations of certain assets and liabilities may vary significantly from quarter to quarter due to a variety of factors, many of which are beyond our control. You should not rely on period-to-period comparisons of our results of operations as an indication of our future performance. Our results of operations may fall below the expectations of market analysts and our own forecasts. If this happens, the market price of our common stock may fall significantly. The factors that may affect our quarterly operating results include the following:

- fluctuations in results of our enforcement and licensing activities or outcome of cases;
- fluctuations in duration of judicial processes and time to completion of cases;
- the timing and amount of expenses incurred to negotiate with licensees and obtain settlements from infringers;
- the impact of our anticipated need for personnel and expected substantial increase in headcount;
- fluctuations in the receptiveness of courts and juries to significant damages awards in patent infringement cases and speed to trial in the jurisdictions in which our cases may be brought and the accepted royalty rates attributable to damages analysis for patent cases generally, including the royalty rates for industry standard patents which we may own or acquire;
- worsening economic conditions which cause revenues or profits attributable to infringer sales of products or services to decline;
- changes in the regulatory environment, including regulation of NPE activities or patenting practices, that may negatively impact our or infringers practices;
- the timing and amount of expenses associated with litigation, regulatory investigations or restructuring activities, including settlement costs and regulatory penalties assessed related to government enforcement actions;
- Any changes we make in our Critical Accounting Estimates described in the Management’s Discussion and Analysis of Financial Condition and Results of Operations sections of our periodic reports;
- the adoption of new accounting pronouncements, or new interpretations of existing accounting pronouncements, that impact the manner in which we account for, measure or disclose our results of operations, financial position or other financial measures; and
- costs related to acquisitions of technologies or businesses.

If we fail to retain our key personnel, we may not be able to achieve our anticipated level of growth and our business could suffer.

Our future depends, in part, on our ability to attract and retain key personnel and the continued contributions of our executive officers, each of whom may be difficult to replace. In particular, Anthony Hayes, our Chief Executive Officer, is important to the management of our business and operations and the development of our strategic direction. The loss of the services of any such individual and the process to replace any key personnel would involve significant time and expense and may significantly delay or prevent the achievement of our business objectives.

Because an increasing amount of our outstanding shares may become freely tradable, sales of these shares could cause the market price of our common stock to drop significantly, even if our business is performing well.

As of December 31, 2017, we had outstanding 6,234,898 shares of common stock, of which our directors and executive officers owned 114,253 shares which are subject to the limitations of Rule 144 under the Securities Act.

In general, Rule 144 provides that any non-affiliate of ours, who has held restricted common stock for at least six-months, is entitled to sell their restricted stock freely, provided that we are then current in our filings with the SEC.

An affiliate of the Company may sell after six months with the following restrictions:

- we are current in our filings,
- certain manner of sale provisions,
- filing of Form 144, and
- volume limitations limiting the sale of shares within any three-month period to a number of shares that does not exceed the greater of 1% of the total number of outstanding shares or, the average weekly trading volume during the four calendar weeks preceding the filing of a notice of sale.

Because almost all of our outstanding shares are freely tradable (subject to certain restrictions imposed by lockup agreements executed by the holders thereof) and the shares held by our affiliates may be freely sold (subject to the Rule 144 limitations), sales of these shares could cause the market price of our common stock to drop significantly, even if our business is performing well.

Item 1B. UNRESOLVED STAFF COMMENTS.

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

Item 2. PROPERTIES.

Our main office is located in New York, New York where we lease one office with a monthly payment of approximately $3,200. We also lease office space in Bethesda, Maryland under a lease with monthly payments of $15,107 that expires on March 31, 2018, which we did not renew. We also lease space in Longview, Texas, on a month to month basis, for approximately $2,000 per month. We believe that the New York and Texas facilities are sufficient to meet our needs.

Item 3. LEGAL PROCEEDINGS.

In the ordinary course of business, we actively pursue legal remedies to enforce our intellectual property rights and to stop unauthorized use of our technology. Other than ordinary routine litigation incidental to the business and other than as set forth below, we know of no material, active or pending legal proceedings against us, except for those described below.

Spherix Incorporated v. Uniden Corporation et al., Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas

On August 30, 2013, we initiated litigation against Uniden Corporation and Uniden America Corporation (collectively "Uniden") in *Spherix Incorporated v. Uniden Corporation et al*, Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas ("the Court") for infringement of U.S. Patent Nos. 5,581,599; 5,752,195; 6,614,899; and 6,965,614 (collectively, the "Asserted Patents"). The complaint alleges that Uniden has manufactured, sold, offered for sale and/or imported technology that infringes the Asserted Patents. We seek relief in the form of a finding of infringement of the Asserted Patents, an accounting of all damages sustained by us as a result of Uniden's infringement, actual damages, enhanced damages under 35 U.S.C. Section 284, attorney's fees and costs. On April 15, 2014, Uniden filed its Answer with counterclaims requesting a declaration that the patents at issue are non-infringed and invalid. On April 28, 2014, we filed our Answer to the counterclaims, in which we denied that the patents at issue were non-infringed and invalid. On May 22, 2014, the Court entered a scheduling order for the case setting trial to begin on February 10, 2016. On June 3, 2014, in an effort to narrow the case, the parties filed a stipulation dismissing without prejudice all claims and counterclaims related to U.S. Patent No. 5,752,195. On September 4, 2014, Uniden America Corporation, together with VTech Communications, Inc., filed a request for *inter partes* review ("IPR") of two of the Asserted Patents in the United States Patent and Trademark Office. On March 3, 2015, the PTAB entered decisions instituting, on limited grounds, IPR proceedings regarding a portion of the claims for the two Spherix patents. The PTAB also suggested an accelerated IPR schedule to culminate in an oral hearing on September 28, 2015. The PTAB held a conference call with the parties on March 17, 2015 to finalize the IPR schedule. On October 27, 2014, the Court held a Technology Tutorial Hearing for the educational benefit of the Court. The *Markman* hearing was held on November 21 and 26, 2014, with both hearings occurring jointly with the *Spherix Incorporated v. VTech Telecommunications Ltd. et al.* case (see above). On March 19, 2015, the Court issued its *Markman* order, construing a total of 13 claim terms that had been disputed by the parties. On April 2, 2015, we filed an Amended Complaint with Jury Demand and the parties filed a Settlement Conference Report informing the Court that the parties have not yet resumed settlement negotiations. The Court has ordered the parties to hold a settlement conference not later than January 20, 2016. On April 9, 2015, the parties filed a Joint Motion to Modify Patent Scheduling Order. On April 10, 2015, the Court granted the Motion. On April 20, 2015, Defendants filed their Amended Answer to our Amended Complaint with their counterclaims. On May 1, 2015, we filed our Answer to the counterclaims. Our patent owner's response to the petition in the IPR was timely filed on May 26, 2015. On July 9, 2015, the Court issued a modified Scheduling Order setting the Final Pretrial Conference for February 2, 2016 and confirming the Trial Date beginning February 20, 2016. On September 9, 2015, the parties jointly filed a motion to stay the case pending the decision in the two IPR proceedings. On September 10, 2015, the Court stayed the case and ordered the parties to file a status report within 10 days of the Patent Office issuing its decision in the IPR proceedings. On October 13, 2015, the Court ordered the case administratively closed until the PTAB issues its final written decisions. On February 3, 2016, the PTAB issued its final decisions in the IPR proceedings, finding invalid eight of the 15 asserted claims of U.S. Patent No. 5,581,599 ("the '599 Patent") and all asserted claims of U.S. Patent No. 6,614,899. Our deadline to file a Notice of Appeal of the PTAB's decision to the United States Court of Appeals for the Federal Circuit was set for April 6, 2016. On February 29, 2016, at the parties' joint request, the Court ordered that the stay of the case remain in effect for 30 days so the parties may work to resolve the case without further Court intervention. The Court also ordered the parties to file an updated status report on or before March 31, 2016 advising the Court of their progress toward resolving this litigation without further Court intervention and whether it is appropriate to reopen the case and lift the stay. The parties timely filed a Joint Status Report on March 31, 2016, in which we requested that the stay remain in effect pending the Federal Circuit issuing a ruling in connection with the appeal of IPR2014-01431 relating to the '599 Patent. On April 1, 2016, we filed our Patent Owner's Notice of Appeal in IPR2014-01431. On April 11, 2016, the Court granted the parties' motion to continue the stay. On July 18, 2016, we timely filed our Opening Brief in our appeal to the Federal Circuit. Uniden's reply brief was filed on August 30, 2016. On September 26, 2016, we timely filed our reply brief. On January 12, 2017, we settled the case with Uniden and Uniden took a license under the Asserted Patents. The appeal to the Federal Circuit continues with the Patent Office as an adverse party. On February 13, 2017, the Federal Circuit scheduled the oral argument for March 9, 2017. The Court heard our argument on March 9, 2017. On March 15, 2017, the Court issued an Order asking the Patent and Trademark Office to submit additional briefing on several issues to clarify the basis for its decision of patent invalidity by April 15, 2017. On July 25, 2017, after full briefing and oral argument, the Federal Circuit issued an order affirming the PTAB's decision relating to the '599 patent.

International License Exchange of America, LLC v. Fairpoint Communications, Inc., Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware

On April 26, 2016, we initiated litigation against Fairpoint Communications, Inc. in *Spherix Incorporated v. Fairpoint Communications, Inc.*, Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware (the "Court") for infringement of U.S. Patent No. RE40,999 (the "999 Patent"). In the Complaint, we sought relief in the form of a finding of infringement of the '999 Patent, damages sufficient to compensate us for Fairpoint's infringement together with pre-and post-judgment interest and costs, a declaration that the case is exceptional under 35 U.S.C. § 285, and the Company's attorney's fees. On October 13, 2016, Fairpoint filed its answer with no counterclaims. On November 16, 2016, International License Exchange of America, LLC, a wholly-owned subsidiary of Equitable ("ILEA"), filed a motion to substitute itself as the plaintiff, consistent with our Monetization Agreement with Equitable. On November 17, 2016, the Court granted ILEA's motion. On June 22, 2017, the Court entered a Scheduling Order setting the Markman hearing for August 22, 2018 and jury trial for October 28, 2019. On August 31, 2017, the parties filed a joint stipulation of dismissal and, on September 1, 2017, the Court terminated the case.

International License Exchange of America, LLC Litigations

Under our Monetization Agreement with Equitable, ILEA has filed the patent infringement litigations listed below.

- On August 12, 2016, litigation against Cincinnati Bell, Inc., case number 1:16-cv-00715-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of U.S. Patent No. RE40,999 ("the '999 patent"), U.S. Patent No. 6,970,461, and U.S. Patent No. 7,478,167. On March 8, 2017, Cincinnati Bell filed a motion to dismiss, alleging lack of personal jurisdiction and improper venue. On March 29, 2017, the parties filed a joint motion to stay all deadlines until April 29, 2017, stating that the parties have reached an agreement in principal to resolve all claims asserted in the case. On April 3, 2017, the court granted the parties motion to stay all deadlines until April 29, 2017. On May 5, 2017, the Court ordered the parties to file a joint status report by three days from the date of the order. On May 5, 2017, the parties filed a joint stipulation of dismissal and the Court terminated the case.
- On August 12, 2016, litigation against Frontier Communications Corporation, case number 1:16-cv-00714-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 16, 2017, ILEA filed an agreed motion to stay all deadlines in the case, stating that the parties had reached an agreement in principal in the case and needed time to finalize the written agreement. On May 19, 2017, the Court granted the motion and stayed all deadlines until June 19, 2017. On June 19, 2017, ILEA filed a notice of voluntary dismissal and the Court terminated the case
- On August 12, 2016, litigation against Echostar Corporation, case number 1:16-cv-00716-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On April 17, 2017, ILEA filed a notice of voluntary dismissal of the case, and on April 18, 2017, the Court closed the case.
- On August 15, 2016, litigation against ATN International, Inc. Commnet Wireless, LLC Choice Communications LLC, and Choice Communications, LLC ("Choice Wireless"), case number: 1:16-cv-00718-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On April 12, 2017, the parties jointly dismissed the case by filing a stipulation dismissing the case with prejudice.
- On August 15, 2016, litigation against Sprint Corporation and Clearwire Corporation case number 1:16-cv-00719-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 1, 2017, ILEA filed a notice of voluntary dismissal of the case, and the court closed the case on May 2, 2017.
- On August 16, 2016, litigation against ViaSat, Inc., case number 1:16-cv-00720-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On March 7, 2017, ViaSat filed a motion to dismiss, alleging failure to state a plausible claim of patent infringement. On March 21, 2017, ILEA filed its brief in opposition to the motion to dismiss. On March 28, 2017, ViaSat filed its reply brief on the motion to dismiss. On May 19, 2017, the Court issued an order granting ViaSat's motion to dismiss, but granted ILEA leave to amend the complaint no later than three weeks from the date of the order. On May 30, 2017, ILEA filed its amended complaint. On July 24, 2017, the parties filed a joint motion to dismiss the case. On July 25, 2017, the Court granted the motion and closed the case.
- On September 9, 2016, litigation against Fortinet Inc., case number 1:16-cv-00795-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On March 7, 2017, Fortinet filed its answer to the Complaint. On June 14, 2017, the Court ordered the parties to file a status report within three days of the order. On June 16, 2017, the parties filed the joint status report stating that the parties have executed a written settlement agreement resolving the case. On July 6, 2017, ILEA filed a stipulation of dismissal with prejudice and the Court closed the case.
- On September 9, 2016, litigation against GTT Communications, Inc., case number 1:16-cv-00796-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 19, 2017, the parties filed a motion to extend time to answer the complaint until June 5, 2017. On May 22, 2017, the Court granted the motion. On June 5, 2017, ILEA filed a notice of voluntary dismissal and the Court terminated the case.
- On November 22, 2016, litigations against Alcatel-Lucent SA and Alcatel-Lucent USA Inc., case number 1:16-cv-01077-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent and U.S. Patent Nos. 7,158,515; 6,222,848; 6,578,086; and 6,697,325. On March 28, 2017, ILEA filed a notice of voluntary dismissal of the case and on that date the court closed the case.

Optic153 LLC Litigations

Under our Monetization Agreement with Equitable, Optic 153 LLC, an Equitable subsidiary, has filed the following litigations relating patents acquired under the terms of settlement of one of our prior litigations:

- On March 15, 2018, litigation against Lumentum Operations LLC, Case No. 1:18-cv-00406-VAC-CJB, in the in the U.S. District Court for the District of Delaware, related to alleged infringement of U.S. Patent No. 6,587,261. Lumentum's Answer is currently due on April 6, 2018.

Counterclaims

In the ordinary course of business, we, or with our wholly-owned subsidiaries or monetization partners, will initiate litigation against parties whom we believe have infringed on our intellectual property rights and technologies. The initiation of such litigation exposes us to potential counterclaims initiated by the defendants. Currently, there are no counterclaims pending against us. In the event such counterclaims are filed, we can provide no assurance that the outcome of these claims will not have a material adverse effect on our financial position and results from operations.

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 traded on the NASDAQ Capital Market under the symbol SPEX. No dividends were paid in 2017 or 2016 and we do not currently anticipate paying any cash dividends on our capital stock in the foreseeable future.

The following table sets forth the high and low closing prices for our common stock, as reported by the NASDAQ Capital Market, on a split-adjusted basis accounting for our 1-for-19 reverse stock split effected on March 4, 2016, for the periods indicated.

Period	High	Low
2016		
First Quarter	$ 2.66	$ 1.71
Second Quarter	$ 3.07	$ 1.86
Third Quarter	$ 2.36	$ 1.26
Fourth Quarter	$ 1.51	$ 0.87
2017		
First Quarter	$ 1.38	$ 1.02
Second Quarter	$ 3.92	$ 0.91
Third Quarter	$ 3.06	$ 1.23
Fourth Quarter	$ 1.68	$ 1.27

On March 27, 2018, the closing price of our common stock, as reported by the NASDAQ Capital Market, was $1.24. As of March 27, 2018, we had approximately 122 holders of record of our common stock

Equity Compensation Plan Information

The following table provides information about our common stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of December 31, 2017 (on a split-adjusted basis).

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1)) (2)
Equity compensation plans approved by security holder	328,490	$ 78.38	253,609
Equity compensation plans not approved by security holder	-	-	-
	328,490		253,609

(1) Consists of options to acquire 105,610 shares of our common stock under the 2013 Equity Incentive Plan and 222,880 under the 2014 Equity Incentive Plan.
(2) Consists of shares of common stock available for future issuance under our equity incentive plan or any other individual compensation arrangement.

Item 6. SELECTED FINANCIAL DATA

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

Item 7. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Forward-Looking Statements

You should read this discussion together with the Financial Statements, related Notes and other financial information included elsewhere in this Form 10-K. The following discussion contains assumptions, estimates and other forward-looking statements that involve a number of risks and uncertainties. These risks could cause our actual results to differ materially from those anticipated in these forward-looking statements.

Overview

We are an intellectual property company that owns patented and unpatented intellectual property. Spherix Incorporated was formed in 1967 as a scientific research company and for much of our history pursued drug development including through Phase III clinical studies which were largely discontinued in 2012. In 2012 and 2013, we shifted our focus to being a firm that owns, develops, acquires and monetizes intellectual property assets. Through our acquisitions of 108 patents and patent applications from Rockstar Consortium US, LP and acquisition of several hundred patents issued to Harris Corporation as a result of our acquisition of North South, we have expanded our activities in wireless communications and telecommunication sectors including antenna technology, Wi-Fi, base station functionality and cellular.

Our activities generally include the acquisition and development of patents through internal or external research and development. In addition, we seek to acquire existing rights to intellectual property through the acquisition of already issued patents and pending patent applications, both in the United States and abroad. We may alone, or in conjunction with others, develop products and processes associated with our intellectual property and license our intellectual property to others seeking to develop products or processes or whose products or processes infringe our intellectual property rights through legal processes. Using our patented technologies, we employ strategies seeking to permit us to derive value from licensing, commercialization, settlement and litigation from our patents. We will continue to seek to obtain patents from inventors and patent owners to monetize patent portfolios.

In addition to our patent monetization efforts, since the fourth quarter of 2017, we have been transitioning to a blockchain technology development company. The Company made no investments in new IP during 2017 and started the transition with its investment in Hoth Therapeutics, Inc. during the 3rd quarter of 2017, and with its entry into an agreement with DatChat, Inc. in March 2018. Since March 1, 2013, the Company has received limited funds from its IP monetization. See “Recent Developments”.

Critical Accounting Policies

Accounting for Warrants

We account for the issuance of common stock purchase warrants issued in connection with the equity offerings in accordance with the provisions of Accounting Standards Codification (“ASC”) 815, *Derivatives and Hedging* (“ASC 815”). We classify as equity any contracts that (i) require physical settlement or net-share settlement or (ii) gives the Company a choice of net-cash settlement or settlement in its own shares (physical settlement or net-share settlement). We classify as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the control of the Company) or (ii) gives the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement). In addition, Under ASC 815, registered common stock warrants that require the issuance of registered shares upon exercise and do not expressly preclude an implied right to cash settlement are accounted for as derivative liabilities. We classify these derivative warrant liabilities on the consolidated balance sheet as a current liability.

We assess the classification of our common stock purchase warrants as of the date of each offering and determined that such instruments met the criteria for liability classification. The warrants are reported on the consolidated balance sheets as a warrant liability at fair value using the Black-Scholes valuation method. Changes in the estimated fair value of the warrants result in the consolidated statement of operations as “change in the fair value of warrant liabilities”.

Convertible Preferred Stock

We account for convertible preferred stock with detachable warrants in accordance with ASC 470: *Debt* and allocated proceeds received to the convertible preferred stock and detachable warrants based on relative fair values. We evaluated the classification of our convertible preferred stock and warrants and determined that such instruments meet the criteria for equity classification. We recorded the related issuance costs and value ascribed to the warrants as a reduction of the convertible preferred stock.

We have also evaluated our convertible preferred stock and warrants in accordance with the provisions of ASC 815, *Derivatives and Hedging*, including consideration of embedded derivatives requiring bifurcation. The issuance of the convertible preferred stock generated a beneficial conversion feature (“BCF”), which arises when a debt or equity security is issued with an embedded conversion option that is beneficial to the investor or in the money at inception because the conversion option has an effective strike price that is less than the market price of the underlying stock at the commitment date. We recognized the BCF by allocating the intrinsic value of the conversion option, which is the number of shares of common stock available upon conversion multiplied by the difference between the effective conversion price per share and the fair value of common stock per share on the commitment date, to additional paid-in capital, resulting in a discount on the convertible preferred stock. As the convertible preferred stock may be converted immediately, we have disclosed the BCF as a deemed dividend on the consolidated statements of operations.

Stock-based Compensation

We account for share-based payment awards exchanged for employee services at the estimated grant date fair value of the award. Stock options issued under our long-term incentive plans are granted with an exercise price equal to no less than the market price of our stock at the date of grant and expire up to ten years from the date of grant. These options generally vest over a one- to five-year period.

The fair value of stock options granted was determined on the grant date by using a Black-Scholes model valuation with assumptions for risk free interest rate, the expected term, expected volatility, and expected dividend yield. The risk-free interest rate is based on U.S. Treasury zero-coupon yield curve over the expected term of the option. The expected term assumption is determined using the weighted average midpoint between vest and expiration for all individuals within the grant. The volatility rate was computed based on the standard deviation of our underlying stock price's daily logarithmic returns. Our model includes a zero dividend yield assumption, as we have not historically paid nor do we anticipate paying dividends on our common stock. Our model does not include a discount for post-vesting restrictions, as we have not issued awards with such restrictions.

