

# SECURITIES & EXCHANGE COMMISSION EDGAR FILING

## PARKERVISION INC

**Form: 10-K**

**Date Filed: 2020-04-14**

Corporate Issuer CIK: 914139

**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, 2019**

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number **000-22904**

**PARKERVISION, INC.**

(Exact Name of Registrant as Specified in its Charter)

**Florida**  
(State of Incorporation)

**59-2971472**  
(I.R.S. Employer ID No.)

**9446 Philips Highway, Suite 5A**

**Jacksonville, Florida 32256**

(Address of Principal Executive Offices)

Registrant's telephone number, including area code: **(904) 732-6100**

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

<u>Title of Each Class</u>	<u>Trading Symbol(s)</u>	<u>Name of Each Exchange on Which Registered</u>
<b>Common Stock, \$.01 par value</b>	<b>PRKR</b>	<b>OTCQB</b>
<b>Common Stock Rights</b>		<b>OTCQB</b>

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 (X)

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes (X) No ( )

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

Large accelerated filer ( )

Accelerated filer ( )

Non-accelerated filer (X)

Smaller reporting company (X)

Emerging growth company ( )

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

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

As of June 28, 2019, the aggregate market value of the registrant's common stock, \$.01 par value, held by non-affiliates of the registrant was approximately \$3,069,058 (based upon \$0.10 share closing price on that date, as reported by OTCQB).

As of March 30, 2020, 43,102,745 shares of the Issuer's Common Stock were outstanding.

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## INTRODUCTORY NOTE

Unless the context otherwise requires, in this Annual Report on Form 10-K (“Annual Report”), “we”, “us”, “our” and the “Company” mean ParkerVision, Inc. and its wholly-owned German subsidiary, ParkerVision GmbH.

### Forward-Looking Statements

We believe that it is important to communicate our future expectations to our shareholders and to the public. This Annual Report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including, without limitation, statements about our future plans, objectives, and expectations under the headings “Item 1. Business” and “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Forward-looking statements include any statement that does not directly relate to any historical or current fact. When used in this Annual Report and in future filings by the Company with the Securities and Exchange Commission (“SEC”), the words or phrases “will likely result”, “management expects”, “we expect”, “will continue”, “is anticipated”, “estimated” or similar expressions are intended to identify such “forward-looking statements.” Readers are cautioned not to place undue reliance on such forward-looking statements, each of which speaks only as of the date made. Such statements are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results and those presently anticipated or projected, including the risks and uncertainties set forth in this Annual Report under the heading “Item 1A. Risk Factors” and in our other periodic reports. Examples of such risks and uncertainties include general economic and business conditions, the outcome of litigation, unexpected changes in technologies and technological advances, reliance on our intellectual property, and the ability to obtain adequate financing in the future. We have no obligation to publicly release the results of any revisions which may be made to any forward-looking statements to reflect anticipated events or circumstances occurring after the date of such statements.

## PART I

### **Item 1. Business.**

We were incorporated under the laws of the state of Florida on August 22, 1989. We are in the business of innovating fundamental wireless technologies and products. We have designed and developed proprietary radio frequency (“RF”) technologies and integrated circuits for use in wireless communication products. We also designed, developed and marketed a consumer distributed WiFi product line under the brand name Milo®.

We have expended significant financial and other resources to research and develop our RF technologies and to obtain patent protection for those technologies in the United States of America (“U.S.”) and certain foreign jurisdictions. We believe certain patents protecting our proprietary technologies have been broadly infringed by others and therefore the primary focus of our business plan is now the enforcement of our intellectual property rights through patent infringement litigation and licensing efforts. We currently have patent enforcement actions ongoing in various U.S. district courts against mobile handset providers and their chip suppliers for the infringement of a number of our RF patents.

We restructured our operations during the third quarter of 2018 in order to reduce operating expenses in light of our limited capital resources. Accordingly, we significantly reduced our ongoing investment in the Milo product and ceased our integrated circuit development efforts. In early 2019, we ceased substantially all ongoing research and development efforts and, where applicable, repurposed resources to support our patent enforcement and product sales and support efforts. We ceased sales of our Milo products in the fourth quarter of 2019.