The periodic expense is then determined based on the valuation of the options, and at that time an estimated forfeiture rate is used to reduce the expense recorded. Our estimate of pre-vesting forfeitures is primarily based on our historical experience and is adjusted to reflect actual forfeitures as the options vest.

Fair Value of Financial Instruments

Financial instruments, including accounts and other receivables, accounts payable and accrued liabilities are carried at cost, which management believes approximates fair value due to the short-term nature of these instruments. We measure the fair value of financial assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. We maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

We use three levels of inputs that may be used to measure fair value:

Level 1 - quoted prices in active markets for identical assets or liabilities
Level 2 - quoted prices for similar assets and liabilities in active markets or inputs that are observable
Level 3 - inputs that are unobservable (for example, cash flow modeling inputs based on assumptions)

Revenue Recognition

Revenue is recognized when (i) persuasive evidence of an arrangement exists, (ii) all obligations have been substantially performed pursuant to the terms of the arrangement, (iii) amounts are fixed or determinable, and (iv) the collectability of amounts is reasonably assured.

In general, revenue arrangements provide for the payment of contractually determined fees in consideration for the grant of certain intellectual property rights for patented technologies owned by us. These rights may include some combination of the following: (i) the grant of a non-exclusive, retroactive and future license, (ii) a covenant-not-to-sue, (iii) the release of the licensee from certain claims, and (iv) the dismissal of any pending litigation. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined, relatively short period of time, with the licensee possessing the right to renew the agreement at the end of each contractual term for an additional minimum upfront payment.

Intangible Assets - Patent Portfolios

Intangible assets include our patent portfolios with original estimated useful lives ranging from 6 months to 12 years. We amortize the cost of the intangible assets over their estimated useful lives on a straight-line basis. Costs incurred to acquire patents, including legal costs, are also capitalized as long-lived assets and amortized on a straight-line basis with the associated patent.

We monitor 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, we will perform 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, we will determine whether impairment has occurred for the group of assets for which we can identify the projected cash flows. If the carrying values are in excess of undiscounted expected future cash flows, we measure any impairment by comparing the fair value of the asset or asset group to its carrying value. We tested our intangible assets for impairment at the end of December 31, 2017 and 2016. There was no impairment of intangible assets in 2017. During the year ended December 31, 2016, we recorded a $2.7 million of impairment charges to our intangible assets.

Recently Issued Accounting Pronouncements

See Note 3 to the consolidated financial statements for a discussion of recent accounting standards and pronouncements.

Results of Operations

Fiscal Year Ended December 31, 2017 Compared to Fiscal Year Ended December 31, 2016

For the year ended December 31, 2017 and 2016, revenue was approximately $1.2 million and $0.9 million, respectively, which primarily represents the amortization of deferred revenue related to the two patent license agreements we entered into with RPX Corporation ("RPX") on November 23, 2015 and May 22, 2016 (the "RPX License Agreements"). During the year ended December 31, 2017, we recognized $0.2 million and $1.0 million from November 2015 and May 2016 RPX License transactions, respectively. Both the November 2015 and May 2016 RPX License transactions use the straight-line method to amortize the deferred revenue over the contract life.

For the year ended December 31, 2017, we incurred a loss from operations of $3.8 million, a decrease of $4.8 million, as compared to $8.6 million in 2016. The decrease in net loss was primarily attributed to (i) $2.7 million decrease in impairment charge taken against the intangible assets (ii) a $0.8 million decrease in amortization expenses related to the Rockstar patents acquired by the Company during 2013 due to a $2.7 million impairment of intangible assets in 2016 and (iii) a $1.3 million decrease in professional fees due to further cost cutting implemented in the first quarter of 2017.

For the year ended December 31, 2017, other income was approximately $0.5 million as compared to approximately $2.1 million of other income for the year ended 2016. The decrease in other income was primarily attributed to a $2.4 million decrease in fair value of warrant liabilities; which was partially offset by an increase in fair value of our investment in Hoth of $0.3 million and an increase of $0.5 million in other income, net related to investment income on our securities.

Net loss attributable to common stockholders was a net loss of $3.3 million in the year ended December 31, 2017 compared to net income of $25.0 million in the year ended 2016. The change is attributed to the decrease of deemed capital contribution on extinguishment of preferred stock. During the year ended December 31, 2016, we incurred a one-time $31.5 million of deemed capital contribution on preferred stock related to the cancellation of 381,967 shares of Series H Preferred Stock pursuant to the RPX license agreement, which capital contribution is not reflected in the year ended December 31, 2017. See Note 7 for additional details surrounding the Series H Preferred Stock and RPX license agreement.

Liquidity and Capital Resources

We continue to incur ongoing administrative and other expenses, including public company expenses, in excess of corresponding revenue.

We intend to finance our activities through:

- managing current cash and cash equivalents on hand from our past equity offerings,
- seeking additional funds raised through the sale of additional securities in the future,
- seeking additional liquidity through credit facilities or other debt arrangements, and
- increasing revenue from the monetization of its patent portfolios, license fees and new business ventures.

Cash Flows from Operating Activities - For the year ended December 31, 2017, net cash used in operations was $3.3 million compared to net cash provided by operations of $70,000 for the year ended December 31, 2016.

The cash used in operating activities for the year ended December 31, 2017 primarily resulted from a net loss of $3.3 million. The cash provided by operating activities for the year ended December 31, 2016 primarily resulted from significant non-cash charges related to impairment of intangibles of $2.7 million, amortization expenses of $2.1 million, stock-based compensation expense of approximately $0.6 million and approximately $3.5 million of deferred revenue, partially offset by approximately $6.5 million net loss and $2.3 million of change in fair value of warrant liabilities.

Cash Flows from Investing Activities - For the year ended December 31, 2017, net cash provided by investing activities was approximately $1.3 million. The cash provided by investing activities primarily resulted from our sale of marketable securities for the year ended December 31, 2017 of $14.2 million, partially offset by our investment in Hoth for $0.7 million and by our purchase of marketable securities of $12.3 million. For the year ended December 31, 2016, net cash used in investing activities was approximately $3.0 million. The cash used in investing activities primarily resulted from our purchase of marketable securities for the year ended December 31, 2016 of approximately $18.0 million and purchase of property and equipment of approximately $4,000, partially offset by sale of marketable securities of approximately $15.1 million.

Cash Flows from Financing Activities - Net cash flows provided by financing activities during the year ended December 31, 2017 was $2.1 million compared to net cash provided by financing activities of $2.9 million in the year ended December 31, 2016. The cash provided by financing activities for the year ended December 31, 2017, primarily resulted from approximately $2.1 million net proceeds from an underwritten public offering of 1,250,000 shares of our common stock. The cash provided by financing activities for the year ended December 31, 2016, primarily resulted from approximately $2.1 million net proceeds from an underwritten public offering of 1,592,357 shares of the Company's common stock and $0.8 million proceeds from warrant exercises and the purchase 200,000 shares, partially offset by the payment for the cancellation of common stock of approximately $4,000.

Our business will require significant amounts of capital to sustain operations and make the investments we need to execute our longer-term business plan. Our accumulated deficit amounted to approximately $145.1 million at December 31, 2017. Our existing liquidity is not sufficient to fund our operations, anticipated capital expenditures, working capital and other financing requirements for the foreseeable future. We will need to obtain additional debt or equity financing, especially if we experience downturns in our business that are more severe or longer than anticipated, or if we experience significant increases in expense levels resulting from being a publicly-traded company or from the litigations in which we participate. If we attempt to obtain additional debt or equity financing, we cannot assume that such financing will be available to us on favorable terms, or at all.

On March 19, 2018, we closed on a public offering of common stock for gross proceeds of approximately $3.0 million. The offering was a shelf takedown off of the our registration statement on Form S-3 (File No. 333-222488) and was conducted pursuant to a placement agency agreement between us and Laidlaw & Company (UK) Ltd., the sole placement agent, on a best-efforts basis with respect to the offering ("Laidlaw"), that was entered into on March 14, 2018. We sold 2,222,222 shares of its common stock in the offering at a purchase price of $1.35 per share. The use of proceeds from such offering was to develop the business of DatChat, Inc., with whom we entered into an agreement and plan of merger with to acquire 100% of its ownership, on March 12, 2018.

Disputes regarding the assertion of patents and other intellectual property rights are highly complex and technical. 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 or initiate inter parties reviews in an effort to avoid or limit liability and damages for patent infringement or cause us to incur additional costs as a strategy. If such efforts are successful, they may have an impact on the value of the patents and preclude us from deriving revenue from the patents, the patents could be declared invalid by a court or the United States Patent and Trademark Office, in whole or in part, or the costs could increase.

Should we be unsuccessful in our efforts to execute our business plan, it could become necessary for us to reduce expenses, curtail operations or explore various alternative business opportunities or possibly suspend or discontinue our business activities.

We have filed a shelf registration statement on Form S-3 with the SEC. The registration statement, which has been declared effective, was filed in reliance on Instruction I.B.6 of Form S-3, which imposes a limitation on the maximum amount of securities that we may sell pursuant to the registration statement during any twelve-month period. At the time we sell securities pursuant to the registration statement, the amount of securities to be sold plus the amount of any securities we have sold during the prior twelve months in reliance on Instruction I.B.6 may not exceed one-third of the aggregate market value of our outstanding common stock held by non-affiliates as of a day during the 60 days immediately preceding such sale as computed in accordance with Instruction I.B.6. Whether we sell securities under the registration statement will depend on a number of factors, including the market conditions at that time, our cash position at that time and the availability and terms of alternative sources of capital.

Rockstar will be entitled to receive a contingent recovery percentage of future profits ("Participation Payments") from licensing, settlements and judgments against defendants with respect to patents purchased under the First Patent Purchase Agreement; however, no payment is required unless the Company receives a recovery. The Participation Payments under the First Patent Purchase Agreement are equal to zero percent until the Company recovers with respect to patents purchased under the First Patent Purchase Agreement at least (a) $8.0 million or (b) if we recover less than $17.0 million, an amount equal to $5.0 million plus $3.0 million times a fraction equal to total recoveries minus $10.0 million, divided by $7.0 million (clause (a) or (b), as applicable, being the "Initial Return"), in each case net of certain expenses. Once we obtain recoveries in excess of the Initial Return, we are required to make a payment to Rockstar of $13.0 million, payable only from the proceeds of such recovery, within six months after such recovery. In addition, no later than 30 days after the end of each quarter in which we make such a recovery, we are required to pay to Rockstar a percentage of such recovery, net of certain expenses, scaling from 30% if such cumulative recoveries net of certain expenses are less than or equal to $50.0 million, to 70% to the extent cumulative recoveries net of certain expenses are in excess of $1.0 billion.

Rockstar will also be entitled to receive Participation Payments from licensing, settlements and judgments against defendants with respect to patents purchased under the Second Patent Purchase Agreement; however, no payment is required unless we receive a recovery. The Participation Payments under the Second Patent Purchase Agreement are equal to zero percent until we recover with respect to patents purchased under the Second Patent Purchase Agreement at least $120.0 million, net of certain expenses. Once we obtain recoveries in excess of that amount, we are required to pay to Rockstar 50% of our recovery in excess of that amount, no later than 30 days after the end of each quarter in which we make such a recovery.

Our ability to fund these Participation Payments or the $13.0 million contingent payment will depend on the liquidity of our assets, recoveries, alternative demands for cash resources and access to capital at the time. Furthermore, our obligation to fund Participation Payments could adversely impact our liquidity and financial position. As of the date of this report, we have not made any such Participation Payments.

Contractual Obligations

Future minimum rental payments required as of December 31, 2017, including Bethesda office lease obligation are as follows ($ in thousands):

	Lease Payments
Year Ended December 31, 2018	45
	$ 45

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK.

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

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Financial statements and supplementary data required by this Item 8 follow.

Index to Financial Statements Page

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders
of Spherix Incorporated

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Spherix Incorporated and Subsidiaries (the “Company”) as of December 31, 2017 and 2016, the related consolidated statements of operations, changes in stockholders’ equity and cash flows for each of the two years in the period ended December 31, 2017, and the related notes (collectively referred to as the “financial statements”). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2017, 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 the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits 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/ Marcum LLP

Marcum LLP

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

New York, NY
March 30, 2018

SPHERIX INCORPORATED AND SUBSIDIARIES
Consolidated Balance Sheets
($ in thousands except per share amounts)

	December 31 2017	December 31 2016
ASSETS		
Current assets		
Cash and cash equivalents	$ 197	$ 134
Marketable securities	3,998	6,025
Prepaid expenses and other assets	150	135
Total current assets	4,345	6,294
Property and equipment, net	3	6
Patent portfolios and patent rights, net	3,578	4,951
Investments at fair value in Hoth	1,020	—
Deposit	26	26
Total assets	**$ 8,972**	**$ 11,277**
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable and accrued expenses	$ 56	$ 123
Accrued salaries and benefits	695	446
Warrant liabilities	822	702
Short-term deferred revenue	957	1,216
Short-term lease liabilities	48	183
Total current liabilities	2,578	2,670
Long-term deferred revenue	2,288	3,245
Long-term lease liabilities	—	44
Total liabilities	**4,866**	**5,959**
Stockholders' equity		
Series D: 4,725 shares issued and outstanding at December 31, 2017 and 2016; liquidation value of $0.0001 per share	—	—
Series D-1: 834 shares issued and outstanding at December 31, 2017 and 2016; liquidation value of $0.0001 per share	—	—
Common stock, 0.0001 par value, 100,000,000 shares authorized; 6,234,910 and 4,943,941 shares issued at December 31, 2017 and 2016, respectively; 6,234,898 and 4,943,929 shares outstanding at December 31, 2017 and 2016, respectively	—	—
Additional paid-in-capital	149,425	147,331
Treasury stock, at cost, 12 shares at December 31, 2017 and 2016	(264)	(264)
Accumulated deficit	(145,055)	(141,749)
Total stockholders' equity	4,106	5,318
Total liabilities and stockholders' equity	**$ 8,972**	**$ 11,277**

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

SPHERIX INCORPORATED AND SUBSIDIARIES
Consolidated Statements of Operations
($ in thousands)

	Years Ended December 31,	
	2017	**2016**
Revenues	$ 1,236	$ 877
Operating costs and expenses		
Amortization of patent portfolio	1,373	2,135
Compensation and related expenses (including stock-based compensation)	2,059	1,950
Professional fees	1,038	2,293
Impairment of intangible assets	—	2,713
Rent	92	84
Other selling, general and administrative	496	253
Total operating expenses	5,058	9,428
Loss from operations	(3,822)	(8,551)
Other (expenses) income		
Other income, net	291	(182)
Change in fair value of investment	345	—
Change in fair value of warrant liabilities	(120)	2,257
Total other income	516	2,075
Net loss	**$ (3,306)**	**$ (6,476)**
Deemed capital contribution on extinguishment of preferred stock	—	31,480
Net (loss) income attributable to common stockholders	**$ (3,306)**	**$ 25,004**
Net (loss) income per share attributable to common stockholders, basic and diluted		
Basic	$ (0.60)	$ 6.76
Diluted	$ (0.60)	$ 6.51
Weighted average number of common shares outstanding,		
Basic	5,538,568	3,700,090
Diluted	5,538,568	3,838,366

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

SPHERIX INCORPORATED AND SUBSIDIARIES
Consolidated Statements of Changes in Stockholders' Equity
($ in thousands)

	Common Stock		Preferred Stock		Additional Paid-in	Treasury Stock		Accumulated	Total Stockholders'
	Shares	Amount	Shares	Amount	Capital	Shares	Amount	Deficit	Equity
Balance at January 1, 2016	**2,539,847**	**$ —**	**388,766**	**$ —**	**$ 144,287**	**12**	**$ (264)**	**$ (135,273)**	**$ 8,750**
Conversion of Series K preferred stock to common stock	326,315	—	(1,240)	—	—	—	—	—	—
Beneficial conversion feature of Series K convertible preferred stock	—	—	—	—	695	—	—	—	695
Deemed dividend on conversion of Series K convertible preferred stock to common stock	—	—	—	—	(695)	—	—	—	(695)
Extinguishment of Series H convertible preferred stock and deemed capital contribution	—	—	(381,967)	—	(414)	—	—	—	(414)
Fractional shares adjusted for reverse split	(1,675)	—	—	—	(4)				(4)
Warrant Exercise	200,000	—	—	—	760				760
Issuance common stock in equity raise, net of offering cost	1,592,357	—	—	—	2,140				2,140
Stock-based compensation	287,085	—	—	—	562				562
Net loss	—	—	—	—	—	—	—	(6,476)	(6,476)
Balance at December 31, 2016	**4,943,929**	**$ —**	**5,559**	**$ —**	**$ 147,331**	**12**	**$ (264)**	**$ (141,749)**	**$ 5,318**
Repurchase of restricted stock units to pay for employee withholding taxes	35,969	—	—	—	(24)	—	—	—	(24)
Issuance common stock in equity raise, net of offering cost	1,250,000	—	—	—	2,095	—	—	—	2,095
Stock-based compensation	5,000	—	—	—	23	—	—	—	23
Net loss	—	—	—	—	—	—	—	(3,306)	(3,306)
Balance at December 31, 2017	**6,234,898**	**$ —**	**5,559**	**$ —**	**$ 149,425**	**12**	**$ (264)**	**$ (145,055)**	**$ 4,106**

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

SPHERIX INCORPORATED AND SUBSIDIARIES
Consolidated Statements of Cash Flows
($ in thousands)

	Year Ended December 31,	
	2017	**2016**
Cash flows from operating activities		
Net loss	$ (3,306)	$ (6,476)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Amortization of patent portfolio	1,373	2,135
Change in fair value of investment	(345)	—
Change in fair value of warrant liabilities	120	(2,257)
Stock-based compensation	23	562
Depreciation expenses	3	3
Realized loss on marketable securities	328	95
Unrealized gain on marketable securities	(240)	243
Impairment of intangible assets	—	2,713
Changes in assets and liabilities:		
Prepaid expenses and other assets	(15)	195
Accounts payable and accrued expenses	(67)	(261)
Accrued salaries and benefits	249	(199)
Deferred revenue	(1,216)	3,497
Accrued lease liabilities	(179)	(180)
Net cash (used in) provided by operating activities	(3,272)	70
Cash flows from investing activities		
Purchase of marketable securities	(12,274)	(18,035)
Purchase of property and equipment	—	(4)
Sale of marketable securities	14,213	15,065
Investment in Hoth Therapeutics, Inc.	(675)	—
Net cash provided by (used in) investing activities	1,264	(2,974)
Cash flows from financing activities		
Cash paid for cancellation of common stock	—	(4)
Cash from issuance common stock, net of offering cost	2,095	2,140
Proceeds from exercise of warrants	—	760
Repurchase of restricted stock units to pay for employee withholding taxes	(24)	—
Net cash provided by financing activities	2,071	2,896
Net increase in cash and cash equivalents	63	(8)
Cash and cash equivalents, beginning of the year	134	142
Cash and cash equivalents, end of the year	$ 197	$ 134
Cash paid for interest and taxes	$ 8	$ —
Non-cash investing and financing activities		
Extinguishment of Series H Convertible Preferred Stock in connection with license agreement	$ —	$ 31,480
Recognition of deferred revenue in connection with license agreement	$ —	$ 414

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

Note 1. Organization and Description of Business

Organization and Description of Business

Spherix Incorporated (the "Company") is an intellectual property company incorporated in the State of Delaware that owns patented and unpatented intellectual property. The Company was formed in 1967 as a scientific research company and for much of its history pursued drug development including through Phase III clinical studies which were discontinued. Through the Company's acquisition of patents and patent applications developed by Nortel Networks Corporation from Rockstar Consortium US, LP ("Rockstar") and Harris Corporation from North South Holdings Inc. ("North South") in 2013, the Company has expanded its activities.

The Company is a patent commercialization company focused on generating revenues from the monetization of intellectual property, or IP. Such monetization includes, but is not limited to, acquiring IP from patent holders in order to maximize the value of the patent holdings by conducting and managing a licensing campaign, or through the settlement and litigation of patents. We intend to generate revenues and related cash flows from the granting of intellectual property rights for the use of patented technologies that we own, that we manage for others, or that others manage on our behalf. To date, we have generated minimal revenues and no assurance can be provided that our business model will be successful.

The Company continually works to enhance its portfolio of intellectual property through acquisition and strategic partnerships. The Company's mission is to partner with inventors, or other entities, who own undervalued intellectual property. The Company then works with the inventors or other entities to commercialize the IP.

In March 2016, the Company entered into an agreement (which was subsequently amended in April and May 2016) with Equitable IP Corporation ("Equitable") to facilitate the monetization of its patents (the "Monetization Agreement"). Pursuant to the Monetization Agreement, the Company is working together with Equitable to further develop and revise its ongoing litigation plan. See Note 5 for additional details surrounding the Monetization Agreement.

Reverse Stock Split and Amendment to Certificate of Incorporation

On February 26, 2016, the Company's stockholders approved an amendment to the Company's certificate of incorporation and authorized the Company's Board of Directors to effect a reverse stock split of Common Stock at a ratio in the range of 1-for-12 to 1-for-24. The Company implemented this reverse stock split on March 4, 2016 with a ratio of 1-for-19 (the "Reverse Stock Split"). No fractional shares were issued in connection with the Reverse Stock Split. Stockholders who otherwise would have been entitled to receive a fractional share in connection with the Reverse Stock Split received a cash payment in lieu thereof. The par value and other terms of the common stock were not affected by the Reverse Stock Split. In addition, the amendment to the Company's certificate of incorporation that effected the Reverse Stock Split also simultaneously reduced the number of authorized shares of Common Stock from 200,000,000 to 100,000,000.

The Company's Common Stock began trading at its post-Reverse Stock Split price at the beginning of trading on March 4, 2016.

Immediately following the Reverse Stock Split, the number of outstanding shares of Common Stock were reduced from 48,259,430 shares to 2,539,847. All per share amounts and outstanding shares of Common Stock including stock options, restricted stock and warrants, have been retroactively adjusted in these consolidated financial statements for all periods presented to reflect the 1-for-19 Reverse Stock Split. Further, exercise prices of stock options and warrants have been retroactively adjusted in these consolidated financial statements for all periods presented to reflect the 1-for-19 Reverse Stock Split. Numbers of shares of the Company's preferred stock were not affected by the Reverse Stock Split; however, the conversion ratios have been adjusted to reflect the Reverse Stock Split.

Note 2. Liquidity and Financial Condition

The Company continues to incur ongoing administrative and other expenses, including public company expenses, in excess of corresponding (non-financing related) revenue. While the Company continues to implement its business strategy, it intends to finance its activities through:

- managing current cash and cash equivalents on hand from the Company's past debt and equity offerings,
- seeking additional funds raised through the sale of additional securities in the future,
- seeking additional liquidity through credit facilities or other debt arrangements, and
- increasing revenue from its patent portfolios, license fees and new business ventures.

Management believes the Company currently has sufficient funds to meet its operating requirements for at least the next twelve months.

The Company's ultimate success is dependent on its ability to obtain additional financing and generate sufficient cash flow to meet its obligations on a timely basis. The Company's business will require significant amounts of capital to sustain operations and make the investments it needs to execute its longer-term business plan. The Company's working capital amounted to approximately $1.8 million at December 31, 2017, and net loss amounted to approximately $3.3 million and $6.5 million for the years ended December 31, 2017 and 2016, respectively. The Company had an approximately $145.1 million of accumulated deficit as of December 31, 2017. Absent generation of sufficient revenue from the execution of the Company's long-term business plan, the Company will need to obtain additional debt or equity financing, especially if the Company experiences downturns in its business that are more severe or longer than anticipated, or if the Company experiences significant increases in expense levels resulting from being a publicly-traded company or operations. If the Company attempts to obtain additional debt or equity financing, the Company cannot assume that such financing will be available to the Company on favorable terms, or at all.

Disputes regarding the assertion of patents and other intellectual property rights are highly complex and technical. The Company may be forced to litigate against others to enforce or defend its 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 the Company is involved may allege defenses and/or file counterclaims or initiate inter-party reviews in an effort to avoid or limit liability and damages for patent infringement or cause the Company to incur additional costs as a strategy. If such efforts are successful, they may have an impact on the value of the patents and preclude the Company from deriving revenue from the patents. The patents could be declared invalid by a court or the United States Patent and Trademark Office, in whole or in part, or the costs of the Company can increase. Recent rulings also create an increased risk that if the Company is unsuccessful in litigation it could be responsible to pay the attorneys' fees and other costs of defendants by lowering the standard for legal fee shifting sought by defendants in patent cases.

Public Underwriting

On August 8, 2016, the Company closed on an underwritten public offering of 1,592,357 shares of the Company's common stock at a price to the public of $1.57 per share (the "Offering Price"). Under the terms of the Underwriting Agreement, the Company granted the representative of the underwriters a 30-day option to purchase up to 231,349 additional shares of its common stock (the 30-day underwriters option expired unexercised). The net proceeds to the Company were $2.1 million, after deducting the underwriting discount and other estimated offering expenses payable by the Company.

On July 18, 2017, the Company entered into an underwriting agreement with Laidlaw & Company (UK) Ltd. with respect to the issuance and sale of an aggregate of 1,250,000 shares of the Company's common stock, par value $0.0001 per share, in a firm commitment underwritten public offering which closed on July 24, 2017. Each share was sold for a price of $2.00 for aggregate gross proceeds of $2.5 million, with net proceeds of approximately $2.1 million, after deducting the underwriting discounts and commissions (equivalent to 8% of gross proceeds) and estimated offering expenses.

Note 3. Summary of Significant Accounting Policies

Basis of Presentation and Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Nuta Technology Corp. ("Nuta"), Spherix Portfolio Acquisition II, Inc. ("SPXII"), Guidance IP, LLC ("Guidance"), Directional IP, LLC ("Directional"), Spherix Management Services, LLC ("SMS") and NNPT, LLC ("NNPT"). All significant intercompany balances and transactions have been eliminated in consolidation.

Use of Estimates

The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("US GAAP"). This requires management to make estimates and assumptions that affect certain reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. The Company's significant estimates and assumptions include the recoverability and useful lives of long-lived assets, valuation of investments, stock-based compensation, the valuation of derivative liabilities, and the valuation allowance related to the Company's deferred tax assets. Certain of the Company's estimates, including the carrying amount of the intangible assets, could be affected by external conditions, including those unique to the Company and general economic conditions. It is reasonably possible that these external factors could have an effect on the Company's estimates and could cause actual results to differ from those estimates and assumptions.

Segments

The Company operates in one operating segment and, accordingly, no segment disclosures have been presented herein.

Concentration of Cash

The Company maintains cash balances at two financial institutions in checking accounts and money market accounts. The Company considers all highly liquid investments with original maturities of three months or less when purchased to be cash and cash equivalents. As of December 31, 2017 and 2016, the Company had $0.2 million and $0.1 million, respectively, in cash and cash equivalents. The Company has not experienced any losses in such accounts and believes it is not exposed to any significant credit risk on cash.

Marketable Securities

Marketable securities are classified as trading and are carried at fair value. The Company's marketable securities consist of corporate bonds and highly liquid mutual funds and exchange-traded & closed-end funds which are valued at quoted market prices. During the year ended December 31, 2017 and 2016, the Company incurred realized losses of approximately $328,000 and $95,000, respectively, and unrealized gain of approximately $240,000 and unrealized loss of approximately of $243,000, respectively, on its investments in marketable securities, which are included in other income, net on the consolidated statements of operations. In addition, during the year ended December 31, 2017 and 2016, the Company earned dividend income of approximately $111,000 and $19,000, respectively, which is included in other income, net on the consolidated statement of operations. The Company reinvested such dividend income into its marketable securities during the years ended December 31, 2017 and 2016. The market value of marketable securities held as of December 31, 2017 and 2016 were $4.0 million and $6.0 million, respectively.

Fair Value of Financial Instruments

Financial instruments, including cash and cash equivalents, accounts and other receivables, accounts payable and accrued liabilities are carried at cost, which management believes approximates fair value due to the short-term nature of these instruments. The Company measures the fair value of financial assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value.

The Company uses three levels of inputs that may be used to measure fair value:

Level 1 - quoted prices in active markets for identical assets or liabilities
Level 2 - quoted prices for similar assets and liabilities in active markets or inputs that are observable
Level 3 - inputs that are unobservable (for example, cash flow modeling inputs based on assumptions)

Property and Equipment

Property and equipment are stated at cost and include office furniture and equipment and computer hardware and software. The Company computes depreciation and amortization under the straight-line method and typically over the following estimated useful lives of the related assets:

● Office furniture and equipment	3 to 10 years
● Computer hardware and software	3 to 5 years

Impairment of Long-lived Assets (Including Patent 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. Due to the continuous decline in stock price during 2016 and the price volatility in 2017, the Company performed impairment tests for intangible assets at December 31, 2016 and 2017. In 2016, the Company recorded a $2.7 million impairment charge and no impairment charge was taken in 2017 (see Note 5).

Convertible Preferred Stock

The Company applies the accounting standards for distinguishing liabilities from equity when determining the classification and measurement of its preferred stock. Preferred shares subject to mandatory redemption are classified as liability instruments and are measured at fair value. Conditionally redeemable preferred shares (including preferred shares that feature redemption rights that are either within the control of the holder or subject to redemption upon the occurrence of uncertain events not solely within the Company's control) are classified as temporary equity. At all other times, preferred shares are classified as stockholders' equity.

The Company accounts for convertible preferred stock with detachable warrants in accordance with ASC 470: *Debt* and allocated proceeds received to the convertible preferred stock and detachable warrants based on relative fair values. The Company evaluated the classification of its convertible preferred stock and warrants and determined that such instruments meet the criteria for equity classification. The Company recorded the related issuance costs and value ascribed to the warrants as a reduction of the convertible preferred stock.

The Company has also evaluated its convertible preferred stock and warrants in accordance with the provisions of ASC 815, *Derivatives and Hedging*, including consideration of embedded derivatives requiring bifurcation. The issuance of the convertible preferred stock could generate a beneficial conversion feature ("BCF"), which arises when a debt or equity security is issued with an embedded conversion option that is beneficial to the investor or in the money at inception because the conversion option has an effective strike price that is less than the market price of the underlying stock at the commitment date. The Company recognized the BCF by allocating the intrinsic value of the conversion option, which is the number of shares of common stock available upon conversion multiplied by the difference between the effective conversion price per share and the fair value of common stock per share on the commitment date, to additional paid-in capital, resulting in a discount on the convertible preferred stock (see Note 8). As the convertible preferred stock may be converted immediately, the Company recognized the BCF as a deemed dividend in the consolidated statements of operations.

Treasury Stock

The Company accounts for the treasury stock using the cost method, which treats it as a reduction in stockholders' equity.

Revenue Recognition

Revenue is recognized when (i) persuasive evidence of an arrangement exists, (ii) all obligations have been substantially performed pursuant to the terms of the arrangement, (iii) amounts are fixed or determinable, and (iv) the collectability of amounts is reasonably assured.

In general, revenue arrangements provide for the payment of contractually determined fees in consideration for the grant of certain intellectual property rights for patented technologies owned by the Company. These rights may include some combination of the following: (i) the grant of a non-exclusive, retroactive and future license, (ii) a covenant-not-to-sue, (iii) the release of the licensee from certain claims, and (iv) the dismissal of any pending litigation. The intellectual property rights granted may be perpetual in nature, extending until the expiration of the related patents, or can be granted for a defined, relatively short period of time, with the licensee possessing the right to renew the agreement at the end of each contractual term for an additional minimum upfront payment.

The Company has determined that its licenses represent functional intellectual property under Topic 606. Therefore, revenue is recognized at the point in time when the customer has the right to use the intellectual property rather than over the license period. Accordingly, the Company's deferred revenue related to its licenses will be eliminated and accumulated deficit as of January 1, 2018 will decrease by $3,245.

Inventor Royalties

Inventor royalties are expensed in the period that the related revenues are recognized. In certain instances, pursuant to the terms of the underlying inventor agreements, costs paid by the Company to acquire patents are recoverable from future net revenues. Patent acquisition costs that are recoverable from future net revenues are amortized over the estimated economic useful life of the related patents, or as the prepaid royalties are earned by the inventor, as appropriate, and the related expense is included in amortization expense.

Accounting for Warrants

The Company accounts for the issuance of common stock purchase warrants issued in connection with the equity offerings in accordance with the provisions of ASC 815, Derivatives and Hedging ("ASC 815"). The Company classifies as equity any contracts that (i) require physical settlement or net-share settlement or (ii) gives the Company a choice of net-cash settlement or settlement in its own shares (physical settlement or net-share settlement). The Company classifies as assets or liabilities any contracts that (i) require net-cash settlement (including a requirement to net-cash settle the contract if an event occurs and if that event is outside the control of the Company) or (ii) gives the counterparty a choice of net-cash settlement or settlement in shares (physical settlement or net-share settlement). In addition, Under ASC 815, registered common stock warrants that require the issuance of registered shares upon exercise and do not expressly preclude an implied right to cash settlement are accounted for as derivative liabilities. The Company classifies these derivative warrant liabilities on the consolidated balance sheet as a current liability.

The Company assessed the classification of common stock purchase warrants as of the date of each offering and determined that such instruments met the criteria for liability classification. Accordingly, the Company classified the warrants as a liability at their fair value and adjusts the instruments to fair value at each reporting period. This liability is subject to re-measurement at each balance sheet date until the warrants are exercised or expired, and any change in fair value is recognized as "change in the fair value of warrant liabilities" in the consolidated statements of operations. The fair value of the warrants has been estimated using a Black-Scholes valuation model (see Note 6).

Stock-based Compensation

The Company accounts for share-based payment awards exchanged for employee services at the estimated grant date fair value of the award. Stock options issued under the Company's long-term incentive plans are granted with an exercise price equal to no less than the market price of the Company's stock at the date of grant and expire up to ten years from the date of grant. These options generally vest over a one- to five-year period.

The fair value of stock options granted was determined on the grant date using assumptions for risk free interest rate, the expected term, expected volatility, and expected dividend yield. The risk-free interest rate is based on U.S. Treasury zero-coupon yield curve over the expected term of the option. The expected term assumption is determined using the weighted average midpoint between vest and expiration for all individuals within the grant. The expected volatility assumption is computed based on the standard deviation of the Company's underlying stock price's daily logarithmic returns.

The Company's model includes a zero dividend yield assumption, as the Company has not historically paid nor does it anticipate paying dividends on its common stock. The Company's model does not include a discount for post-vesting restrictions, as the Company has not issued awards with such restrictions.

The periodic expense is then determined based on the valuation of the options, and at that time an estimated forfeiture rate is used to reduce the expense recorded. In addition to the assumptions used in the Black-Scholes option-pricing model, the amount of stock option expense the Company recognizes in the consolidated statements of operations includes an estimate of stock option forfeitures. Under ASC 718, the Company is required to estimate the level of forfeitures expected to occur and record compensation expense only for those awards that ultimately expect will vest. The Company recognizes the effect of forfeitures in compensation expense when the forfeitures occur.

Income Taxes

The Company uses the asset and liability method of accounting for income taxes in accordance with ASC 740, "Income Taxes" ("ASC 740"). Under this method, income tax expense is recognized as the amount of: (i) taxes payable or refundable for the current year and (ii) deferred tax consequences of temporary difference resulting from matters that have been recognized in the Company's financial statement or tax returns. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities measured at the enacted tax rates in effect for the year in which these items are expected to reverse. Deferred tax assets are reduced by valuation allowances if, based on the consideration of all available evidence, it is more likely than not that some portion or all of the deferred tax asset will not be realized.

Net Loss per Share

Basic loss per share is computed by dividing the net income or loss applicable to common shares by the weighted average number of common shares outstanding during the period. Net income (loss) attributable to common stockholders includes the effect of the deemed capital contribution on extinguishment of preferred stock and the deemed dividend related to the immediate accretion of beneficial conversion feature of convertible preferred stock. Diluted earnings per share is computed using the weighted average number of common shares and, if dilutive, potential common shares outstanding during the period. Potential common shares consist of the incremental common shares issuable upon the exercise of stock options (using the treasury stock method) and the conversion of the Company's convertible preferred stock and warrants (using the if-converted method). Diluted loss per share excludes the shares issuable upon the conversion of preferred stock and the exercise of stock options and warrants from the calculation of net loss per share if their effect would be anti-dilutive.

The following table summarizes the earnings (loss) per share calculation (in thousands, except per share amount):

	For the Years Ended December 31, 2017	2016
Basic earnings per share		
Numerator:		
Net loss	$ (3,306)	$ (6,476)
Deemed capital contribution on extinguishment of preferred stock	—	31,480
Net (loss) income available to common stockholders	**$ (3,306)**	**$ 25,004**
Denominator:		
Weighted average number of common shares outstanding,	5,538,568	3,700,090
Earnings per basic share:		
Net loss	(0.60)	(1.75)
Deemed capital contribution on extinguishment of preferred stock	—	8.51
Net (loss) income available to common stockholders	**$ (0.60)**	**$ 6.76**
Dilutive earnings per share		
Numerator:		
Net loss	$ (3,306)	$ (6,476)
Deemed capital contribution on extinguishment of preferred stock	—	31,480
Net (loss) income available to common stockholders	**$ (3,306)**	**$ 25,004**
Denominator:		
Weighted average basic shares outstanding,	5,538,568	3,700,090
Weighted average effect of dilutive securities		
Employee stock options	—	296
Convertible preferred stock	—	130,562
Restricted stock units	—	7,418
Weighted average diluted shares outstanding	5,538,568	3,838,366
Earnings per diluted share:		
Net loss	$ (0.60)	$ (1.69)
Deemed capital contribution on extinguishment of preferred stock	—	8.20
Net (loss) income available to common stockholders	**$ (0.60)**	**$ 6.51**

Securities that could potentially dilute loss per share in the future that were not included in the computation of diluted loss per share at December 31, 2017 and 2016 are as follows:

	As of December 31,	
	2017	**2016**
Convertible preferred stock	2,926	2,926
Warrants to purchase common stock	1,249,754	1,251,709
Non-vested restricted stock units	—	
Options to purchase common stock	328,490	309,037
Total	**1,581,170**	**1,563,672**

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers (Topic 606)" (ASU 2014-09) as modified by ASU No. 2015-14, "Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date," ASU 2016-08, "Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU No. 2016-10, "Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and Licensing," and ASU No. 2016-12, "Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients." The revenue recognition principle in ASU 2014-09 is that an entity should recognize revenue to depict the transfer of goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, new and enhanced disclosures will be required. Companies may adopt the new standard either using the full retrospective approach, a modified retrospective approach with practical expedients, or a cumulative effect upon adoption approach. The Company will adopt the new standard effective January 1, 2018, using the modified retrospective approach. The Company has determined that its licenses represent functional intellectual property under Topic 606. Therefore, revenue is recognized at the point in time when the customer has the right to use the intellectual property rather than over the license period. Accordingly, the Company's deferred revenue related to its licenses will be eliminated and accumulated deficit as of January 1, 2018 will decrease by $3,245.

In January 2016, the FASB issued ASU No. 2016-01, *Recognition and Measurement of Financial Assets and Financial Liabilities*. ASU No. 2016-01 requires equity investments to be measured at fair value with changes in fair value recognized in net income; simplifies the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment; eliminates the requirement for public business entities to disclose the methods and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; requires public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; requires an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; requires separate presentation of financial assets and financial liabilities by measurement category and form of financial assets on the balance sheet or the accompanying notes to the financial statements; and clarifies that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. ASU No. 2016-01 is effective for financial statements issued for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. The Company will adopt the provisions of ASU 2016-01 on January 1, 2018. The adoption of this update will not impact the Company's consolidated financial statements and related disclosures.

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, which supersedes FASB ASC Topic 840, *Leases (Topic 840)* and provides principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. The new standard requires lessees to apply a dual approach, classifying leases as either finance or operating leases based on the principle of whether or not the lease is effectively a financed purchase by the lessee. This classification will determine whether lease expense is recognized based on an effective interest method or on a straight-line basis over the term of the lease, respectively. A lessee is also required to record a right-of-use asset and a lease liability for all leases with a term of greater than twelve months regardless of classification. Leases with a term of twelve months or less will be accounted for similar to existing guidance for operating leases. The standard is effective for annual and interim periods beginning after December 15, 2018, with early adoption permitted upon issuance. The adoption of this standard is not expected to have a material impact on the Company's consolidated financial position and results of operations.

In May 2017, the FASB issued ASU 2017-09, *Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting*, (ASU 2017-09). ASU 2017-09 provides clarity and reduces both (1) diversity in practice and (2) cost and complexity when applying the guidance in Topic 718, to a change to the terms or conditions of a share-based payment award. The amendments in ASU 2017-09 should be applied prospectively to an award modified on or after the adoption date. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2017. The Company adopted ASU No. 2017-09 on January 1, 2018. The adoption of this update did not impact the Company's Financial Statements or related disclosures.

In July 2017, the FASB issued ASU 2017-11, *Earnings Per Share (Topic 260), Distinguishing Liabilities from Equity (Topic 480) and Derivatives and Hedging (Topic 815): I. Accounting for Certain Financial Instruments with Down Round Features; II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception*, (ASU 2017-11). Part I of this update addresses the complexity of accounting for certain financial instruments with down round features. Down round features are features of certain equity-linked instruments (or embedded features) that result in the strike price being reduced on the basis of the pricing of future equity offerings. Current accounting guidance creates cost and complexity for entities that issue financial instruments (such as warrants and convertible instruments) with down round features that require fair value measurement of the entire instrument or conversion option. Part II of this update addresses the difficulty of navigating Topic 480, Distinguishing Liabilities from Equity, because of the existence of extensive pending content in the FASB Accounting Standards Codification. This pending content is the result of the indefinite deferral of accounting requirements about mandatorily redeemable financial instruments of certain nonpublic entities and certain mandatorily redeemable noncontrolling interests. The amendments in Part II of this update do not have an accounting effect. This ASU is effective for fiscal years, and interim periods within those years, beginning after December 15, 2018. The Company is currently assessing the potential impact of adopting ASU 2017-11 on its financial statements and related disclosures.