## General Development of Business

Due to a number of factors contributing to a lack of liquidity in 2018, a change in our business plans was required. Accordingly, in August 2018, we implemented cost reduction measures that included a significant reduction in our workforce, the closure of our engineering design center in Lake Mary, Florida and a reduction in executive and management salaries. As a result of these measures, we ceased ongoing chip development activities and significantly curtailed our spending for sales and marketing of our Milo product line in order to focus our limited resources on our patent enforcement program. We ceased sales of our Milo products during the fourth quarter of 2019 in order to focus solely on patent enforcement actions.

From a patent enforcement standpoint, we spent much of 2019 supporting our two patent infringement cases against Qualcomm and others that are currently scheduled for jury trials in August and December 2020, respectively. In addition, during 2019, we declined to appeal adverse decisions on our patent infringement actions in the German courts and, accordingly, we currently have no patent enforcement actions ongoing in Germany. See “Legal Proceedings” in Note 12 to our consolidated financial statements included in Item 8 for a detailed description of our various patent enforcement actions.

A significant portion of our litigation costs have been funded under a secured contingent payment arrangement with Brickell Key Investments, LP (“Brickell”) and other contingent arrangements with legal counsel. In 2019, we funded our operations primarily through the issuance of convertible debt. See “Liquidity and Capital Resources” included in Item 7 for a full discussion of our litigation funding arrangements and our equity and debt financings.

### Milo WiFi Products

Our Milo-branded WiFi products were produced and sold from 2017 to 2019. These products offered a cost-effective networking system to enhance WiFi connectivity by effectively distributing the WiFi signal from existing routers and modems throughout a broader coverage area. We marketed these products primarily to consumers through Amazon.com and other online outlets, including our own direct-to-consumer online retail site.

Our Milo products did not generate the revenue growth that we anticipated in 2018, in part due to our lack of sufficient financial resources to establish brand recognition and expand sales channels. Accordingly, as part of our restructuring in August 2018, we made significant reductions in our product sales, marketing, development and operations staff as well as our expenditures for advertising and other marketing promotions, causing sales to further decline. In the fourth quarter of 2019, we ceased sales of our Milo products.

The components for the production of our Milo products were generally purchased from third-party suppliers, including contract manufacturers, on a purchase order basis. To mitigate supply risk, and based on long lead-times and anticipated consumer demand, we built up a significant Milo component and finished product inventory. As a result, in connection with our restructuring in August 2018, we ceased production and recognized impairment charges against our on-hand inventories.

Our Milo products competed with WiFi networking products offered by companies such as Google, Belkin/Linksys, D-Link, NetGear, Eero (purchased by Amazon), and others. We also faced competition from service providers who bundle competing networking devices with their service offering. Although we believe our products were able to compete based on performance, ease-of-installation, price and customer support, our competitors have substantially greater financial resources and brand awareness that we believe were significant factors in the lack of success of our product line.

## RF Technologies

Our RF technologies enable highly accurate transmission and reception of RF carriers at low power, thereby enabling extended battery life, and certain size, cost, performance, and packaging advantages.

We believe the most significant hurdle to the licensing and/or sale of our technologies and related products is the widespread use of certain of our technologies in infringing products produced by companies with significantly greater financial, technical and sales and marketing resources. We believe we can gain adoption and/or secure licensing agreements with unauthorized current users of one or more of our technologies, and therefore compete, based on a solid and defensible patent portfolio and the advantages enabled by our unique circuit architectures.

## Patents and Trademarks

We consider our intellectual property, including patents, patent applications, trademarks, and trade secrets to be significant to our business plan. We have a program to file applications for and obtain patents, copyrights, and trademarks in the U.S. and in selected foreign countries where we believe filing for such protection is appropriate to establish and maintain our proprietary rights in our technology and products. As of December 31, 2019, we had approximately 130 active U.S. and foreign patents related to our RF technologies. In addition, we have a number of recently expired patents that we believe continue to have significant economic value as a result of our ability to assert past damages in our patent enforcement actions. We estimate the economic lives of our patents to be the shorter of fifteen years from issuance or twenty years from the earliest application date. Our current portfolio of issued patents have expirations ranging from 2020 to 2036.