Recently Adopted Accounting Pronouncements

In March 2016, the FASB issued ASU No. 2016-09, *Compensation-Stock Compensation (Topic 718), Improvements to Employee Share-Based Payment Accounting* ("ASU 2016-09"). Under ASU 2016-09, companies will no longer record excess tax benefits and certain tax deficiencies in additional paid-in capital ("APIC"). Instead, they will record all excess tax benefits and tax deficiencies as income tax expense or benefit in the income statement and the APIC pools will be eliminated. In addition, ASU 2016-09 eliminates the requirement that excess tax benefits be realized before companies can recognize them. ASU 2016-09 also requires companies to present excess tax benefits as an operating activity on the statement of cash flows rather than as a financing activity. Furthermore, ASU 2016-09 will increase the amount an employer can withhold to cover income taxes on awards and still qualify for the exception to liability classification for shares used to satisfy the employer's statutory income tax withholding obligation. An employer with a statutory income tax withholding obligation will now be allowed to withhold shares with a fair value up to the amount of taxes owed using the maximum statutory tax rate in the employee's applicable jurisdiction(s). ASU 2016-09 requires a company to classify the cash paid to a tax authority when shares are withheld to satisfy its statutory income tax withholding obligation as a financing activity on the statement of cash flows. Under current U.S. GAAP, it was not specified how these cash flows should be classified. In addition, companies will now have to elect whether to account for forfeitures on share-based payments by (1) recognizing forfeitures of awards as they occur or (2) estimating the number of awards expected to be forfeited and adjusting the estimate when it is likely to change, as is currently required. The amendments of this ASU are effective for reporting periods beginning after December 15, 2016, with early adoption permitted but all of the guidance must be adopted in the same period. Effective on January 1, 2017, the Company began accounting for forfeitures as they occur. Ultimately, the actual expenses recognized over the vesting period will be for those shares that vested. Prior to making this election under ASU 2016-09, the Company estimated their forfeiture rate at 0%, or they did not have a significant history of forfeitures.

Note 4. Investment in Hoth Therapeutics, Inc.

On June 30, 2017 (the "Closing Date"), the Company entered into a Securities Purchase Agreement (the "Purchase Agreement") with Hoth Therapeutics, Inc., a Nevada corporation ("Hoth"), for the purchase of an aggregate of 6,800,000 shares of common stock, par value $0.0001 (the "Shares"), of Hoth, for a purchase price of $675,000. As of the Closing Date, Hoth had a total of 17,000,000 shares of common stock issued and outstanding. Hoth is a development stage biopharmaceutical company focused on unique targeted therapeutics for patients suffering from indications such as atopic dermatitis, also known as eczema. Hoth's primary asset is a sublicense agreement with Chelexa Biosciences, Inc. ("Chelexa") pursuant to which Chelexa has granted Hoth an exclusive sublicense to use its BioLexa products for the treatment of eczema.

Under the Purchase Agreement, following the occurrence of a Going Public Event (as defined below), Hoth covenants to timely file all reports required to be filed under the Securities Exchange Act of 1934 (the "Exchange Act") and to take all necessary steps to cause the Shares to be approved for listing or quotation on a trading market such as NYSE MKT, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange, OTCQB or OTCQX. A "Going Public Event" means (i) an initial public offering of Hoth's securities pursuant to an effective registration statement under the Securities Act of 1933, as amended (the "Securities Act"), or (ii) Hoth's entry into a merger, consolidation, transfer or share exchange transaction pursuant to which Hoth becomes subject to the reporting requirements of the Exchange Act.

The Company adopted the fair value option for this investment and recorded any change in fair value in the statement of operations (see Note 6).

Note 5. Intangible Assets

Patent Portfolio

The Company's intangible assets with finite lives consist of its patents and patent rights. For all periods presented, all of the Company's identifiable intangible assets were subject to amortization. The net carrying amounts related to acquired intangible assets are as follows ($ in thousands):

	Net Carrying Amount		Weighted average amortization period (years)
Patent Portfolios and Patent Rights at December 31, 2015, net	$	9,799	4.63
Amortization expenses		(2,135)	
Impairment loss		(2,713)	
Patent Portfolios and Patent Rights at December 31, 2016, net	$	4,951	3.65
Amortization expenses		(1,373)	
Patent Portfolios and Patent Rights at December 31, 2017, net	$	3,578	2.67

The amortization expenses related to acquired intangible assets for the years ended December 31, 2017 and 2016 are as follows ($ in thousands):

	For the Years Ended December 31,			
Date Acquired and Description	**2017**		**2016**	
7/24/13 - Rockstar patent portfolio	$	71	$	104
9/10/13 - North South patent portfolio		22		31
12/31/13 - Rockstar patent portfolio		1,280		2,000
	$	1,373	$	2,135

The Company reviews its patent portfolio for impairment as a single asset group whenever events or changes in circumstances indicate that the carrying value may not be recoverable.

The Company's stock price continued to decrease during 2016. The Company's performed an impairment test of intangible assets at December 31, 2016. In accordance with ASC 360-10, the Company first estimated the future undiscounted cash flows anticipated to be generated by the patent portfolio based on the Company's current usage and future plans for the patent portfolio over its remaining weighted average useful life. The analysis concluded that the carrying amount of the patent portfolio was not recoverable at December 31, 2016. As a result, the Company performed an analysis to determine if the carrying amount of the patent portfolio exceeded its fair value. Considering that the patent portfolio is the Company's most significant asset and is the foundation of all of its operations, the Company determined that the most appropriate measurement of fair value of the asset group was the aggregate market value of the Company's common stock. As a result, the Company determined that the fair value of the patent portfolio at December 31, 2016 was approximately $5.0 million, which was comparable to the aggregate market capitalization of the Company as of that date. The Company recorded an additional $2.7 million of impairment charge against its patent portfolio at December 31, 2016. The new cost basis of the patent portfolio of $5.0 million will be amortized over its weighted average remaining useful life of 3.65 years.

There was no impairment charge recorded during the year ended December 31, 2017.

The future amortization of these intangible assets was based on the adjusted carrying amount. Future amortization of all patents is as follows ($ in thousands):

	Rockstar Portfolio Acquired 24-Jul-13	North South Portfolio Acquired 10-Sep-13	Rockstar Portfolio Acquired 31-Dec-13	Total Amortization
Year Ended December 31, 2018	71	22	1,280	1,373
Year Ended December 31, 2019	71	22	1,280	1,373
Year Ended December 31, 2020	71	22	639	732
Year Ended December 31, 2021	71	22	—	93
Thereafter	4	3	—	7
Total	$ 288	$ 91	$ 3,199	$ 3,578

Equitable Agreement

In March 2016, the Company entered into an agreement (which was subsequently amended) with Equitable IP Corporation ("Equitable") to facilitate the monetization of the Company's patents (the "Monetization Agreement"). Pursuant to the Monetization Agreement, the Company has worked together with Equitable to develop and revise the Company's ongoing litigation plan. Under the Monetization Agreement, Equitable is obligated to use its best, commercially reasonable efforts to monetize the Company's patents. The Company will share net monetization revenue derived from all monetization activity equally with Equitable. To facilitate the litigation plan, approximately 186 of over 330 of the Company's patents and applications have been assigned to Equitable, which will pay all maintenance and prosecution fees going forward. No assigned patents may be transferred by Equitable to a third party without the Company's consent. As of the date of this report, all terms of the Monetization Agreement have been met and upon request by Equitable, the Company will further assign approximately 140 additional patents and applications to Equitable for monetization. The Company has retained a grant-back license to practice all transferred patents.

The Company concluded that the Monetization Agreement did not constitute a sale of the patents. The Company's retention of the right to use the patents, the requirement for the Company's consent to any sale, and the significant economic benefits the Company retained with respect to the litigation, licensing, and sale proceeds, did not meet the sale of patent criteria. The Monetization Agreement has been treated as an agreement to outsource its licensing activities to an outside servicer, for contingent fees based on the success of the servicer's efforts. As such, the Company will not remove the patents from its consolidated balance sheet, and will record its share of litigation, licensing, and sales proceeds, if any, when those proceeds are received, or when due if the other revenue recognition criteria are met under ASC 605, *Revenue Recognition*.

Note 6. Fair Value of Financial Assets and Liabilities

Financial instruments, including cash and cash equivalents, accounts and other receivables, accounts payable and accrued liabilities are carried at cost, which management believes approximates fair value due to the short-term nature of these instruments. The Company measures the fair value of financial assets and liabilities based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The Company maximizes the use of observable inputs and minimizes the use of unobservable inputs when measuring fair value.

The Company uses three levels of inputs that may be used to measure fair value:

Level 1 - quoted prices in active markets for identical assets or liabilities
Level 2 - quoted prices for similar assets and liabilities in active markets or inputs that are observable
Level 3 - inputs that are unobservable (for example, cash flow modeling inputs based on assumptions)

The following table presents the Company's assets and liabilities that are measured at fair value at December 31, 2017 and 2016 ($ in thousands):

	Fair value measured at December 31, 2017			
	Total carrying value at December 31, 2017	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Marketable securities - mutual and exchange traded funds	$ 3,998	$ —	$ 3,998	$ —
Investment in Hoth	$ 1,020	$ —	$ —	$ 1,020
Liabilities				
Fair value of warrant liabilities	$ 822	$ —	$ —	$ 822

	Fair value measured at December 31, 2016			
	Total carrying value at December 31, 2016	Quoted prices in active markets (Level 1)	Significant other observable inputs (Level 2)	Significant unobservable inputs (Level 3)
Assets				
Marketable securities - corporate bonds	$ 6,025	$ 211	$ 5,814	$ —
Liabilities				
Fair value of warrant liabilities	$ 702	$ —	$ —	$ 702

There were no transfers between Level 1, 2 or 3 for the years ended December 31, 2017 and 2016.

Level 3 Valuation Techniques

Level 3 financial liabilities consist of the warrant liabilities for which there is no current market for these securities such that the determination of fair value requires significant judgment or estimation. Changes in fair value measurements categorized within Level 3 of the fair value hierarchy are analyzed each period based on changes in estimates or assumptions and recorded as appropriate.

A significant decrease in the volatility or a significant decrease in the Company's stock price, in isolation, would result in a significantly lower fair value measurement. Changes in the values of the warrant liabilities are recorded in "change in fair value of warrant liabilities" in the Company's consolidated statements of operations.

On July 21, 2015, the Company issued the July 2015 Warrants to purchase aggregate of 370,263 shares of common stock to the investors in the July 2015 Financing. The July 2015 Warrants became exercisable on January 22, 2016 at an exercise price of $8.17 per share. The warrants require, at the option of the holder, a net-cash settlement following certain fundamental transactions (as defined in the July 2015 Warrants) at the Company and therefore are classified as liabilities. The July 2015 Warrants have been recorded at their fair value using the Black-Scholes valuation model, and will be recorded at their respective fair value at each subsequent balance sheet date. This model incorporates transaction details such as the Company's stock price, contractual terms, maturity, risk free rates, as well as volatility.

On December 7, 2015, the Company issued Series A warrants to purchase up to 1,052,624 shares of common stock and Series B warrants to purchase up to 842,099 shares of common stock contained in December Offering. Series A Warrants have an exercise price of $3.80 per share and are exercisable at any time between December 7, 2015 and May 6, 2016. 852,624 shares of Series A warrants expired on May 24, 2016, and no Series A Warrants remain outstanding as of December 31, 2016. Series B Warrants have an exercise price of $4.75 per share and are exercisable at any time between December 7, 2015 and December 6, 2020. The Warrants require the issuance of registered shares upon exercise, do not expressly preclude an implied right to cash settlement and are therefore accounted for as derivative liabilities. The Company classifies these derivative warrant liabilities on the consolidated balance sheet as a current liability.

The Series A and Series B warrants have been recorded at their fair value using the Black-Scholes valuation model, and will be recorded at their respective fair value at each subsequent balance sheet date. This model incorporates transaction details such as the Company's stock price, contractual terms, maturity, risk free rates, as well as volatility.

A summary of quantitative information with respect to the valuation methodology and significant unobservable inputs used for the Company's warrant liabilities that are categorized within Level 3 of the fair value hierarchy at the date of issuance and as of December 31, 2017 and 2016 is as follows:

Date of valuation	December 31, 2017	December 31, 2016
Risk-free interest rate	1.98%	0.16%-1.76%
Expected volatility	100.00% - 132.21%	100% - 115.35%
Expected life (in years)	2.94 - 3.06	0.3-5.1
Expected dividend yield	—	—

The risk-free interest rate was based on rates established by the Federal Reserve. For the July 2015 Warrants, the expected volatility in the Black-Scholes model is based on an expected volatility of 100% for both periods which represents the percentage required to be used when valuing the cash settlement feature as contractually stated in the form of warrant. The general expected volatility is based on standard deviation of the Company's underlying stock price's daily logarithmic returns. The expected life of the warrants was determined by the expiration date of the warrants. The expected dividend yield was based upon the fact that the Company has not historically paid dividends on its common stock, and does not expect to pay dividends on its common stock in the future.

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial liabilities that are measured at fair value on a recurring basis for the year ended December 31, 2017 and 2016 ($ in thousands):

	Fair Value of Level 3 financial liabilities	
	December 31, 2017	December 31, 2016
Beginning balance	$ 702	$ 2,959
Fair value adjustment of warrant liabilities	120	(2,257)
Ending balance	$ 822	$ 702

The Company owns approximately 37% of common shares in Hoth as of December 31, 2017. The value of the Company's investment in Hoth was determined based on a valuation which takes into consideration, when applicable, cash received, cost of the investment, market participant inputs, estimated cash flows based on entity specific criteria, purchase multiples paid in other comparable third-party transactions, market conditions, liquidity, operating results and other qualitative and quantitative factors. The values at which the Company's investment in Hoth is carried on its books are adjusted to estimated fair value at the end of each quarter taking into account general economic and stock market conditions and those characteristics specific to Hoth.

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial assets that are measured at fair value on a recurring basis:

	Fair Value of Level 3 financial liabilities
	December 31, 2017
Beginning balance	$ —
Fair value of Hoth upon issuance	675
Change in fair value of Hoth	345
Ending balance	$ 1,020

While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

The decision to elect the fair value option, which is irrevocable once elected, is determined on an instrument by instrument basis and applied to an entire instrument. The net gains or losses, if any, on an investment for which the fair value option has been elected, are recognized as change in fair value of investment in the Consolidated Statements of Operations.

The fair value of the investment in Hoth at December 31, 2017 was approximately $1.0 million. The underlying stock price of Hoth was estimated to be $0.15 per share based on Hoth's fundraising activity and the Option Pricing Method Backsolve in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, Valuation of Privately-Held-Company Equity Securities Issues as Compensation. The valuation of the underlying shares included the following assumptions: risk-free rate - 1.39%, company volatility - 75%, expected term or time to maturity - 1.25 years.

Note 7. RPX License Agreement

On November 23, 2015, the Company and RPX Corporation ("RPX") entered into a Patent License Agreement (the "RPX License Agreement") under which the Company granted RPX the right to sublicense various patent license rights to certain RPX clients. The consideration to the Company included: (i) the transfer to the Company for cancellation of its remaining outstanding Series I Redeemable Convertible Preferred Stock (the "Series I Preferred Stock"), as to which a $5,000,000 mandatory redemption payment would have been due from the Company on or by December 31, 2015; (ii) the transfer to the Company for cancellation of 13%, or 57,076 shares, of its Series H Convertible Preferred Stock (the "Series H Preferred Stock") then held by RPX, having a total carrying amount of $4,765,846 at the time the stock was issued to Rockstar; (iii) cancellation of the only outstanding security interest on 101 of the Company's patents and patent applications that originated at Nortel Networks ("Nortel") and were purchased by the Company from Rockstar, which security interest had previously been transferred to RPX by Rockstar ("RPX Security Interest"); and (iv) $300,000 in cash to the Company. While the license granted to RPX is non-exclusive and the duration of the license is for the life of the patents, the Company's ongoing obligations in the arrangement is to provide certain specific RPX licensors with a non-exclusive license to any new patents that may be acquired by or exclusively licensed to the Company during the two-year period following the effective date of the agreement. Therefore, the Company will recognize $0.6 million revenue ratably over the two-year period that it is obligated to provide these RPX licensees with licenses to such new patents. During the year ended December 31, 2017 and 2016, the Company recorded approximately $259,000 and $290,000, respectively, in revenue related to the amortization of the license.

On May 23, 2016, the Company, and RPX, entered into a second, separate, Patent License Agreement (the "RPX License") under which the Company granted RPX the right to sublicense various patent rights only to current RPX clients (as of May 23, 2016). In exchange for the rights granted by the Company under the RPX License, the Company received the following consideration: (i) a cash payment made to the Company in May 2016 in the amount of $4,355,000; and (ii) cancellation of 100% of the remaining 381,967 shares of the Company's outstanding Series H Convertible Preferred Stock currently held by RPX, having a total carrying amount of $31,894,244 at the time the stock was issued to Rockstar Consortium US LP ("Rockstar").

In consideration of the above, the Company granted RPX the rights to grant to its current clients: (i) a fully paid portfolio license, to the extent such parties did not already have licenses to the Company's patents; (ii) a covenant-not-to-sue current RPX clients for supply of chipsets; (iii) a standstill of litigation involving any patents acquired in the next five years ("Standstill").

The Company also granted to Alcatel-Lucent a license to the portfolio acquired from the Harris Corporation.

During the year ended December 31, 2017 and 2016, the Company recorded approximately $957,000 and $587,000, respectively, in revenue related to the amortization of the license.

Under a separate agreement between the Company and RPX, the Company granted RPX the ability to grant to VTech Telecommunications Ltd. ("VTech") a sublicense for a fully paid portfolio license in exchange for an additional $20,000 in cash consideration during the year ended December 31, 2017.

The license granted under the terms of the RPX License described herein does not extend to entities/companies that are not clients of RPX and provide chipsets or other hardware to current RPX clients.

The carrying value of Series H Convertible Preferred Stock on the extinguishment date was estimated at approximately $31.9 million. The fair value on the same date was estimated at approximately $414,000 based upon equivalent common shares that the Series H Convertible Preferred Stock could have converted into at the closing price on May 23, 2016. This resulted in the Company receiving cash from RPX of $4.4 million, a deemed capital contribution of approximately $31.5 million, short term deferred revenue $1.1 million and long term deferred revenue of $3.7 million.

A summary of information with respect the RPX transaction on May 23, 2016 is as follows:

Assumptions		
Stock price on May 22, 2016	$	2.06
Series H Assumptions		
Series H Shares		381,967
Series H - Liquidation preference	$	83.50
Series H -Carrying value	$	31,894,245
Equivalent common shares - Series H		201,035
Fair Value of Series H preferred	$	414,133
Contribution/Deemed dividend	**$**	**31,480,112**

The deferred revenue will be amortized over a 5-year service period as the RPX License includes a standstill agreement which requires Spherix to provide the licensee with the right to use any future acquired patents for five years.

ASC 260-10-S99-2, *Effect on the Calculation of Earnings per Share for the Redemption or Induced Conversion of Preferred Stock*, requires the gain or loss on extinguishment of equity-classified preferred stock to be included in net income per common stockholder used to calculate earnings per share (similar to the treatment of dividends paid on preferred stock). The difference between (1) the fair value of the consideration transferred to the holders of the preferred stock and (2) the carrying amount of the preferred stock (net of issuance costs) is subtracted from (or added to) net income to arrive at income available to common stockholders in the calculation of earnings per share.

Note 8. Stockholders' Equity and Redeemable Convertible Preferred Stock

Amended and Restated Certificate of Incorporation

On March 4, 2016, the Company implemented a Reverse Stock Split with a ratio of 1-for-19. The par value and other terms of the common stock were not affected by the Reverse Stock Split. In addition, the amendment to the Company's certificate of incorporation that effected the Reverse Stock Split simultaneously reduced the number of authorized shares of Common Stock from 200,000,000 to 100,000,000 (see Note 1).

Common Stock

2017 activity

On July 18, 2017, the Company entered into an underwriting agreement with Laidlaw & Company (UK) Ltd. with respect to the issuance and sale of an aggregate of 1,250,000 shares of the Company's common stock, par value $0.0001 per share, in a firm commitment underwritten public offering which closed on July 24, 2017. Each share was sold for a price of $2.00 for aggregate gross proceeds of $2.5 million, with net proceeds of approximately $2.1 million, after deducting the underwriting discounts and commissions (equivalent to 8% of gross proceeds) and estimated offering expenses.

2016 activity

On August 8, 2016, the Company closed on an underwritten public offering of 1,592,357 shares of the Company's common stock at a price to the public of $1.57 per share. Under the terms of the Underwriting Agreement, the Company granted the representative of the underwriters a 30-day option to purchase up to 231,349 additional shares of its common stock (the 30-day underwriters option expired unexercised). The net proceeds to the Company were $2.1 million, after deducting the underwriting discount and other estimated offering expenses payable by the Company.

Preferred Stock

On April 23, 2014, the Company filed a Certificate of Elimination with the Secretary of State of the State of Delaware eliminating its Series B Convertible Preferred Stock, Series E Convertible Preferred Stock and Series F Convertible Preferred Stock and returning them to authorized but undesignated shares of preferred stock. No shares of the foregoing series of preferred stock were outstanding. On May 28, 2014, the Company designated 20,000,000 shares of preferred stock as Series J Convertible Preferred Stock ("Series J Preferred Stock"). On December 2, 2015, the Company designated 1,240 shares of preferred stock as Series K Convertible Preferred Stock ("Series K Preferred Stock").

The Company had designated separate series of its capital stock as of December 31, 2017 and December 31, 2016 as summarized below:

	Number of Shares Issued and Outstanding as of			
	December 31, 2017	December 31, 2016	Par Value	Conversion Ratio
Series "A"	—	—	$ 0.0001	N/A
Series "C"	—	—	0.0001	0.05:1
Series "D"	4,725	4,725	0.0001	0.53:1
Series "D-1"	834	834	0.0001	0.53:1
Series "F-1"	—	—	0.0001	0.05:1
Series "H"	—	—	0.0001	0.53:1
Series "I"	—	—	0.0001	1.05:1
Series "J"	—	—	0.0001	0.05:1
Series "K"	—	—	0.0001	263.16:1

Series A Participating Preferred Stock

The Company's board of directors has designated 500,000 shares of its preferred stock as Series A Participating Preferred Stock ("Series A Preferred Stock").

On January 1, 2013, the Company adopted a stockholder rights plan in which rights to purchase shares of Series A Preferred Stock were distributed as a dividend at the rate of one right for each share of common stock. The rights are designed to guard against partial tender offers and other abusive and coercive tactics that might be used in an attempt to gain control of the Company or to deprive its stockholders of their interest in the long-term value of the Company. These rights seek to achieve these goals by forcing a potential acquirer to negotiate with the board of directors (or to go to court to try to force the board of directors to redeem the rights), because only the board of directors can redeem the rights and allow the potential acquirer to acquire the Company's shares without suffering very significant dilution. However, these rights also could deter or prevent transactions that stockholders deem to be in their interests, and could reduce the price that investors or an acquirer might be willing to pay in the future for shares of the Company's common stock.

Each right entitles the registered holder to purchase nineteen one-hundredths of a share (a "Unit") of the Company's Series A Preferred Stock. Each Unit of Series A Preferred Stock will be entitled to an aggregate dividend of 100 times the dividend declared per share of common stock. In the event of liquidation, the holders of the Units of Series A Preferred Stock will be entitled to an aggregate payment of 100 times the payment made per share of common stock. Each Unit of Series A Preferred Stock will have 100 votes, voting together with the common stock. Finally, in the event of any merger, consolidation or other transaction in which shares of common stock are exchanged, each Unit of Series A Preferred Stock will be entitled to receive 100 times the amount received per share of common stock. These rights are protected by customary anti-dilution provisions.

The rights will be exercisable only if a person or group acquires 10% or more of the Company's common stock (subject to certain exceptions stated in the plan) or announces a tender offer the consummation of which would result in ownership by a person or group of 10% or more of the Company's common stock. The board of directors may redeem the rights at a price of $0.001 per right. The rights will expire at the close of business on December 31, 2017 unless the expiration date is extended or unless the rights are earlier redeemed or exchanged by the Company. As of December 31, 2017 and 2016, no shares of Series A Preferred Stock were issued and outstanding.

Series C Convertible Preferred Stock

On March 6, 2013, the Company and certain investors that participated in the Company's November 2012 private placement transaction entered into separate Warrant Exchange Agreements pursuant to which those investors exchanged common stock purchase warrants for 229,337 shares of the Company's Series C Convertible Preferred Stock ("Series C Preferred Stock"). Each share of Series C Preferred Stock is convertible into one-nineteenth of a share of Common Stock at the option of the holder. The Series C Preferred Stock was established on March 5, 2013 by the filing in the State of Delaware of a Certificate of Designation of Preferences, Rights and Limitations of Series C Preferred Stock. In December 2015, the one remaining share of Series C Preferred Stock was surrendered by the stockholder for cancellation. As of December 31, 2017 and 2016, no shares of Series of Series C Preferred Stock remained issued and outstanding, respectively.

Series D Convertible Preferred Stock

In connection with the acquisition of North South's patent portfolio in September 2013, the Company issued 1,379,685 shares of its Series D Convertible Preferred Stock ("Series D Preferred Stock") to the stockholders of North South. Each share of Series D Preferred Stock has a stated value of $0.0001 per share and is convertible into ten-nineteenths of a share of Common Stock. Upon the liquidation, dissolution or winding up of the Company's business, each holder of Series D Preferred Stock shall be entitled to receive, for each share of Series D Preferred Stock held, a preferential amount in cash equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of Common Stock on an "as converted" basis. Each holder of Series D Preferred Stock shall be entitled to vote on all matters submitted to its stockholders and shall be entitled to such number of votes equal to the number of shares of Common Stock such shares of Series D Preferred Stock are convertible into at such time, taking into account the beneficial ownership limitations set forth in the governing Certificate of Designation and the conversion limitations described below. At no time may shares of Series D Preferred Stock be converted if such conversion would cause the holder to hold in excess of 4.99% of issued and outstanding Common Stock, subject to an increase in such limitation up to 9.99% of the issued and outstanding Common Stock on 61 days' written notice to the Company. The conversion ratio of the Series D Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions.

As of December 31, 2017 and 2016, 4,725 shares of Series D Preferred Stock remained issued and outstanding.

Series D-1 Convertible Preferred Stock

The Company's Series D-1 Convertible Preferred Stock ("Series D-1 Preferred Stock") was established on November 22, 2013. Each share of Series D-1 Preferred Stock has a stated value of $0.0001 per share and is convertible into ten- nineteenths of a share of Common Stock. Upon the liquidation, dissolution or winding up of the Company's business, each holder of Series D-1 Preferred Stock shall be entitled to receive, for each share of Series D-1 Preferred Stock held, a preferential amount in cash equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of Common Stock on an "as converted" basis. Each holder of Series D-1 Preferred Stock shall be entitled to vote on all matters submitted to the Company's stockholders and shall be entitled to such number of votes equal to the number of shares of Common Stock such shares of Series D-1 Preferred Stock are convertible into at such time, taking into account the beneficial ownership limitations set forth in the governing Certificate of Designation. At no time may shares of Series D-1 Preferred Stock be converted if such conversion would cause the holder to hold in excess of 9.99% of issued and outstanding Common Stock. The conversion ratio of the Series D-1 Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company commenced an exchange with holders of Series D Convertible Preferred Stock pursuant to which the holders of the Company's outstanding shares of Series D Preferred Stock acquired in the Merger could exchange such shares for shares of the Company's Series D-1 Preferred Stock on a one-for-one basis.

As of December 31, 2017 and 2016, 834 shares of Series D-1 Preferred Stock remained issued and outstanding.

Series H Convertible Preferred Stock

On December 31, 2013, the Company designated 459,043 shares of preferred stock as Series H Preferred Stock. On December 31, 2013, the Company issued approximately $38.3 million of Series H Preferred Stock (or 459,043 shares) to Rockstar. Each share of Series H Preferred Stock is convertible into ten-nineteenths of a share of Common Stock and has a stated value of $83.50. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Company is prohibited from effecting the conversion of the Series H Preferred Stock to the extent that, as a result of such conversion, the holder beneficially owns more than 4.99% (which may be increased to 9.99% and subsequently to 19.99%, each upon 61 days' written notice), in the aggregate, of issued and outstanding shares of Common Stock calculated immediately after giving effect to the issuance of shares of Common Stock upon the conversion of the Series H Preferred Stock. Holders of the Series H Preferred Stock shall be entitled to vote on all matters submitted to the Company's stockholders and shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Series H Preferred Stock are convertible, subject to applicable beneficial ownership limitations. The Series H Preferred Stock provides a liquidation preference of $83.50 per share. The shares of Series H Preferred Stock were not immediately convertible and did not possess any voting rights until such a time as the Company had obtained stockholder approval of the issuance, pursuant to NASDAQ Listing Rule 5635. On April 16, 2014, the Company obtained the required stockholder approval and, as a result, all outstanding shares of Series H Preferred Stock are convertible and possess voting rights in accordance with its terms. On May 28, 2014, 20,000 shares of Series H Preferred Stock were converted into 10,526 shares of Common Stock.

In January 2015, Rockstar transferred its remaining outstanding Series H Preferred Stock to RPX Clearinghouse LLC, an affiliate of RPX.

According to the RPX License Agreement disclosed in Note 6, on November 23, 2015, RPX transferred to the Company for cancellation 57,076 shares of Series H Preferred Stock then held by RPX, having a total carrying amount of $4,765,846 at the time the stock was issued to Rockstar.

In connection with a second, separate, licensing agreement, on May 23, 2016, RPX transferred to the Company for cancellation of 100% of the remaining 381,967 shares of Series H Preferred Stock held by RPX, having a total carrying amount of $31,894,244 at the time the stock was issued to Rockstar (see Note 6 for further details).

As of December 31, 2017 and 2016, no shares of Series H Preferred Stock remained issued and outstanding, respectively.

Series I Redeemable Convertible Preferred Stock

On December 31, 2013, the Company designated 119,760 shares of preferred stock as Series I Preferred Stock. On December 31, 2013, the Company issued approximately $20 million (or 119,760 shares) of Series I Preferred Stock to Rockstar. Each share of Series I Preferred Stock was convertible into twenty-nineteenths of a share of Common Stock and had a stated value of $167.00. The conversion ratio was subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The holder was prohibited from converting the Series I Preferred Stock to the extent that, as a result of such conversion, the holder beneficially owned more than 4.99% (which may be increased to 9.99% and subsequently to 19.99%, each upon 61 days' written notice), in the aggregate, of the Company's issued and outstanding shares of Common Stock calculated immediately after giving effect to the issuance of shares of Common Stock upon the conversion of the Series I Preferred Stock. Holders of the Series I Preferred Stock shall be entitled to vote on all matters submitted to its stockholders and shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Series I Preferred Stock were convertible, subject to applicable beneficial ownership limitations. The Series I Preferred Stock provided for a liquidation preference of $167.00 per share.

The Series I Preferred Stock contained a mandatory redemption date of December 31, 2015 as to 100% of the Series I Preferred Stock then outstanding, requiring a minimum of 25% of the total number of shares of Series I Preferred Stock issued to be redeemed (less the amount of any conversions occurring prior thereto) on or prior to each of September 30, 2014, December 31, 2014, June 30, 2015 and December 31, 2015 (each, a "Partial Redemption Date" and each payment, a "Redemption Payment"). On each Partial Redemption Date, the Company was required to pay the holder a Redemption Payment equal to the lesser of (i) such number of shares of Series I Preferred Stock as had a stated value of $5.0 million; or (ii) such number of shares of Series I Preferred Stock as should, together with all voluntary and mandatory redemptions and conversions to Common Stock occurring prior to the applicable Partial Redemption Date, had an aggregate stated value of $5.0 million; or (iii) the remaining shares of Series I Preferred Stock issued and outstanding if such shares had an aggregate stated value of less than $5.0 million, in an amount of cash equal to its stated value plus all accrued but unpaid dividends, distributions and interest thereon, unless such holder of Series I Preferred Stock, in its sole discretion, elected to waive such Redemption Payment or convert such shares of Series I Preferred Stock (or a portion thereof) into Common Stock. No interest or dividends were payable on the Series I Preferred Stock unless the Company failed to make the first $5.0 million Partial Redemption Payment due September 30, 2014, then interest should accrue on the outstanding stated value of all outstanding shares of Series I Preferred Stock at a rate of 15% per annum from January 1, 2014. The Company's obligations to pay the Redemption Payments and any interest payments in connection therewith were secured pursuant to the terms of a Security Agreement under which the Rockstar patent portfolio serves as collateral security. No action can be taken under the Security Agreement unless the Company had failed to make a second redemption payment of $5.0 million due December 31, 2014, which payment was made. The Security Agreement contains additional usual and customary events of default under which the holder could take action, including a sale to a third party or reduction of secured amounts via transfer of the Rockstar patent portfolio to the holder.

Additionally, in the event the Company consummated a Fundamental Transaction (as defined below), the Company should be required to redeem such portion of the outstanding shares of Series I Preferred Stock as shall equal (i) 50% of the net proceeds of the Fundamental Transaction after deduction of the amount of net proceeds required to leave the Company with cash and cash equivalents on hand of $5.0 million and up until the net proceeds leave the Company with cash and cash equivalents on hand of $7.5 million and (ii) 100% of the net proceeds of the Fundamental Transaction thereafter. “Fundamental Transaction” means directly or indirectly, in one or more related transactions: (a) the Company of any subsidiary realizes net proceeds from any financing, recovery, sale, license fee or other revenue received by the Company (including on account of any intellectual property rights held by the Company and not just in respect of the patents) during any fiscal quarter in an amount which would cause the cash or cash equivalents of the Company to exceed $5,000,000, (b) the Company consolidates or merges with or into (whether or not the Company or any of its subsidiaries is the surviving corporation) any other person, or (c) the Company or any of its subsidiaries sells, leases, licenses, assigns, transfers, conveys or otherwise disposes of all or substantially all of its respective properties or assets to any other Person, provided that, in the event of a Fundamental Transaction under clause (b) or (c), neither such Fundamental Transaction may proceed without the consent of the holders holding a majority of the shares of Series I Preferred Stock unless (A) all shares of Series I Preferred Stock held by the holders are redeemed with interest upon closing of such Fundamental Transaction, and (B) all shares of Common Stock of the Company then held by the holders are redeemed or otherwise purchased for cash or freely tradable securities of a publicly traded company at a price at or above the then-current market value of such Common Stock.

The shares of Series I Preferred Stock were not immediately convertible and did not possess any voting rights until such a time as the Company had obtained stockholder approval of the issuance, pursuant to NASDAQ Listing Rule 5635. On April 16, 2014, the Company obtained the required stockholder approval and, as a result, all outstanding shares of Series I Preferred Stock are convertible and possess voting rights in accordance with its terms.

In January 2015, Rockstar transferred its remaining outstanding Series I Preferred Stock, as well as its other stock in the Company to RPX Clearinghouse LLC.

In June 2015, the Company redeemed 5,601 shares of Series I Preferred Stock. In accordance with this redemption, the Company paid RPX $0.9 million.

On November 23, 2015, as per RPX License Agreement disclosed in Note 6, RPX transferred to the Company for cancellation all remaining 29,940 shares of Series I Preferred Stock, as to which a $5,000,000 mandatory redemption payment would have been due from the Company on or by December 31, 2015.

As of December 31, 2017 and 2016, no shares of Series I Preferred Stock remained issued and outstanding, respectively.

Series J Convertible Preferred Stock

On May 28, 2014, the Company designated 20,000,000 shares of preferred stock as Series J Preferred Stock. On May 28, 2014, the Company entered into a placement agency agreement with Laidlaw & Company (UK) Ltd., as the placement agent, which provided for the issuance and sale in a registered direct public offering (the “Series J Offering”) by the Company of 10,000,000 shares of Series J Preferred Stock which were convertible into a total of 526,315 shares of Common Stock. The Series J Preferred Stock in the Series J Offering was sold at a public offering price of $2.00 per share. The net offering proceeds to the Company from the sale of the shares were approximately $18.4 million, after deducting placement agent fees ($1.32 million), legal fees ($0.18 million) and escrow fee ($0.04 million). The sale of the Series J Preferred Stock was made pursuant to a subscription agreement between the Company and certain investors in the Series J Offering.

The shares of Series J Preferred Stock carry a liquidation preference equal to the greater of (i) the stated value or (ii) the amount the holder would receive as a holder of Common Stock if such holder had converted the Series J Preferred Stock immediately prior to such liquidation, dissolution or winding up. Each holder of Series J Preferred Stock is entitled to vote on all matters submitted to stockholders of the Company and is entitled to a vote of 67.3% of the number of votes for each share of Common Stock into which the Series J Preferred Stock is convertible owned at the record date for the determination of stockholders entitled to vote on such matter. Subject to certain ownership limitations as described below, shares of Series J Preferred Stock are convertible at any time at the option of the holder into shares of Common Stock in an amount equal to one-nineteenths of a share of Common Stock for each one share of Series J Preferred Stock surrendered. Subject to limited exceptions, holders of shares of Series J Preferred Stock do not have the right to convert any portion of their Series J Preferred Stock that would result in the holder, together with its affiliates, beneficially owning in excess of 9.99% of the number of shares of Common Stock outstanding immediately after giving effect to its conversion; notwithstanding the foregoing, some Investors elected to have the 9.99% beneficial ownership limitation to initially be 4.99%.

As of December 31, 2017 and 2016, no shares of Series J Preferred Stock are issued and outstanding.

Series K Convertible Preferred Stock

On December 2, 2015, the Company designated 1,240 shares of preferred stock as Series K Preferred Stock. On December 7, 2015, the Company issued 1,240 shares of Series K Preferred Stock in December 2015 Offering. Each share of Series K Preferred Stock is convertible into five thousand-nineteenths of a share of Common Stock and has a stated value of $1,000. The conversion ratio is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions. The Series K Preferred do not generally have any voting rights but are convertible into shares of Common Stock. At no time may shares of Series K Preferred Stock be converted if such conversion would cause the holder to hold in excess of 4.99% of the issued and outstanding Common Stock, subject to an increase in such limitation up to 9.99% of the issued and outstanding Common Stock on 61 days' written notice to the Company. The conversion ratio of the Series K Preferred Stock is subject to adjustment in the event of stock splits, stock dividends, combination of shares and similar recapitalization transactions.

During the year ended December 31, 2016, stockholders converted 1,240 shares of Series K Preferred Stock into 326,315 shares of Common Stock.

As of December 31, 2017 and 2016, no shares of Series K Preferred Stock are issued and outstanding.

Warrants

A summary of warrant activity for year ended December 31, 2017 is presented below:

	Warrants	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2016	1,250,311	$ 9.21	$ —	3.91
Expired	(557)	—	—	—
Outstanding as of December 31, 2017	1,249,754	$ 8.98		2.92
Exercisable as of December 31, 2017	1,249,754	$ 8.98	$ —	2.92

Stock Options

2012 Plan

In late 2012, the Company adopted the 2012 Equity Incentive Plan (the "2012 Plan") which permits issuance of incentive stock options, non-qualified stock options and restricted stock. The 2012 Plan replaced a prior incentive stock plan. At December 31, 2017, there were 521 shares available for grant under the 2012 Plan.

2013 Plan

In April 2013, the Company's board of directors adopted the Spherix Incorporated 2013 Equity Incentive Plan (the "2013 Plan"), an omnibus equity incentive plan pursuant to which the Company may grant equity and cash and equity-linked awards to certain management, directors, consultants and others. The plan was approved by the Company's stockholders in August 2013.

The 2013 Plan authorized approximately 15% of the Company's fully-diluted Common Stock at the time approved (not to exceed 147,368 shares) be reserved for issuance under the Plan, after giving effect to the shares of the Company's capital stock issuable under the Nuta Merger.

At December 31, 2017, there were 105,610 fully vested options outstanding and 41,758 shares available for grant under the 2013 Plan.

2014 Plan and Option Grants

On January 28, 2014, the Company approved the adoption of a director compensation program (the "Program") for non-employee directors pursuant to and subject to the available number of shares reserved under the Spherix Incorporated 2014 Equity Incentive Plan (the "2014 Plan").

On February 26, 2016, the Company's stockholders approved, and the Company adopted, an amendment to the 2014 Plan increasing the number of shares issuable thereunder from 219,046 shares of Common Stock to 434,210 shares of Common Stock.

At December 31, 2017, there were 222,880 options outstanding and 211,330 shares available for grant under the 2014 Plan.

On November 14, 2016, 78 options granted on November 15, 2011 expired.

On May 14, 2017, 56 options granted on May 15, 2012 expired. On August 13, 2017, 120 options granted on August 14, 2012 expired. On November 15, 2017, 106 options granted on November 16, 2012 expired.

During the year ended December 31, 2016, pursuant to and subject to the available number of shares reserved under the 2014 Plan, the Company issued 23,682 options to five of the Company's directors. The aggregate grant date fair value of these options was approximately $36,000.

During the year ended December 31, 2017, pursuant to and subject to the available number of shares reserved under the 2014 Plan, the Company issued an aggregate of 15,788 options to purchase common stock of the Company to its chief executive officer and four of its directors. The aggregate grant date fair value of these options was approximately $12,000. These stock options vest over one year.

The fair value of options granted in 2017 and 2016 was estimated using the following assumptions:

	For the Years Ended December 31,	
	2017	2016
Exercise price	$ 1.02	$1.42 - $1.98
Expected stock price volatility	134.5%	122.4% - 141.3%
Risk-free rate of interest	1.4%	0.96% - 1.15%
Term (years)	4.42	4.34-9.65

A summary of option activity under the Company's employee stock option plan for year ended December 31, 2017 is presented below:

	Number of Shares	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2016	310,091	$ 82.25	$ —	4.1
Employee options granted	15,788	1.02	5,999	4.4
Employee options expired	(282)	—	—	—
Outstanding as of December 31, 2017	325,597	$ 78.20	$ 5,999	3.2
Options vested and expected to vest	325,597	$ 78.20	$ 5,999	3.2
Options vested and exercisable	317,705	$ 80.12	$ 3,000	3.2

A summary of options that the Company granted to non-employees for the year ended December 31, 2017 is presented below:

	Number of Shares	Weighted Average Exercise Price	Total Intrinsic Value	Weighted Average Remaining Contractual Life (in years)
Outstanding as of December 31, 2016	2,893	$ 98.07	$ —	4.4
Non-employee options granted	—	—	—	—
Outstanding as of December 31, 2017	2,893	$ 98.07	$ —	3.4
Options vested and expected to vest	2,893	$ 98.07	$ —	3.4
Options vested and exercisable	2,893	$ 98.07	$ —	3.4

Stock-based compensation associated with the amortization of stock option expense was $14,000 and $35,000 for the years ended December 31, 2017 and 2016, respectively.

Estimated future stock-based compensation expense relating to unvested stock options is approximately $3,000. The weighted average remaining contractual term of exercisable options is approximately 3.2 years at December 31, 2017.

Restricted Stock Awards

2016 activity

On January 26, 2016, the Company issued 652 shares of restricted common stock to a third party for consulting services. The restricted stock award vested immediately. The grant date fair value of restricted stock was $1,487.

On February 4, 2016, the Company entered into a consulting agreement with a third party. The Company has agreed to pay the consultant three cash retainer payments for a total of $70,000, and granted $100,000 in shares of restricted stock. On February 4, 2016, the Company issued 42,445 restricted shares based on the average closing price for the 10 trading days immediately prior to February 4, 2016. The restricted stock award vested immediately.