## Employees

As of December 31, 2019, we had 10 full-time and 2 part-time employees. We also outsource certain specialty services, such as information technology, and utilize contract staff and third-party consultants from time to time to supplement our workforce. Our employees are not represented by any collective bargaining agreements and we consider our employee relations to be satisfactory.

## Available Information and Access to Reports

We file annual reports on Forms 10-K, quarterly reports on Forms 10-Q, proxy statements and other reports, including any amendments thereto, electronically with the SEC. The SEC maintains an Internet site (<http://www.sec.gov>) where these reports may be obtained at no charge. We also make copies of these reports available, free of charge through our website (<http://www.parkervision.com>) via the link "SEC filings" as soon as practicable after filing or furnishing such materials with the SEC.

## Corporate Website

We announce investor information, including news and commentary about our business, financial performance and related matters, SEC filings, notices of investor events, and our press and earnings releases, in the investor relations section of our website (<http://ir.parkervision.com>). Additionally, if applicable, we webcast our earnings calls and certain events we participate in or host with members of the investment community in the investor relations section of our website. Investors and others can receive notifications of new information posted in the investor relations section in real time by signing up for email alerts and/or RSS feeds. Further corporate governance information, including our governance guidelines, Board committee charters, and code of conduct, is also available in the investor relations section of our website under the heading "Corporate Governance." The content of our website is not incorporated by reference into this Annual Report or in any other report or document we file with the SEC, and any references to our website are intended to be inactive textual references only.

## **Item 1A. Risk Factors.**

In addition to other risks and uncertainties described in this Annual Report, the following risk factors should be carefully considered in evaluating our business because such factors may have a significant impact on our business, operating results, liquidity and financial condition. As a result of the risk factors set forth below, actual results could differ materially from those projected in any forward-looking statements.

### **Our financial condition raises substantial doubt as to our ability to continue as a going concern.**

We have had significant losses and negative cash flows in every year since inception, and continue to have an accumulated deficit which, at December 31, 2019, was approximately \$401.8 million. Our net losses for the years ended December 31, 2019 and 2018 were approximately \$9.5 million and \$20.9 million, respectively. Our independent registered public accounting firm has included in their audit opinion on our consolidated financial statements as of and for the year ended December 31, 2019, a statement with respect to substantial doubt about our ability to continue as a going concern. Note 2 to our consolidated financial statements included in Item 8 includes a discussion regarding our liquidity and our ability to continue as a going concern. Our consolidated financial statements have been prepared assuming we will continue to operate as a going concern, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. If we become unable to continue as a going concern, we may have to liquidate our assets and the values we receive for our assets in liquidation or dissolution could be significantly lower than the values reflected in our consolidated financial statements. The substantial doubt as to our ability to continue as a going concern may adversely affect our ability to negotiate reasonable terms with our vendors and may adversely affect our ability to raise additional capital in the future.

### **We have had a history of losses which may ultimately compromise our ability to implement our business plan and continue in operation.**

To date, our technologies and products have not produced revenues sufficient to cover our operating costs. We will continue to make expenditures on patent protection and enforcement and general operations in order to continue our current patent enforcement efforts. Those efforts may not produce a successful financial outcome in 2020, or at all. Without a successful financial outcome from one or more of our patent enforcement efforts, we will not achieve profitability. Furthermore, our current capital resources are not sufficient to sustain our operations through 2020. If we are not able to generate sufficient revenues or obtain sufficient capital resources, we will not be able to implement our business plan or meet our current obligations due within the twelve months after the issuance date of our consolidated financial statements and investors will suffer a loss in their investment. This may also result in a change in our business strategies.