On February 26, 2016, the Company granted each of two consultants 7,895 shares of restricted common stock for consulting services. The restricted stock award vested on March 31, 2016 based upon the closing price on February 26, 2016. The grant date fair value of each restricted stock award was $15,000, respectively.

On June 22, 2016, the Company granted two consultants 10,870 and 43,479 shares of restricted common stock for consulting services, respectively. The restricted stock award vested immediately. The grant date fair value of restricted stock was $25,000 and $100,000, respectively.

In December 2016, in accordance with the employment agreements, the Company determined to pay Mr. Reiner and Mr. Dotson an annual bonus of $60,000 and $91,255, respectively, in shares of common stock in respect of their performance for the 2016 fiscal year which, as of the closing price of December 21, 2016, would have constituted a total of 122,972 shares. The shares were issued on December 8, 2016. The fair value of the 122,972 shares issued was based upon the closing price as of December 8, 2016.

2017 activity

On October 11, 2017, the Company granted a consultant 5,000 shares of restricted common stock for consulting services. The restricted stock award vested immediately. The grant date fair value of restricted stock award was $8,400.

	Number of Units	Weighted Average Grant Day Fair Value
Nonvested at December 31, 2016	—	$ —
Granted	5,000	1.68
Vested	(5,000)	1.68
Nonvested at December 31, 2016	—	$ —

Restricted Stock Units

On March 14, 2017, 35,969 restricted stock units (“RSUs”) were delivered to Anthony Hayes. 23,287 shares of common stock were withheld (at the closing price of the Company’s common stock on the NASDAQ Capital Market on March 14, 2017) to satisfy the tax obligation relating to the vesting of the RSUs.

As of December 31, 2017, the Company did not have unrecognized stock-based compensation expense related to restricted stock unit awards.

Stock-based Compensation Expense

Stock-based compensation expense for the year ended December 31, 2017 and 2016 was comprised of the following ($ in thousands):

	For the Years Ended December 31, 2017	2016
Employee restricted stock awards	$ —	$ 151
Non-employee restricted stock awards	9	255
Employee stock option awards	14	35
Employee restricted stock units	—	121
Total compensation expense	**$ 23**	**$ 562**

Note 9. Assignment and Assumption of Rights Agreement with TOI

On June 16, 2012, the Company and Transfer Online, Inc. (“TOI”) entered into an Assignment and Assumption of Rights Agreement (the “Assignment”) to that certain Rights Agreement, effective January 1, 2013 (valid through December 31, 2017, referred to herein as the “Rights Agreement”) originally entered into between the Company and Equity Stock Transfer (“EST”), and previously filed by the Company on Form 8-K with the Securities and Exchange Commission on January 30, 2013. The Assignment of the Rights Agreement replaced EST as the Rights Agent and to appoint TOI as the successor Rights Agent on July 15, 2016. The Rights Agreement was amended and restated as of June 9, 2017.

Note 10. Commitments and Contingencies

Financing of Directors' and Officers' Insurance

The Company financed its Directors' and Officers' insurance policy for approximately $0.2 million. Payments are due monthly and the policy is for 12 months. Finance charges for the 12-month period are nominal. As of December 31, 2017, the Company owed approximately $0.1 million and such amounts were recorded in accrued expenses. The Company has made regular payments in accordance with this insurance policy.

Leases

Future minimum rental payments required as of December 31, 2017, including Bethesda office lease obligation are as follows ($ in thousands):

	Lease Payments
Year Ended December 31, 2018	45
	$ 45

Legal Proceedings

In the ordinary course of business, the Company actively pursues legal remedies to enforce its intellectual property rights and to stop unauthorized use of use technology. From time to time, the Company may be involved in various claims and counterclaims and legal actions arising in the ordinary course of business. There were no pending material claims or legal matters as of the date of this report other than the following matters:

Spherix Incorporated v. Uniden Corporation et al., Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas

On August 30, 2013, we initiated litigation against Uniden Corporation and Uniden America Corporation (collectively "Uniden") in *Spherix Incorporated v. Uniden Corporation et al.*, Case No. 3:13-cv-03496-M, in the United States District Court for the Northern District of Texas ("the Court") for infringement of U.S. Patent Nos. 5,581,599; 5,752,195; 6,614,899; and 6,965,614 (collectively, the "Asserted Patents"). The complaint alleges that Uniden has manufactured, sold, offered for sale and/or imported technology that infringes the Asserted Patents. We sought relief in the form of a finding of infringement of the Asserted Patents, an accounting of all damages sustained by us as a result of Uniden's infringement, actual damages, enhanced damages under 35 U.S.C. Section 284, attorney's fees and costs. On June 3, 2014, in an effort to narrow the case, the parties filed a stipulation dismissing without prejudice all claims and counterclaims related to U.S. Patent No. 5,752,195. On September 4, 2014, Uniden America Corporation, together with VTech Communications, Inc., filed a request for *inter partes* review ("IPR") of U.S. Patent No. 5,581,599 (the "'599 Patent") and 6,614,899 (the "'899 Patent") in the United States Patent and Trademark Office. On March 3, 2015, the U.S. Patent Trial and Appeal Board ("PTAB") entered decisions instituting, on limited grounds, IPR proceedings regarding a portion of the claims for the two Spherix patents. On March 19, 2015, the Court issued its *Markman* order, construing a total of 13 claim terms that had been disputed by the parties. On April 2, 2015, we filed an Amended Complaint with Jury Demand and the parties filed a Settlement Conference Report informing the Court that the parties have not yet resumed settlement negotiations. On September 10, 2015, the Court stayed the case and ordered the parties to file a status report within 10 days of the Patent Office issuing its decision in the IPR proceedings. On October 13, 2015, the Court ordered the case administratively closed until the PTAB issued its final written decisions. On February 3, 2016, the PTAB issued its final decisions in the IPR proceedings, finding invalid eight of the 15 asserted claims of the '599 Patent and all asserted claims of the '899 Patent. Our deadline to file a Notice of Appeal of the PTAB's decision to the United States Court of Appeals for the Federal Circuit was set for April 6, 2016. On February 29, 2016, at the parties' joint request, the Court ordered that the stay of the case remain in effect for 30 days so the parties may work to resolve the case without further Court intervention. The parties timely filed a Joint Status Report on March 31, 2016, in which we requested that the stay remain in effect pending the Federal Circuit issuing a ruling in connection with the appeal of IPR2014-01431 relating to the '599 Patent. On April 1, 2016, we filed our Patent Owner's Notice of Appeal in IPR2014-01431. On April 11, 2016, the Court granted the parties' motion to continue the stay. On January 12, 2017, we settled the case with Uniden and Uniden took a license under the Asserted Patents and the appeal to the Federal Circuit continued with the Patent and Trademark Office ("PTO") as an adverse party. On July 25, 2017, after full briefing and oral argument, the Federal Circuit issued an order affirming the PTAB's decision relating to the '599 Patent.

International License Exchange of America, LLC v. Fairpoint Communications, Inc., Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware

On April 26, 2016, we initiated litigation against Fairpoint Communications, Inc. in *Spherix Incorporated v. Fairpoint Communications, Inc.*, Case No. 1:16-cv-00305-RGA, in the United States District Court for the District of Delaware (the "Court") for infringement of U.S. Patent No. RE40,999 (the '999 Patent"). In the Complaint, we sought relief in the form of a finding of infringement of the '999 Patent, damages sufficient to compensate us for Fairpoint's infringement together with pre-and post-judgment interest and costs, a declaration that the case is exceptional under 35 U.S.C. § 285, and the Company's attorney's fees. On October 13, 2016, Fairpoint filed its answer with no counterclaims. On November 16, 2016, International License Exchange of America, LLC, a wholly-owned subsidiary of Equitable ("ILEA"), filed a motion to substitute itself as the plaintiff, consistent with our Monetization Agreement with Equitable. On November 17, 2016, the Court granted ILEA's motion. On June 22, 2017, the Court entered a Scheduling Order setting the Markman hearing for August 22, 2018 and jury trial for October 28, 2019. On August 31, 2017, the parties filed a joint stipulation of dismissal and, on September 1, 2017, the Court terminated the case.

International License Exchange of America, LLC Litigations

Under our Monetization Agreement with Equitable, ILEA has filed the patent infringement litigations listed below.

- On August 12, 2016, litigation against Cincinnati Bell, Inc., case number 1:16-cv-00715-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of U.S. Patent No. RE40,999 ("the '999 patent"), U.S. Patent No. 6,970,461, and U.S. Patent No. 7,478,167. On March 8, 2017, Cincinnati Bell filed a motion to dismiss, alleging lack of personal jurisdiction and improper venue. On March 29, 2017, the parties filed a joint motion to stay all deadlines until April 29, 2017, stating that the parties have reached an agreement in principal to resolve all claims asserted in the case. On April 3, 2017, the court granted the parties motion to stay all deadlines until April 29, 2017. On May 5, 2017, the Court ordered the parties to file a joint status report by three days from the date of the order. On May 5, 2017, the parties filed a joint stipulation of dismissal and the Court terminated the case.
- On August 12, 2016, litigation against Frontier Communications Corporation, case number 1:16-cv-00714-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 16, 2017, ILEA filed an agreed motion to stay all deadlines in the case, stating that the parties had reached an agreement in principal in the case and needed time to finalize the written agreement. On May 19, 2017, the Court granted the motion and stayed all deadlines until June 19, 2017. On June 19, 2017, ILEA filed a notice of voluntary dismissal and the Court terminated the case.
- On August 12, 2016, litigation against Echostar Corporation, case number 1:16-cv-00716-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On April 17, 2017, ILEA filed a notice of voluntary dismissal of the case, and on April 18, 2017, the Court closed the case.
- On August 15, 2016, litigation against ATN International, Inc. Commnet Wireless, LLC Choice Communications LLC, and Choice Communications, LLC ("Choice Wireless"), case number: 1:16-cv-00718-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On April 12, 2017, the parties jointly dismissed the case by filing a stipulation dismissing the case with prejudice.
- On August 15, 2016, litigation against Sprint Corporation and Clearwire Corporation case number 1:16-cv-00719-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 1, 2017, ILEA filed a notice of voluntary dismissal of the case, and the court closed the case on May 2, 2017.
- On August 16, 2016, litigation against ViaSat, Inc., case number 1:16-cv-00720-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On March 7, 2017, ViaSat filed a motion to dismiss, alleging failure to state a plausible claim of patent infringement. On March 21, 2017, ILEA filed its brief in opposition to the motion to dismiss. On March 28, 2017, ViaSat filed its reply brief on the motion to dismiss. On May 19, 2017, the Court issued an order granting ViaSat's motion to dismiss, but granted ILEA leave to amend the complaint no later than three weeks from the date of the order. On May 30, 2017, ILEA filed its amended complaint. On July 24, 2017, the parties filed a joint motion to dismiss the case. On July 25, 2017, the Court granted the motion and closed the case.
- On September 9, 2016, litigation against Fortinet Inc., case number 1:16-cv-00795-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On March 7, 2017, Fortinet filed its answer to the Complaint. On June 14, 2017, the Court ordered the parties to file a status report within three days of the order. On June 16, 2017, the parties filed the joint status report stating that the parties have executed a written settlement agreement resolving the case. On July 6, 2017, ILEA filed a stipulation of dismissal with prejudice and the Court closed the case.
- On September 9, 2016, litigation against GTT Communications, Inc., case number 1:16-cv-00796-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the '999 patent. On May 19, 2017, the parties filed a motion to extend time to answer the complaint until June 5, 2017. On May 22, 2017, the Court granted the motion. On June 5, 2017, ILEA filed a notice of voluntary dismissal and the Court terminated the case.

- On November 22, 2016, litigation against Alcatel-Lucent SA and Alcatel-Lucent USA Inc., case number 1:16-cv-01077-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent and U.S. Patent Nos. 7,158,515; 6,222,848; 6,578,086; and 6,697,325. On March 28, 2017, ILEA filed a notice of voluntary dismissal of the case and on that date the court closed the case.
- On May 4, 2017, litigation against NTT Communications ICT Solutions Pty Ltd., NTT America, Inc., and NTT Security (US) Inc., case number 1:17-cv-00508-UNA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent and the ‘990 patent. On November 8, 2017, ILEA filed a notice of voluntary dismissal of the case and the court terminated the case.
- On May 15, 2017, litigation against ADTRAN, Inc. case number 1:17-cv-00562-RGA, in the U.S. District Court for the District of Delaware, related to alleged infringement of the ‘999 patent and U.S. Patent Nos. 5,959,990; 6.970,461; 7,478,167; 7,274,704; and 7,277,533. On January 22, 2018, ILEA filed a notice of voluntary dismissal and the court terminated the case.

Optic153 LLC Litigations

Under our Monetization Agreement with Equitable, Optic 153 LLC, an Equitable subsidiary, has filed the following litigations relating to patents acquired under the terms of settlement of one of our prior litigations:

- On March 15, 2018, litigation against Lumentum Operations LLC, Case No. 1:18-cv-00406-VAC-CJB, in the in the U.S. District Court for the District of Delaware, related to alleged infringement of U.S. Patent No. 6,587,261. Lumentum’s Answer is currently due on April 6, 2018.

Counterclaims

In the ordinary course of business, we, or with our wholly-owned subsidiaries or monetization partners, will initiate litigation against parties whom we believe have infringed on our intellectual property rights and technologies. The initiation of such litigation exposes us to potential counterclaims initiated by the defendants. Currently, there are no counterclaims pending against us. In the event such counterclaims are filed, we can provide no assurance that the outcome of these claims will not have a material adverse effect on our financial position and results from operations.

Note 11. Income Taxes

The income tax provision consists of the following ($ in thousands):

	As of December 31,	
	2017	**2016**
Federal		
Current	$ -	$ -
Deferred	$ 14,376	3,578
Decrease in valuation allowance	(14,376)	(3,578)
State and local		
Current	-	-
Deferred	(1,416)	(50)
Increase in valuation allowance	1,416	50
Change in valuation Allowance	(12,960)	(3,578)
Income Tax Provision (Benefit)	$ -	$ -

The following is a reconciliation of the U.S. federal statutory rate to the effective income tax rates for the years ended December 31, 2017 and 2016:

	For the years ended December 31,	
	2017	**2016**
U.S. Statutory Federal Rate	34%	34%
Federal tax rate change	(456.08)%	-
State Taxes, Net of Federal Tax Benefit	2.28%	2.97%
Other Permanent Differences	3.12%	1.01%
State rate change in effect	-	6.88%
Fair Value of Warrants	(1.23)%	11.85%
Increase due to true up of State NOL	26.00%	
Decrease due to change in Federal NOL and other true ups	(0.12)%	(1.47)%
Change in Valuation Allowance	392.03%	(55.25)%
Income Tax Provision (Benefit)	0.0	0.0

At December 31, 2017 and 2016, the Company's deferred tax assets and liabilities consisted of the effects of temporary differences attributable to the following ($ in thousands):

	As of December 31,	
	2017	2016
Deferred tax assets:		
Net-operating loss carryforward	$ 9,608	$ 12,971
Stock based compensation	5,368	8,413
Patent portfolio and other	11,244	17,796
Total Deferred Tax assets	26,220	39,180
Valuation allowance	(26,220)	(39,180)
Deferred Tax Asset, Net of Allowance	$ -	$ -

On December 22, 2017, "H.R.1", formerly known as the "Tax Cuts and Jobs Act", was signed into law. Among other items, H.R.1 reduces the federal corporate tax rate to 21% from the existing maximum rate of 35%, effective January 1, 2018. As a result, the Company revalued its net deferred tax asset at the new lower tax rate and has reduced the value of the deferred tax asset before valuation allowance by $15.08 million.

In assessing the realization of deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the period in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and taxing strategies in making this assessment. The Company has determined that, based on objective evidence currently available, it is more likely than not that with the exception of an Alternative Minimum Tax (AMT) carryforward, the deferred tax assets will not be realized in future periods. Accordingly, the Company has provided a partial-valuation allowance for the deferred tax assets with the exception of the AMT credit carryforward at December 31, 2017 and 2016. As of December 31, 2017, the change in valuation allowance is approximately $13.04 million.

Under the Act, corporations are no longer subject to the Alternative Minimum Tax (AMT), effective for taxable years beginning after Dec. 31, 2017. However, where a corporation has an AMT credit from a prior taxable year, the corporation will continue to carry the credit forward and may use a portion of it as a refundable credit in any taxable year beginning after 2017 but before 2022. Generally, 50 percent of the corporation's AMT Credit carried forward to one of these years will be claimable and refundable for that year. In tax years beginning in 2021, however, the entire remaining carryforward generally will be refundable. The Company has an AMT credit carryforward of $81,863 as of December, 31, 2017. The Company will request the following refunds for the tax years ended December 31, 2018 through December 31, 2022:

Tax Year Ended:	AMT Credit Refund Request
December 31, 2018	$ 40,932
December 31, 2019	20,466
December 31, 2020	10,233
December 31, 2021	10,233
	$ 81,863

Upon completion of our 2017 U.S. income tax return in 2018 we may identify additional re-measurement adjustments to our recorded deferred tax liabilities. We will continue to assess our provision for income taxes as future guidance is issued, but do not currently anticipate significant revisions will be necessary. Any such revisions will be treated in accordance with the measurement period guidance outlined in Staff Accounting Bulletin No. 118

As of December 31, 2017, the Company had federal and state net operating loss carryovers ("NOLs") of approximately $41.7 million, which expire from 2030 through 2037. The NOL carryover may be subject to limitation under Internal Revenue Code section 382, should there be a greater than 50% ownership change as determined under the regulations. As required by the provisions of ASC 740, the Company recognizes the financial statement benefit of a tax position only after determining that the relevant tax authority would more likely than not sustain the position following an audit. For tax positions meeting the more likely than not threshold, the amount recognized in the consolidated financial statements is the largest benefit that has a greater than 50 percent likelihood of being realized upon ultimate settlement with the relevant tax authority. Differences between tax positions taken or expected to be taken in a tax return and the net benefit recognized and measured pursuant to the interpretation are referred to as "unrecognized benefits." A liability is recognized (or amount of NOL or amount of tax refundable is reduced) for an unrecognized tax benefit because it represents an enterprise's potential future obligation to the taxing authority for a tax position that was not recognized as a result of applying the provisions of ASC 740.

If applicable, interest costs and penalties related to unrecognized tax benefits are required to be calculated and would be classified as interest and penalties in general and administrative expense in the statement of operations. As of December 31, 2017 and 2016, no liability for unrecognized tax benefit was required to be reported. No interest or penalties were recorded during the years ended December 31, 2017 and 2016. The Company does not expect any significant changes in its unrecognized tax benefits in the next year. The Company files U.S. federal and state income tax returns. As of December 31, 2017, the Company's U.S. and state tax returns (California, Delaware, Maryland, New York, New York City, Virginia, Pennsylvania and Texas) remain subject to examination by tax authorities beginning with the tax return filed for the year ended December 31, 2014, however, there were no audits pending in any of the above-mentioned jurisdictions during 2017. The Company believes that its income tax positions would be sustained upon an audit and does not anticipate any adjustments that would result in material changes to its consolidated financial position.

Note 12. Subsequent Events

The Company evaluates events that have occurred after the balance sheet date but before the consolidated financial statements are issued. Based upon the evaluation, the Company did not identify any recognized or non-recognized subsequent events that would have required adjustment or disclosure in the consolidated financial statements other than disclosed.

DatChat Merger Agreement

The Merger

On March 12, 2018, the Company entered into an Agreement and Plan of Merger (the "Merger Agreement"), by and among Spherix, Spherix Merger Subisdiary Inc., a Nevada corporation and a wholly-owned Subsidiary of Spherix ("Merger Sub"), DatChat, Inc., a Nevada corporation ("DatChat"), and Darin Myman in the capacity as the representative from and after the effective time of the Merger (the "Effective Time") for the stockholders of DatChat as of immediately prior to the Effective Time (the "Stockholder Representative").

Pursuant to the Merger Agreement, subject to the terms and conditions set forth therein, at the closing of the transactions contemplated by the Merger Agreement (the "Closing"), Merger Sub will merge with and into DatChat (the "Merger"), with DatChat continuing as the surviving corporation in the Merger. Subject to the terms and conditions set forth in the Merger Agreement, at the Effective Time: (i) all shares of capital stock of DatChat (the "DatChat Stock") issued and outstanding immediately prior to the Effective Time will be converted into the right to receive the Stockholder Merger Consideration (as defined below).

Merger Consideration

At or prior to the Closing, Spherix, the Stockholder Representative, and a mutually agreeable escrow agent (the "Escrow Agent"), shall enter into an Escrow Agreement, effective as of the Effective Time, in form and substance reasonably satisfactory to the Parties (the "Escrow Agreement"), pursuant to which Spherix shall deposit with the Escrow Agent from the Stockholder Merger Consideration (as defined below) the following numbers of shares of Spherix common stock (the sum of such amounts, the "Escrow Shares"): (i) a number of shares Spherix common stock equal to 10% of the Stockholder Merger Consideration shares (including any equity securities paid as dividends or distributions with respect to such shares or into which such shares are exchanged or converted, the "Indemnity Escrow Shares"), to be held in a segregated escrow account (the "Indemnity Escrow Account") and disbursed by the Escrow Agent and (ii) a number of shares Spherix common stock equal 90% of the Stockholder Merger Consideration shares (including any equity securities paid as dividends or distributions with respect to such shares or into which such shares are exchanged or converted, the " Distribution Escrow Shares "), to be held in a segregated escrow account (the "Distribution Escrow Account") and disbursed by the Escrow Agent. Each stockholder of DatChat at the Effective Time (each, a "DatChat Stockholder") shall receive its pro rata share of the Stockholder Merger Consideration, less its pro rata portion of the Escrow Shares held in the Escrow Account, based on the number of shares of DatChat Stock owned by such DatChat Stockholder as compared to the total number of shares of DatChat Stock owned by all DatChat Stockholders as of immediately prior to the Effective Time. The Indemnity Escrow Shares shall serve as a security for, and a source of payment of, the indemnity rights of the Spherix indemnified parties'. The Distribution Escrow Shares will be released from escrow over time in accordance with the schedule and restrictions as agreed upon by Spherix and the Stockholder Representative and set forth in the Escrow Agreement. As consideration for the Merger, Spherix shall deliver to the stockholders of DatChat an aggregate of 46,153,846 shares of Spherix common stock (the "Stockholder Merger Consideration"), with each share of Spherix common stock valued at $1.30 per share.