### **We will need to raise substantial additional capital in the future to fund our operations. Failure to raise such additional capital may prevent us from implementing our business plan as currently formulated.**

Because we have had net losses and, to date, have not generated positive cash flow from operations, we have funded our operating losses primarily from the sale of debt and equity securities, including our secured contingent debt obligation. Our capital resources include cash and cash equivalents of \$0.06 million at December 31, 2019 and proceeds of approximately \$2.1 million received during the first quarter of 2020 from various debt and equity transactions. Although we implemented significant cost reduction measures in 2018 and 2019, our business plan will continue to require expenditures for patent protection and enforcement and general operations. For the years ended December 31, 2019 and 2018, we used \$3.4 million and \$10.3 million, respectively in cash for operations which was funded primarily through the sale of convertible debt and equity securities. Our current capital resources will not be sufficient to meet our working capital needs for the twelve months after the issuance of our consolidated

financial statements and we will require additional capital to fund our operations. Additional capital may be in the form of debt securities, the sale of equity securities, including common or preferred stock, additional litigation funding, or a combination thereof. Failure to raise additional capital will have a material adverse impact on our ability to achieve our business objectives.

**Raising additional capital by issuing debt securities or additional equity securities may result in dilution and/or impose covenants or restrictions that create operational limitations or other obligations.**

We will require additional capital to fund our operations and meet our current obligations due within the twelve months after the issuance date of our consolidated financial statements. Financing, if any, may be in the form of debt or sales of equity securities, including common or preferred stock. Debt instruments or the sale of preferred stock may result in the imposition of operational limitations and other covenants and payment obligations, any of which may be burdensome to us and may have a material adverse impact on our ability to implement our business plan as currently formulated. The sale of equity securities, including common or preferred stock, may result in dilution to the current stockholders' ownership and may be limited by the number of shares we have authorized and available for issuance.

**We may be obligated to repay outstanding notes at a premium upon the occurrence of an event of default.**

We have \$2.3 million in secured and unsecured notes payable and \$3.6 million in outstanding principal under convertible notes payable at December 31, 2019 and we have an additional \$0.5 million in outstanding principal under convertible notes issued in the first quarter of 2020. If we fail to comply with the various covenants set forth in each of the notes, including failure to pay principal or interest when due or, under certain notes, consummating a change in control, we could be in default thereunder. Upon an event of default under each of the notes, the interest rate of the notes will increase to 12% per annum and the outstanding principal balance of the notes plus all accrued unpaid interest may be declared immediately payable by the holders. We may not have sufficient available funds to repay the notes upon an event of default, and we cannot provide assurances that we will be able to obtain other financing at terms acceptable to us, or at all.

**Our ability to utilize our tax benefits could be substantially limited if we fail to generate sufficient income or if we experience an "ownership change."**

We have cumulative net operating loss carryforwards ("NOLs") totaling approximately \$335.1 million at December 31, 2019, of which \$314.8 million is subject to expiration in varying amounts from 2020 to 2037. Our ability to fully recognize the benefits from those NOLs is dependent upon our ability to generate sufficient income prior to their expiration. In addition, our NOL carryforwards may be limited if we experience an ownership change as defined by Section 382 of the Internal Revenue Code ("Section 382"). In general, an ownership change under Section 382 occurs if 5% shareholders increase their collective ownership of the aggregate amount of our outstanding shares by more than 50 percentage points over a relevant lookback period. The sale of additional equity securities may trigger an ownership change under Section 382 which will significantly limit our ability to utilize our tax benefits. In order to avoid limitations imposed by Section 382, we may be limited in the amount of additional equity securities we are able to sell to raise capital.

**Our litigation funding arrangements may impair our ability to obtain future financing and/or generate sufficient cash flows to support our future operations.**

We have funded much of our cost of litigation through contingent financing arrangements with Brickell and contingent fee arrangements with legal counsel. The repayment obligation to Brickell is secured by the majority of our assets until such time that we have repaid a specified minimum return. Furthermore, our contingent arrangements will result in reductions in the amount of net proceeds retained by us from



litigation, licensing and other patent-related activities. The contingent fees payable to others could exceed half of our future proceeds depending on size and timing of proceeds, among other factors. The long-term continuation of our business plan is dependent upon our ability to secure sufficient financing to support our business, and our ability to generate revenues and/or patent related proceeds sufficient to offset expenses and meet our contingent payment obligation. Failure to generate revenue or other patent-related proceeds sufficient to repay our contingent obligation may impede our ability to obtain additional financing which will have a material adverse effect on our ability to achieve our long-term business objectives.

**Our litigation can be time-consuming, costly and we cannot anticipate the results.**

Since 2011, we have spent a significant amount of our financial and management resources to pursue patent infringement litigation against third parties. We believe this litigation, and other litigation matters that we may in the future determine to pursue, will continue to consume management and financial resources for long periods of time. There can be no assurance that our current or future litigation matters will ultimately result in a favorable outcome for us or that our financial resources will not be exhausted before achieving a favorable outcome. In addition, even if we obtain favorable interim rulings or verdicts in particular litigation matters, they may not be predictive of the ultimate resolution of the matter. Unfavorable outcomes could result in exhaustion of our financial resources and could hinder our ability to pursue licensing and/or product opportunities for our technologies in the future. Failure to achieve favorable outcomes from one or more of our patent enforcement actions will have a material adverse impact on our financial condition, results of operations, cash flows, and business prospects. We have contingent fee arrangements in place with others to reduce our litigation related expenditures; however any litigation-based or other patent-related amounts collected by us will be subject to contingency payments to our legal counsel and other funding parties which will reduce the amount retained by us.

**If our patents and intellectual property rights do not provide us with the anticipated market protections, our competitive position, business, and prospects will be impaired.**

We rely on our intellectual property rights, including patents and patent applications, to provide competitive advantage and protect us from theft of our intellectual property. We believe that our patents are for entirely new technologies and that our patents are valid, enforceable and valuable. However, third parties have made claims of invalidity with respect to certain of our patents and other similar claims may be brought in the future. For example, the Federal Patent Court in Munich recently invalidated one of our patents that was the subject of infringement cases against LG and Apple in Germany following a nullity claim filed by Qualcomm. If our patents are shown not to be as broad as currently believed, or are otherwise challenged such that some or all of the protection is lost, we will suffer adverse effects from the loss of competitive advantage and our ability to offer unique products and technologies. As a result, there would be an adverse impact on our financial condition and business prospects. Furthermore, defending against challenges to our patents may give rise to material costs for defense and divert resources away from our other activities.

**Our business, results of operations, and financial condition may be impacted by the recent coronavirus (COVID-19) outbreak.**

The global spread of COVID-19 has created significant volatility and uncertainty in financial markets. If such volatility and uncertainty persist, we may be unable to raise additional capital on terms that are acceptable to us, or at all. Additionally, in response to the pandemic, governments and the private sector have taken a number of drastic measures to contain the spread of COVID-19. While our employees currently have the ability and are encouraged to work remotely, such measures may have a substantial impact on employee attendance or productivity, which, along with the possibility of employees' illness, may adversely affect our operations.

In addition, COVID-19 is expected to negatively impact the timing of our current patent infringement actions as a result of office closures, travel restrictions and court closures. For example, each of our patent infringement cases in Florida have motions pending or granted for the extension of certain court deadlines due to the impact of COVID-19.

Although COVID-19 is currently not material to our results of operations, there is significant uncertainty relating to the potential impact of COVID-19 on our business. The extent to which COVID-19 impacts our ongoing patent enforcement actions and our ability to obtain financing, as well as our results of operations and financial condition, generally, will depend on future developments which are highly uncertain and cannot be predicted, including new information which may emerge concerning the severity of COVID-19 and the actions taken by governments and private businesses to contain COVID-19 or treat its impact, among others. If the disruptions posed by COVID-19 continue for an extensive period of time, our business, results of operations, and financial condition may be materially adversely affected.