March 2018 Shelf Takedown

On March 19, 2018, the Company closed its recently announced public offering of common stock for gross proceeds of approximately $3.0 million. The offering was a shelf takedown off of the Company's registration statement on Form S-3 (File No. 333-222488) and was conducted pursuant to a placement agency agreement (the "Agreement") between the Company and Laidlaw & Company (UK) Ltd., the sole placement agent, on a best-efforts basis with respect to the offering (the "Placement Agent"), that was entered into on March 14, 2018. The Company sold 2,222,222 shares of its common stock in the offering at a purchase price of $1.35 per share.

TheBit Daily LLC

On March 23, 2018, Spherix Incorporated purchased 8.0% of the issued and outstanding limited liability company membership interests of TheBit Daily LLC, a development stage media and education platform focused on the blockchain and cryptocurrency space, for a subscription price of $25,000.

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

We maintain “disclosure controls and procedures,” as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in Securities and Exchange Commission rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and our Chief Financial Officer, to allow timely decisions regarding required disclosure. In designing and evaluating our disclosure controls and procedures, management recognized that disclosure controls and procedures, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the disclosure controls and procedures are met. Additionally, in designing disclosure controls and procedures, our management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible disclosure controls and procedures.

The design of any disclosure controls and procedures also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. With respect to the annual period ended December 31, 2017, under the supervision and with the participation of our management, we conducted an evaluation of the effectiveness of the design and operations of our disclosure controls and procedures. Based upon this evaluation, our management has concluded that our disclosure controls and procedures were not effective as of December 31, 2017. We have a lack of segregation of duties, and a lack of controls in place to ensure that all material transactions and developments impacting the financial statements are reflected.

However, to the extent possible, we will implement procedures to assure that the initiation of transactions, the custody of assets and the recording of transactions will be performed by separate individuals. We believe that the foregoing steps will remediate the material weakness identified above, and we will continue to monitor the effectiveness of these steps and make any changes that our management deems appropriate.

Management is in the process of determining how best to make the required changes that are needed to implement an effective system of internal control over financial reporting. Our management acknowledges the existence of this problem, and intends to develop procedures to address it to the extent possible given the Company’s limitations in financial and human resources.

Management’s Annual Report on Internal Control over Financial Reporting

Our management, including our Chief Executive Officer and Interim Chief Financial Officer assessed the effectiveness of our internal control over financial reporting as of December 31, 2017 and concluded that our internal controls over financial reporting were not effective. In making this assessment, our management used the 2013 framework established in “Internal Control-Integrated Framework” promulgated by the Committee of Sponsoring Organizations of the Treadway Commission, commonly referred to as the “COSO” criteria.

In connection with management’s assessment of our internal control over financial reporting described above, management has identified the following material weaknesses in our internal control over financial reporting as of December 31, 2017.

(1) The Company has inadequate segregation of duties consistent with control objectives.
(2) Lack of controls in place to ensure that all material transactions and developments impacting the financial statements are reflected.

We are currently reviewing our internal controls and procedures related to these material weaknesses and expect to implement changes in the near term, including identifying specific areas within our governance, accounting and financial reporting processes to add adequate resources to potentially mitigate these material weaknesses.

Our management team will continue to monitor and evaluate the effectiveness of our disclosure controls and procedures and our internal controls over financial reporting on an ongoing basis and is committed to taking further action and implementing additional enhancements or improvements, as necessary and as funds allow.

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 contain an attestation report of our independent registered public accounting firm regarding internal control over financial reporting since the rules for smaller reporting companies provide for this exemption.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the year ended December 31, 2016 which have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 9B. OTHER INFORMATION

None.

PART III

All per share amounts and outstanding shares, including stock options, restricted stocks and warrants, have been retroactively adjusted for all periods on a post-Reverse Stock Split basis below. Further, exercise prices of stock options and warrants have been retroactively adjusted in these consolidated financial statements for all periods presented to reflect the 1-for-19 Reverse Stock Split. Numbers of shares of the Company's preferred stock were not affected by the Reverse Stock Split; however, the conversion ratios have been adjusted to reflect the Reverse Stock Split.

Item 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Directors

The following table sets forth the name, age and position of each current director of the Company.

Name	Age	Position	Director Since
Robert J. Vander Zanden (1)(2)(3)	72	Director and Chairman of the Board	2004
Anthony Hayes	50	Chief Executive Officer and Director	2013
Tim S. Ledwick (1)(2)	60	Director	2015
Eric Weisblum (1)(2)(3)	48	Director	2016

(1) Member of our Audit Committee.
(2) Member of our Compensation Committee.
(3) Member of our Nominating Committee.

The biographies of our current directors are as follows:

Dr. Robert J. Vander Zanden

Dr. Robert J. Vander Zanden, a Board member since 2004, having served as a Vice President of R&D at Kraft Foods International, brings a long and distinguished career in applied technology, product commercialization, and business knowledge of the food science industry to us. Additionally, Mr. Vander Zanden has specific experience in developing organizations designed to deliver against corporate objectives. Dr. Vander Zanden holds a Ph.D. in Food Science and an M.S. in Inorganic Chemistry from Kansas State University, and a B.S. in Chemistry from the University of Wisconsin - Platteville, where he was named a Distinguished Alumnus in 2002. In his 30-year career, he has been with ITT Continental Baking Company as a Product Development Scientist; with Ralston Purina's Protein Technology Division as Manager Dietary Foods R&D; with Keebler as Group Director, Product and Process Development (with responsibility for all corporate R&D and quality); with Group Gamesa, a Frito-Lay Company, as Vice President, Technology; and with Nabisco as Vice President of R&D for their International Division. With the acquisition of Nabisco by Kraft Foods, he became the Vice President of R&D for Kraft's Latin American Division. Dr. Vander Zanden retired from Kraft Foods in 2004. He currently holds the title of Adjunct Professor and Lecturer in the Department of Food, Nutrition and Packaging Sciences at Clemson University, where he also is a member of their Industry Advisory Board. His focus on achieving product and process innovation through training, team building and creating positive working environments has resulted in his being recognized with many awards for product and packaging innovation. Mr. Vander Zanden executive experience provides him with valuable business expertise, which the Board believes qualifies him to serve as a director of the Company.

Anthony Hayes

Mr. Anthony Hayes, a director and Chief Executive Officer since 2013, has served as the Chief Executive Officer of North South since March 2013 and since June 2013, as a consultant to our Company. Mr. Hayes was the fund manager of JaNSOME IP Management LLC and JaNSOME Patent Fund LP from August 2012 to August 2013, both of which he co-founded. Mr. Hayes was the founder and Managing Member of Atwater Partners of Texas LLC from March 2010 to August 2012 and a partner at Nelson Mullins Riley & Scarborough LLP from May 1999 to March 2010. Mr. Hayes received his Juris Doctorate from Tulane University School of Law and his B.A. in economics from Mary Washington College. The Board believes Mr. Hayes is qualified to serve as a director of the Company based on his expansive knowledge of, and experience in, the patent monetization sector, as well as because of his intimate knowledge of the Company through his service as Chief Executive Officer. On March 10, 2017, as a result of Mr. Frank Reiner's resignation as Chief Financial Officer, Mr. Hayes began serving as the Company's Principal Accounting Officer.

Tim S. Ledwick

Mr. Tim S. Ledwick, who joined as a director in 2015, is currently the Chief Financial Officer of Management Health Solutions, a private equity-backed company that provides software solutions and services to hospitals focused on reducing costs through superior inventory management practices. In addition, since 2012 he has served on the board and as Chair of the Audit Committee of Telkonet, Inc. (TKOI) a smart energy management technology company. From 2007 to 2011, Mr. Ledwick provided CFO consulting services to AdvantageResourcing (former Advantage Human Resourcing, Inc.) a $150 million services firm and, in addition, from 2007-2008 also acted as special advisor to The Dellacorte Group, a middle market financial advisory firm focused on transactions between $100 million and $1 billion. From 2002 through 2006, Tim was a member of the Board of Directors and Executive Vice President-CFO of Dictaphone Corporation playing a lead role in developing a business plan which revitalized the company, resulting in the successful sale of the firm and delivering a seven times return to shareholders. From 2001-2002, Mr. Ledwick was brought on as CFO to lead the restructuring efforts of Lernout & Hauspie Speech Products, a Belgium-based NASDAQ listed speech technology company, whose market cap had at one point reached a high of $9 billion. From 1999 through 2001, he was CFO of Cross Media Marketing Corp, an $80 million public company headquartered in New York City, playing a lead role in the firm`s acquisition activity, tax analysis and capital raising. Mr. Ledwick is a member of the Connecticut Society of Certified Public Accountants and received his B.B.A. in accounting from The George Washington University and his M.S. in Finance from Fairfield University. The Board believes that Mr. Ledwick's executive experience and financial expertise qualifies him to serve as a director of the Company.

Eric Weisblum

Mr. Eric Weisblum, who joined as a director in 2016, is currently the Chief Executive Officer and a director of Point Capital Inc. (OTC:PTCI), where he has been employed since 2013 and prior to that was President of Sableridge Capital for five years . In addition to being an active investor in both public and private companies, Mr. Weisblum provides managerial assistance and guidance to help companies execute on their business strategy. Mr. Weisblum has reviewed, invested and worked with numerous public and private companies, and he has overseen the execution of M&A strategy in the micro-cap and small cap markets. Mr. Weisblum also co-founded Whalehaven, a hedge fund that has invested in over 100 public companies to date. Prior to Whalehaven, Mr. Weisblum was employed by M.H. Meyerson & Co. Inc., a full-service financial and investment-banking firm, with individual and institutional accounts. At M.H. Meyerson, Mr. Weisblum traded equities on behalf of numerous established funds, and originated, structured, and placed structured financing transactions. As a result, Mr. Weisblum brings with him nearly 20 years of experience in structuring and trading financial instruments. Mr. Weisblum holds a B.A. from the University of Hartford's Barney School of Business.

Executive Officers

The names of our executive officers and their ages, positions, and biographies as of March 29, 2018 are set forth below. Mr. Hayes' background is discussed above under the section Directors.

Name	Age	Position
Anthony Hayes	50	Chief Executive Officer, Director & Principal Accounting Officer

Section 16(a) Beneficial Ownership Reporting Compliance

Section 16(a) of the Exchange Act, requires our directors and executive officers, and anyone who beneficially owns ten percent (10%) or more of our Common Stock, to file with the SEC initial reports of beneficial ownership and reports of changes in beneficial ownership of Common Stock. Anyone required to file such reports also need to provide us with copies of all Section 16(a) forms they file.

Based solely upon a review of (i) copies of the Section 16(a) filings received during or with respect to 2017 and (ii) certain written representations of our officers and directors, we believe that all filings required to be made pursuant to Section 16(a) of the Exchange Act during and with respect to 2017 were filed in a timely manner, with the exception of a Form 3 to be filed by Mr. Weisblum, Mr. Vander Zanden, Mr. Ledwick and Mr. Hayes in May 2017 in connection with certain stock option grants, which were filed on June 6, 2017. In addition, in August 2016, in connection with his appointment to the Board of Directors, Mr. Weisblum was required to file a Form 3, which deficiency he corrected and reported on a Form 5 filed on February 9, 2017.

Code of Ethics

We have adopted a Code of Ethics, which is available on our website at www.spherix.com.

Audit Committee

We have a standing Audit Committee. The Audit Committee members are Mr. Ledwick, Chair, Dr. Vander Zanden and Eric Weisblum. The Committee has authority to review our financial records, deal with our independent auditors, recommend financial reporting policies to the Board, and investigate all aspects of our business. The Audit Committee Charter is available for your review on our website at www.spherix.com. Each member of the Audit Committee satisfies the independence requirements and other criteria established by NASDAQ and the SEC applicable to audit committee members. The Board has determined that Mr. Ledwick meets the requirements of an audit committee financial expert as defined in the SEC and NASDAQ rules.

Item 11. EXECUTIVE COMPENSATION

The following Summary of Compensation table sets forth the compensation paid by our Company during the two years ended December 31, 2017, to all Executive Officers earning in excess of $100,000 during any such year.

Summary of Compensation

Name and Principal Position	Year	Salary ($)	Bonus ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)(1)	Change in Pension Value and Non-Qualified Deferred Compensation Earnings ($)	All Other Compensation ($)	Total ($)
Anthony Hayes, Chief Executive Officer, Director, Principal Accounting Officer and Principal Financial Officer (1)	2017	349,430	-	88,499	3,045	-	-	-	930,974
	2016	350,000	350,000	-	6,222	-	-	-	581,222
Frank Reiner, Interim Chief Financial Officer (until March 10, 2017)((3)	2017	53,817	-	-	-	-	-	289,504	343,321
	2016	271,000	40,000	60,000	-	-	-	-	371,000

(1) Awards pursuant to the Spherix Incorporated 2013 Incentive Compensation Plan and 2014 Plan.

(2) On December 16, 2015, the Compensation Committee adopted a resolution to award Mr. Hayes his 2015 target bonus in the amount of $350,000 which was paid on January 13, 2016. On May 3, 2016, the Compensation Committee adopted a resolution to grant Mr. Hayes options to purchase 3,947 shares of Common Stock options with a term of ten years and an exercise price of $1.98 subject to certain vesting conditions upon agreement of the Compensation Committee and Mr. Hayes. Such options were issued to Mr. Hayes on May 24, 2016. On March 14, 2017, 35,969 restricted stock units (“RSUs”) were delivered to Anthony Hayes. 23,287 shares of common stock were withheld (at the closing price of the Company's common stock on the NASDAQ Capital Market on March 14, 2017) to satisfy the tax obligation relating to the vesting of the RSUs. Amount of 2016 bonus is $350,000 Amount of 2017 bonus is not calculable as of March 30, 2018.

(3) All stock options to Mr. Reiner were granted in accordance with ASC Topic 718. On December 8, 2016, the members of the Compensation Committee adopted a resolution to pay Mr. Reiner a bonus of $40,000 in cash and $60,000 in shares of common stock in respect of his performance for the 2016 fiscal year, which as of the close of trading on December 8, 2016, would have constituted a total of 48,781 shares. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of $18,504 in lieu of his right to continue health insurance coverage under the Company’s group health plan.

Narrative Disclosure to Summary Compensation Table

Executive Officer Agreements

On April 1, 2016, we entered into an employment agreement with Mr. Anthony Hayes pursuant to which Mr. Hayes serves as the Chief Executive Officer for a period of one year, subject to renewal. In consideration for his employment, we agreed to pay Mr. Hayes a base salary of $350,000 per annum. Mr. Hayes will be entitled to receive an annual bonus in an amount equal to up to 100% of his base salary if we meet or exceed certain criteria adopted by our Compensation Committee. We further agreed to grant executive restricted stock units, pursuant to the Corporation's 2014 Equity Incentive Plan, with respect to 118,512 shares of the Company's common stock. One-half of the grant shall vest if as of December 31, 2016, the Corporation has pro-forma cash of at least five million dollars ($5,000,000) (cash plus any cash used for a Board-approved extraordinary acquisition or transaction reconstituting the Company's core operations, less accrued bonuses) and one-half shall vest upon the Company meeting certain agreed upon criteria. As of December 31, 2016, 59,256 restricted stock units were vested and 59,256 restricted stock units were forfeited.

On October 19, 2017, the Company entered into an amendment to the employment agreement of Mr. Hayes, pursuant to which, effective January 1, 2017, Mr. Hayes was entitled to receive an annual cash bonus in an amount equal to up to $250,000 if the Company meets or exceeds certain criteria adopted by the Compensation Committee of the Company's Board of Directors. In addition, Mr. Hayes was awarded a restricted stock unit grant for 30,000 shares of the Company's common stock under the Company's 2014 Equity Incentive Plan. Such grant shall vest in installments, in tandem with the satisfaction of the same criteria to which the cash bonus is subject. If all criteria are met, 100% of the grant of restricted stock units shall vest upon the determination of the Compensation Committee, which in any event shall not be later than March 15, 2018. All other terms of Mr. Hayes' employment agreement, effective as of April 1, 2016, remain in full force and effect.

On June 30, 2015, the Board of Directors appointed Frank Reiner as Interim Chief Financial Officer, effective immediately. Pursuant to Mr. Reiner's employment agreement, the term of Mr. Reiner's employment is one year and automatically extends for additional one-year terms unless no less than 60 days' prior written notice of non-renewal is given by Mr. Reiner or us. Mr. Reiner's base salary under his employment agreement was $235,000 per year, but in connection with being named Interim Chief Financial Officer, the Board of Directors authorized an amendment to Mr. Reiner's employment agreement to increase Mr. Reiner's base salary to $271,000. Mr. Reiner is also entitled to receive an annual bonus if the Compensation Committee of the Board determines that performance targets have been met. The amount of the annual bonus is determined based on our gross proceeds from certain monetization of our intellectual property. In December 2016, the members of the Compensation Committee determined to pay Mr. Reiner $60,000 in shares of common stock and a cash bonus of $40,000 in connection with his performance for the 2016 fiscal year. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of $18,504 in lieu of his right to continue health insurance coverage under the Company's group health plan.

Potential Payment upon Termination or Change in Control

Under the April 1, 2016 employment agreement with Mr. Hayes, we have agreed to, in the event of termination by us without "cause" or pursuant to a change in control, grant Mr. Hayes, in addition to reimbursement of any documented, unreimbursed expenses incurred prior to such date, (i) any unpaid compensation and vacation pay accrued during the term of the Employment Agreement, and any other benefits accrued to him under any of our benefit plans outstanding at such time, (ii) twelve (12) months base salary at the then current rate to be paid in a single lump sum within thirty (30) days of Mr. Hayes' termination, (iii) continuation for a period of twelve (12) months of any benefits as extended to our executive officers from time to time, including but not limited to group health care coverage and (iv) payment on a pro rata basis of any annual bonus or other payments earned in connection with any bonus plans to which Mr. Hayes was a participant as of the date of termination. In addition, any options or restricted stock shall be immediately vested upon termination of Mr. Hayes's employment without "cause" or pursuant to a change in control.

Under the March 14, 2014 employment agreement with Mr. Frank Reiner, in the event of a termination or non-renewal of his employment without "cause" or pursuant to the consummation of a change in control, we have agreed to grant Mr. Reiner in addition to reimbursement of any documented, unreimbursed expenses incurred prior to such date, (i) any unpaid compensation and vacation pay accrued during two years commencing on March 14, 2014 or any then applicable extension of the term of Mr. Reiner's employment, and any other benefits accrued to him under any of our benefit plans outstanding at such time, (ii) twelve (12) months' base salary at the then current rate to be paid in a single lump sum within sixty (60) days of Mr. Reiner's termination, (iii) continuation for a period of twelve (12) months of any benefits as extended to our executive officers from time to time and (iv) payment on a pro rata basis of any annual bonus or other payments earned in connection with any bonus plans to which Mr. Reiner was a participant as of the date of termination. In addition, any options or restricted stock shall be immediately vested upon termination or non-renewal of Mr. Reiner's employment without "cause" or pursuant to a change in control. In March 2017, Mr. Reiner and the Company agreed not to renew Mr. Reiner's employment agreement and Mr. Reiner received his non-renewal compensation. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of $18,504 in lieu of his right to continue health insurance coverage under the Company's group health plan.

Outstanding Equity Awards at December 31, 2017

Name	Option Awards				
	Number of Securities Underlying Unexercised Options (#) Exercisable	Number of Securities Underlying Unexercised Options (#) Unexercisable		Option Exercise Price ($)	Option Expiration Date
Anthony Hayes	39,472	-	$	134.52	4/1/2023
	13,158	-	$	54.34	4/3/2019
	5,263	-	$	34.01	7/15/2019
	3,947	-	$	1.98	5/2/2021
	1,974	1,973	$	1.02	5/30/2022
Frank Reiner	5,263	-	$	88.73	3/15/2024
	2,631	-	$	36.86	6/19/2024

Director Compensation

The following table summarizes the compensation paid to non-employee directors during the year ended December 31, 2017.

	Fees earned or paid in cash ($)	Stock Awards ($)	Option Awards ($)	Non-Equity Incentive Plan Compensation ($)	Change in Pension Value and Non-Qualified Deferred Compensation Earnings ($)	All Other Compensation($)	Total ($)
Eric Weisblum (2)	60,000	-	3,045	-	-	-	63,045
Robert J. Vander Zanden (3)	65,000	-	3,045	-	-	-	68,045
Tim Ledwick (4)	60,000	-	3,045	-	-	-	63,045

(1) All stock options were granted in accordance with ASC Topic 718. Please insert the aggregate grant date fair value of the option awards computed in accordance with FASB ASC Topic 718 (column (d)).