**We are subject to outside influences beyond our control, including new legislation that could adversely affect our licensing and enforcement activities and have an adverse impact on the execution of our business plan.**

Our licensing and enforcement activities are subject to numerous risks from outside influences, including new legislation, regulations and rules related to obtaining or enforcing patents. For instance, the U.S. has enacted sweeping changes to the U.S. patent system including changes that transition the U.S. from a “first-to-invent” to a “first-to-file” system and that alter the processes for challenging issued patents. To the extent that we are unable to secure patent protection for our future technologies and/or our current patents are challenged such that some or all of our protection is lost, we will suffer adverse effects to our ability to offer unique products and technologies. As a result, there would be an adverse impact on our financial position, results of operations and cash flows and our ability to execute our business plan.

**Our industry is subject to rapid technological changes which if we are unable to match or surpass, will result in a loss of competitive advantage and market opportunity.**

Because of the rapid technological development that regularly occurs in the wireless technology industry, along with shifting user needs and the introduction of competing products and services, we have historically devoted substantial resources to developing and improving our technology and introducing new product offerings. As a result of our limited financial resources, we have ceased our research and development activities which could result in a loss of future market opportunity which could adversely affect our future revenue potential.

**We are highly dependent on Mr. Jeffrey Parker as our chief executive officer. If his services were lost, it would have an adverse impact on the execution of our business plan.**

Because of Mr. Parker’s leadership position in the company, the relationships he has garnered in both the industry in which we operate and the investment community, and the key role he plays in our patent litigation strategies, the loss of his services might be seen as an impediment to the execution of our business plan. If Mr. Parker was no longer available to the company, investors might experience an adverse impact on their investment. We maintain \$5 million in key-employee life insurance for our benefit for Mr. Parker.

**If we are unable to retain key executives and other highly skilled employees, we will not be able to execute our current business plans.**

Our business is dependent on having skilled and specialized key executives and other employees to conduct our business activities. The inability to retain these key executives and other specialized employees would have an adverse impact on the technical support activities and the financial reporting

and regulatory compliance activities that our business requires. These activities are instrumental to the successful execution of our business plan.

**Any disruptions to our information technology systems or breaches of our network security could interrupt our operations, compromise our reputation, and expose us to litigation, government enforcement actions, and costly response measures and could have a material adverse effect on our business, financial condition and results of operations.**

We rely on information technology systems, including third-party hosted servers and cloud-based servers, to keep business, financial, and corporate records, communicate internally and externally, and operate other critical functions. If any of our internal systems or the systems of our third-party providers are compromised due to computer virus, unauthorized access, malware, and the like, then sensitive documents could be exposed or deleted, and our ability to conduct business could be impaired. Cyber incidents can result from deliberate attacks or unintentional events. These incidents can include, but are not limited to, unauthorized access to our systems, computer viruses or other malicious code, denial of service attacks, malware, ransomware, phishing, SQL injection attacks, human error, or other events that result in security breaches or give rise to the manipulation or loss of sensitive information or assets. Cyber incidents can be caused by various persons or groups, including disgruntled employees and vendors, activists, organized crime groups, and state-sponsored and individual hackers. Cyber incidents can also be caused or aggravated by natural events, such as earthquakes, floods, fires, power loss, and telecommunications failures. The risk of cybersecurity breach has generally increased as the number, intensity, and sophistication of attempted attacks from around the world has increased. While we have cyber security procedures in place, given the evolving nature of these threats, there can be no assurance that we will not suffer material losses in the future due to cyber-attacks.

To date, we have not experienced any material losses relating to cyber-attacks, computer viruses or other systems failures. Although we have taken steps to protect the security of data maintained in our information systems, it is possible that our security measures will not be able to prevent the systems' improper functioning or the improper disclosure of personally identifiable information, such as in the event of cyber-attacks. In addition to operational and business consequences, if our cybersecurity is breached, we could be held liable to our customers or other parties in regulatory or other actions, and we may be exposed to reputation damages and loss of trust and business. This could result in costly investigations and litigation, civil or criminal penalties, fines and negative publicity.