(3) Mr. Vander Zanden was paid $65,000 in cash compensation for his service as a director in 2017. In addition, Mr. Vander Zanden was granted options to purchase 3,045 shares of Common Stock, with a term of five years and an exercise price of $1.02, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue.

(4) Mr. Ledwick was paid $60,000 in cash compensation for his service as a director in 2017. In addition, Mr. Ledwick was granted options to purchase 3,045 shares of Common Stock, with a term of five years and an exercise price of $1.02, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue.

(5) Mr. Weisblum was paid $60,000 in cash compensation for his service as a director in 2017. In addition, Mr. Weisblum was granted options to purchase 3,045 shares of Common Stock, with a term of five years and an exercise price of $1.02, vesting with 50% vesting immediately and the remaining 50% vesting on the one year anniversary of the date of issue.

Non-employee directors received the following annual compensation for service as a member of the Board for the fiscal year ended December 31, 2017:

Annual Retainer	$	60,000	To be paid in cash in four equal quarterly installments.
Stock Options		3,947	Options to acquire shares of our Common Stock, pursuant to and subject to the available number of shares under the 2014 Plan, to be granted on the date of our Annual Meeting. The options will have an exercise price equal to the closing price on the trading day immediately preceding the date of issuance and be exercisable for a period of ten (10) years with 50% vesting immediately on the date of issue and the remaining 50% vesting on the one year anniversary date of the issue so long as the optionee has not been removed as a director of Spherix for cause.
Additional Retainer	$	5,000	To be paid to the Chairman of the Board upon election annually.

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT, AND RELATED STOCKHOLDERS

Securities Authorized for Issuance under Equity Compensation Plans

The following table provides information about our Common Stock that may be issued upon the exercise of options, warrants and rights under all of our existing equity compensation plans as of December 31, 2017.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (1)	Weighted average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (1)) (2)
Equity compensation plans approved by security holder	328,490	$ 78.38	253,609
Equity compensation plans not approved by security holder	—	—	—
	328,490		253,609

(1) Consists of options to acquire 105,610 shares of our common stock under the 2013 Equity Incentive Plan and 222,880 under the 2014 Equity Incentive Plan.

(2) Consists of shares of Common Stock available for future issuance under our equity incentive plans.

Beneficial Ownership of Common Stock by Certain Beneficial Owners and Management

The following tables set forth certain information concerning the number of shares of our Common Stock owned beneficially as of March 30, 2018 by (i) our officers and directors as a group and (ii) each person (including any group) known to us to own more than 5% of our Common Stock. As of March 30, 2018 there were 6,294,898 shares of Common Stock outstanding. Unless otherwise indicated, it is our understanding and belief that the stockholders listed possess sole voting and investment power with respect to the shares shown.

Title of Class	Name of Beneficial Owner	Amount and Nature of Ownership (1)	Percent of Class Beneficially Owned (2)
Executive Officers and Directors			
Common	Robert J. Vander Zanden	74,295(3)	1.17%
Common	Anthony Hayes	105,997(4)	1.67%
Common	Tim S. Ledwick	54,868(5)	*
Common	Eric Weisblum	50,921(6)	*
Common	All Directors and Officers as a Group (4 persons)	286,081	4.42%

* Less than 1% of the outstanding shares of the Company Common Stock.

(1) Under Rule 13d-3 of the Exchange Act a beneficial owner of a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise has or shares: (i) voting power, which includes the power to vote or to direct the voting of shares; and (ii) investment power, which includes the power to dispose or direct the disposition of shares. Certain shares may be deemed to be beneficially owned by more than one person (if, for example, persons share the power to vote or the power to dispose of the shares). In addition, shares are deemed to be beneficially owned by a person if the person has the right to acquire the shares (for example, upon exercise of an option) within 60 days of the date as of which the information is provided. In computing the percentage ownership of any person, the amount of shares outstanding is deemed to include the amount of shares beneficially owned by such person (and only such person) by reason of these acquisition rights.

(2) Based on 6,294,898 shares of our Common Stock outstanding as of March 30, 2018 and takes into account the beneficial ownership limitations governing the Series D Preferred Stock and Series D-1 Preferred Stock. Beneficial ownership limitations on our Series D Preferred Stock prevent the conversion or voting of the stock if the number of shares of Common Stock to be issued pursuant to such conversion or to be voted would exceed, when aggregated with all other shares of Common Stock owned by the same holder at the time, the number of shares of Common Stock which would result in such holder beneficially owning more than 4.99% of all of the Common Stock outstanding at such time, subject to an increase in such limitation up to 9.99% of the issued and outstanding Common Stock on 61 days' written notice to us. Beneficial ownership limitations on our Series D-1 Preferred Stock prevent the conversion or voting of the stock if the number of shares of Common Stock to be issued pursuant to such conversion or to be voted would exceed, when aggregated with all other shares of Common Stock owned by the same holder at the time, the number of shares of Common Stock which would result in such holder beneficially owning more than 9.99% of all of the Common Stock outstanding at such time.

(3) Includes 21,007 shares of Common Stock, 28,288 options for purchase of Common Stock exercisable as of March 30, 2018, and 25,000 options for purchase of Common Stock exercisable within 60 days of March 30, 2018.

(4) Includes 42,183 shares of Common Stock, and 63,814 options for purchase of Common Stock exercisable as of March 30, 2018 and exercisable within 60 days of March 30, 2018.

(5) Includes 20,000 shares of Common Stock, 9,868 options for purchase of Common Stock exercisable as of March 30, 2018, and 25,000 options for purchase of Common Stock exercisable within 60 days of March 30, 2018.

(6) Includes 20,000 shares of Common Stock, 5,921 options for purchase of Common Stock exercisable as of March 30, 2018, and 25,000 options for purchase of Common Stock exercisable within 60 days of March 30, 2018.

Effective January 1, 2013, and as amended and restated on June 9, 2017, the Company and Equity Stock Transfer, LLC entered into a Rights Agreement, which was subsequently assigned to Transfer Online Inc. as Rights Agent on June 20, 2016. The Rights Agreement provides each stockholder of record a dividend distribution of one “right” for each outstanding share of Common Stock. Rights become exercisable at the earlier of ten days following: (1) a public announcement that an acquirer has purchased or has the right to acquire 10% or more of our Common Stock, or (2) the commencement of a tender offer which would result in an offer or beneficially owning 10% or more of our outstanding Common Stock. All rights held by an acquirer or offer or expire on the announced acquisition date, and all rights expire at the close of business on December 31, 2020, subject to further extension. Each right entitles a stockholder to acquire, at a price of $7.46 per one nineteen-hundredths of a share of our Series A Preferred Stock, subject to adjustments, which carries voting and dividend rights similar to one share of our Common Stock. Alternatively, a right holder may elect to purchase for the stated price an equivalent number of shares of our Common Stock at a price per share equal to one-half of the average market price for a specified period. In lieu of the stated purchase price, a right holder may elect to acquire one-half of the Common Stock available under the second option. The purchase price of the preferred stock fractional amount is subject to adjustment for certain events as described in the Agreement. At the discretion of a majority of the Board of Directors and within a specified time period, we may redeem all of the rights at a price of $0.001 per right. The Board may also amend any provisions of the Agreement prior to exercise.

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The current Board of Directors consists of Mr. Tim S. Ledwick, Mr. Anthony Hayes, Dr. Robert J. Vander Zanden and Mr. Eric Weisblum. The Board of Directors has determined that Dr. Vander Zanden, Mr. Ledwick and Mr. Weisblum are independent directors within the meaning of the applicable NASDAQ rules. Our Audit, Compensation, and Nominating Committees consist solely of independent directors.

On June 30, 2015, our Board of Directors appointed Frank Reiner as Interim Chief Financial Officer. Pursuant to Mr. Reiner’s employment agreement with the Company, dated as of March 14, 2014, as amended, the term of Mr. Reiner’s employment was one year and automatically extended for additional one-year terms unless no less than 60 days’ prior written notice of non-renewal is given by Mr. Reiner or us. Mr. Reiner’s base salary under his employment agreement was $235,000 per year, but in connection with being named Interim Chief Financial Officer, the Board of Directors authorized an amendment to Mr. Reiner’s employment agreement to increase Mr. Reiner’s base salary to $271,000. On March 10, 2017, Mr. Reiner and the Company entered into a separation agreement and general release, pursuant to which Mr. Reiner received payments due to him under the terms of his employment agreement as well as a lump sum payment of $18,504 in lieu of his right to continue health insurance coverage under the Company’s group health plan.

We have not adopted written policies and procedures specifically for related person transactions. Our Board of Directors is responsible to approve all related party transactions, and approved each of the transactions set forth above.

Item 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

Fees Paid to Auditor

The following table sets forth the fees paid by our Company to Marcum LLP for audit and other services provided in 2017 and 2016.

	2017	2016
Audit Fees	$ 85,682	$ 83,295
Audit Related Fees	—	—
Tax Fees	—	—
All Other Fees	—	—
Total	85,682	83,295

Policy on Audit Committee Pre-Approval of Audit and Permissible Non-Audit Services of Independent Auditors

Consistent with SEC policies and guidelines regarding audit independence, the Audit Committee is responsible for the pre-approval of all audit and permissible non-audit services provided by our principal accountants. Our Audit Committee has established a policy regarding approval of all audit and permissible non-audit services provided by our principal accountants. No non-audit services were performed by our principal accountants during the fiscal years ended December 31, 2017 and 2016. Our Audit Committee pre-approves these services by category and service. Our Audit Committee has pre-approved all of the services provided by our principal accountants.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENTS, SCHEDULES

Consolidated Financial Statements

The following financial statements are included in Item 8 herein:

Report of Independent Registered Public Accounting Firm

Consolidated Balance Sheets as of December 31, 2017 and 2016

Consolidated Statements of Operations for the Years Ended December 31, 2017 and 2016

Consolidated Statements of Changes in Stockholders' Equity for the Years Ended December 31, 2017 and 2016

Consolidated Statements of Cash Flows for the Years Ended December 31, 2017 and 2016

Notes to Consolidated Financial Statements

2. **Financial Statement Schedules**

None

Exhibits

Exhibit No.	Description
1.1	Underwriting Agreement, dated July 18, 2017, between Spherix Incorporated and Laidlaw & Co. (UK) Ltd (incorporated by reference to Form 8-K filed July 24, 2017)
1.2	Placement Agency Agreement, dated July 15, 2015, between Spherix Incorporated and Chardan Capital Markets LLC (incorporated by reference to Form 8-K filed July 17, 2015)
3.1	Amended and Restated Certificate of Incorporation of Spherix Incorporated, dated April 24, 2014 (incorporated by reference to Form 8-K filed April 25, 2014)

3.2	Certificate of Amendment of the Amended and Restated Certificate of Incorporation of Spherix Incorporated, dated March 2, 2016 (incorporated by reference to Form 8-K filed March 18, 2016)
3.3	Amended and Restated Bylaws of Spherix Incorporated (incorporated by reference to Form 8-K filed October 15, 2013)
3.4	Certificate of Amendment to the Amended and Restated Certificate of Incorporation of Spherix Incorporated, effective March 4, 2016 (incorporated by reference to Form 10-K filed March 29, 2016)
4.1	Specimen Certificate for common stock, par value $0.0001 per share, of Spherix Incorporated (incorporated by reference to Form S-3/A filed April 17, 2014)
4.2	Rights Agreement dated as of January 24, 2013, between Spherix Incorporated and Equity Stock Transfer, LLC (incorporated by reference to Form 8-K filed January 30, 2013)
4.3	Amended and Restated Rights Agreement, dated as of June 9, 2017, between Spherix Incorporated and Transfer Online Inc. (incorporated by reference to Form 8-K filed June 9, 2017)
4.4	Certificate of Designation of Preferences, Rights and Limitations of Series J Convertible Preferred Stock (incorporated by reference to Form 8-K/A filed on June 2, 2014)
4.5	Certificate of Designation of Preferences, Rights and Limitations of Series K Convertible Preferred Stock (incorporated by reference to Form 8-K filed on December 3, 2015)
4.6	Form of Warrant (incorporated by reference to Form 8-K filed on March 26, 2014)
4.7	Form of Placement Agent Warrant (incorporated by reference to Form 8-K filed on March 26, 2014)
4.8	Form of Common Stock Purchase Warrant (incorporated by reference to Form 8-K filed July 17, 2015)
4.9	Form of Warrant (incorporated by reference to Form 8-K filed December 3, 2015)
10.1	2012 Equity Incentive Plan (incorporated by reference from the Company's Information Statement on Definitive 14C filed November 26, 2012)
10.2	Warrant Exchange Agreement dated March 1, 2013 between the Company and certain investors (incorporated by reference to Form 8-K filed March 7, 2013)
10.3	Agreement and Plan of Merger dated April 2, 2013 (incorporated by reference to the Form 8-K filed on April 4, 2013)
10.4	First Amendment to Agreement and Plan of Merger dated August 30, 2013 (incorporated by reference to the Form 8-K filed on September 4, 2013)
10.5	Spherix Incorporated 2013 Equity Incentive Plan (incorporated by reference to the Form 8-K filed on April 4, 2013)
10.6	Spherix Incorporated 2014 Equity Incentive Plan (incorporated by reference from the Company's Proxy Statement on Form DEF 14A filed December 20, 2013)
10.7	Amendment to Spherix Incorporated 2014 Equity Incentive Plan (incorporated by reference from the Company's Proxy Statement on Form DEF 14A filed March 28, 2014)
10.8	Form of Indemnification Agreement (incorporated by reference to the Form 8-K filed on September 10, 2013)
10.9	Employment Agreement between Spherix Incorporated and Anthony Hayes (incorporated by reference to the Form 8-K filed on September 13, 2013)

10.10	Indemnification Agreement between Spherix Incorporated and Jeffrey Ballabon (incorporated by reference to the Form 8-K filed on June 13, 2014)
10.11**	Patent Purchase Agreement between Spherix Incorporated and Rockstar Consortium US LP, including Amendment No. 1 thereto (incorporated by reference to the Form 8-K/A filed on November 19, 2013)
10.12	Form of Series F Exchange Agreement (incorporated by reference to the Form 8-K filed on November 26, 2013)
10.13	Form of Series D Exchange Agreement (incorporated by reference to the Form 8-K filed on December 30, 2013)
10.14	Confidential Patent Purchase Agreement dated December 31, 2013 between Spherix Incorporated and Rockstar Consortium US LP (incorporated by reference to the Form S-1/A filed January 21, 2014)
10.15	Form of Subscription Agreement (incorporated by reference to the Form 8-K filed March 26, 2014)
10.16	Form of Registration Rights Agreement (incorporated by reference to the Form 8-K filed March 26, 2014)
10.17	Form of Subscription Agreement (incorporated by reference to the Form 8-K filed on May 29, 2014)
10.18	Letter of Agreement, dated January 6, 2014, between Spherix Incorporated and Chord Advisors, LLC (incorporated by reference to the Form 10-K filed on March 30, 2015)
10.19	Letter of Agreement, dated April 11, 2014, between Spherix Incorporated and Chord Advisors, LLC (incorporated by reference to the Form 10-K filed on March 30, 2015)
10.20	Securities Purchase Agreement, dated July 15, 2015, between Spherix Incorporated and the purchasers party thereto (incorporated by reference to Form 8-K filed July 17, 2015)
10.21	Employment Agreement, dated as of March 14, 2014, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 10-K filed March 29, 2016)
10.22	Amendment to Employment Agreement, dated as of June 30, 2015, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 10-K filed March 29, 2016)
10.23	Settlement and License Agreement, dated October 13, 2015, between Spherix Incorporated and Huawei Technologies Co., Ltd. (incorporated by reference to Form 10-K filed March 29, 2016)
10.24	Patent License Agreement, dated as of November 23, 2015, between Spherix Incorporated and RPX Corporation (incorporated by reference to Form 8-K filed November 30, 2015
10.25	Securities Purchase Agreement, dated as of December 2, 2015, between Spherix Incorporated and the investors party thereto (incorporated by reference to Form 8-K filed December 3, 2015)
10.26	Engagement Agreement, dated September 16, 2015, as amended, between Spherix Incorporated and H.C. Wainwright & Co., LLC (incorporated by reference to Form 8-K filed December 3, 2015)
10.27	Employment Agreement, effective as of April 1, 2016, between Spherix Incorporated and Anthony Hayes (incorporated by reference to Form 8-K filed May 26, 2016)
10.28	Amendment to Employment Agreement between Spherix Incorporated and Anthony Hayes (incorporated by reference to the Form 8-K filed on October 25, 2017)
10.29	Separation Agreement and Release, dated March 10, 2017, between Spherix Incorporated and Frank Reiner (incorporated by reference to Form 8-K filed March 15, 2017)

10.30	Patent License Agreement, dated as of May 23, 2016, between Spherix Incorporated and RPX Corporation (incorporated by reference to Form 10-Q filed August 15, 2016)
10.31	Technology Monetization Agreement, dated as of March 11, 2016, and amended as of April 22, 2016, April 27, 2016 and May 22, 2016, between Spherix Incorporated and Equitable IP Corporation (incorporated by reference to Form 8-K filed August 2, 2016)
10.32	Underwriting Agreement, dated as of August 2, 2016, by and among Spherix Incorporated and the underwriters named on Schedule I thereto (incorporated by reference to Form 8-K filed August 3, 2016)
10.33	Assignment and Assumption of Rights Agreement, dated as of June 16, 2016, by and between Spherix Incorporated and Transfer Online, Inc. (incorporated by reference to Form 8-K filed June 21, 2016)
10.34	Securities Purchase Agreement, dated as of June 30, 2017, by and between Spherix Incorporated and Hoth Therapeutics, Inc. (incorporated by reference to Form 8-K filed July 3, 2017)
10.35	Registration Rights Agreement, dated as of June 30, 2017, by and between Spherix Incorporated and Hoth Therapeutics, Inc. (incorporated by reference to Form 8-K filed July 3, 2017)
10.36	Form of Shareholders Agreement, dated as of June 30, 2017 (incorporated by reference to Form 8-K filed July 3, 2017)
10.37	Agreement and Plan of Merger, dated as of March 12, 2018, by and among Spherix Incorporated, Spherix Merger Subsidiary Inc., DatChat, Inc. and Darin Myman (incorporated by reference to Form 8-K filed March 14, 2018)
10.38	Placement Agency Agreement, dated as of March 14, 2018, between Spherix Incorporated and Laidlaw & Company (UK) Ltd. (incorporated by reference to Form 8-K filed March 19, 2018)
21.1*	List of Subsidiaries
23.1*	Consent of Marcum LLP, independent registered public accounting firm
31.1*	Certification of Principal Executive Officer pursuant to Item 601(b)(31) of Regulation S-K, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1*	Certification of Principal Executive Officer pursuant to 18 U.S.C. Section 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.

** Pursuant to a Confidential Treatment Request under Rule 24b-2 filed with and approved by the SEC, portions of this exhibit have been omitted

Item 16. Form 10-K Summary

Not applicable.

SIGNATURES

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

Spherix Incorporated
(Registrant)

By: /s/ Anthony Hayes
Anthony Hayes
Chief Executive Officer and Director (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)

Date: March 30, 2018

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.

/s/ Anthony Hayes Anthony Hayes	Chief Executive Officer and Director	March 30, 2018
/s/ Tim S. Ledwick Tim S. Ledwick	Director	March 30, 2018
/s/ Robert J. Vander Zanden Robert J. Vander Zanden	Chairman of the Board	March 30, 2018
/s/ Eric Weisblum Eric Weisblum	Director	March 30, 2018

Exhibit 21.1

List of Subsidiaries

Nuta Technology Corp
Spherix Portfolio Acquisition II (SPAII)
Guidance IP, LLC
Directional IP, LLC
NNPT, LLC
Spherix Management Services, LLC
Ether Mining Company

Exhibit 23.1

Independent Registered Public Accounting Firm's Consent

We consent to the incorporation by reference in the Registration Statement of Spherix Incorporated and Subsidiaries (the "Company") on Form S-8 (333-210627), Form S-8 (333-197429), Form S-8 (333-187811), Form S-8 (333-185524), Form S-1 (333-218216) and Form S-3 (333-222488) of our report, dated March 30, 2018, with respect to our audits of the consolidated financial statements of the Company as of December 31, 2017 and 2016 and for the years then ended, which report is included in this Annual Report on Form 10-K of Spherix Incorporated and Subsidiaries for the year ended December 31, 2017.

/s/ Marcum LLP

Marcum LLP
New York, NY
March 30, 2018

Exhibit 31.1

Certification of
Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Anthony Hayes, certify that:

1. I have reviewed this report on Form 10-K of Spherix Incorporated;

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.

/s/ Anthony Hayes
Anthony Hayes
Chief Executive Officer
(Principal Executive Officer,
Principal Financial Officer and Principal Accounting Officer)
March 30, 2018

Exhibit 32.1

Certification of
Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

I, Anthony Hayes, Director, Chief Executive Officer, Principal Financial and Accounting Officer of Spherix Incorporated (the “Company”), in compliance with Section 906 of the Sarbanes-Oxley Act of 2002, hereby certify that, to the best of my knowledge, the Company’s Annual Report on Form 10-K for the period ended December 31, 2017 (the “Report”) filed with the Securities and Exchange Commission:

Fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

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

/s/ Anthony Hayes
Anthony Hayes
Chief Executive Officer
(Principal Executive Officer
Principal Financial Officer and Principal Accounting Officer)
March 30, 2018

A signed copy of this written statement required by Section 906 has been provided to Spherix Incorporated and will be retained by Spherix Incorporated and furnished to the Securities and Exchange Commission or its staff upon request.