**Our outstanding options and warrants may affect the market price and liquidity of the common stock.**

At December 31, 2019, we had 34.1 million shares of common stock outstanding and had outstanding options and warrants for the purchase of up to 23.6 million additional shares of common stock, of which approximately 15.6 million were exercisable as of December 31, 2019. In addition, as described more fully below, holders of convertible notes may elect to receive a substantial number of shares of common stock upon conversion of the notes and we may elect to pay accrued interest on the notes in shares of our common stock. All of the shares of common stock underlying these securities are or will be registered for sale to the holder or for public resale by the holder. The amount of common stock reserved for issuance may have an adverse impact on our ability to raise capital and may affect the price and liquidity of our common stock in the public market. In addition, the issuance of these shares of common stock will have a dilutive effect on current stockholders' ownership.

**The conversion of outstanding convertible notes into shares of common stock, and the issuance of common stock by us as payment of accrued interest upon the convertible notes, could materially dilute our current stockholders.**

We have aggregate principal of \$3.6 million in convertible notes outstanding at December 31, 2019. The notes are convertible into shares of our common stock at fixed conversion prices, which may be less than

the market price of our common stock at the time of conversion. If the entire principal is converted into shares of common stock, we would be required to issue an aggregate of up to 20.8 million shares of common stock. In addition, in the first quarter of 2020, we issued an additional aggregate principal amount of \$0.5 million in convertible notes which, if converted at the fixed conversion price, would result in the issuance of an additional 3.5 million shares of our common stock. If we issue all of these shares, the ownership of our current stockholders will be diluted.

Further, we may elect to pay interest on the notes, at our option, in shares of common stock, at a price equal to the then-market price for our common stock. To date, we have issued approximately 1.9 million shares of common stock as in-kind interest payments on our convertible notes. We currently do not believe that we will have the financial ability to make payments on the notes in cash when due. Accordingly, we currently intend to make such payments in shares of our common stock to the greatest extent possible. Such interest payments could further dilute our current stockholders.

**The price of our common stock may be subject to substantial volatility.**

The trading price of our common stock has been and may continue to be volatile. Between January 1, 2018 and December 31, 2019, the reported high and low sales prices for our common stock ranged between \$0.06 and \$1.25 per share. The price of our common stock may continue to be volatile as a result of a number of factors, some of which are beyond our control. These factors include, but are not limited to, developments in outstanding litigation, our performance and prospects, general conditions of the markets in which we compete, and economic and financial conditions, and the impact of COVID-19 on global financial markets. Such volatility could materially and adversely affect the market price of our common stock in future periods.

**Our common stock was delisted from the Nasdaq Capital Market and is now quoted on OTCQB, an over-the-counter market. There can be no assurance that our common stock will continue to trade on the OTCQB or on another over-the-counter market or securities exchange.**

Trading of our common stock on the Nasdaq Capital Market was suspended effective at the open of business on August 17, 2018 as a result of our failure to maintain at least \$35 million in market value of listed securities. Our common stock began trading on the OTCQB, an over-the-counter market, immediately following delisting from Nasdaq, under the symbol "PRKR". The over-the-counter market is a significantly more limited market than Nasdaq, and the quotation of our common stock on the over-the-counter market may result in a less liquid market available for existing and potential stockholders to trade shares of our common stock. Securities traded in the over-the-counter market generally have less liquidity due to factors such as the reduced number of investors that will consider investing in the securities, the reduced number of market makers in the securities, and the reduced number of securities analysts that follow such securities. As a result, holders of shares of our common stock may find it difficult to resell their shares at prices quoted in the market or at all. We may be subject to additional compliance requirements under applicable state laws relating to the issuance of our securities. This could have a long-term adverse effect on our ability to raise capital, which ultimately could adversely affect the market price of our common stock. Delisting could also have other negative results, including the potential loss of confidence by employees, the loss of institutional investor interest and fewer business development opportunities. We cannot provide any assurances as to if or when we will be in a position to relist our common stock on a nationally-recognized securities exchange.

**Our common stock is classified as a "penny stock" under SEC rules, which means broker-dealers who make a market in our stock will be subject to additional compliance requirements.**

Our common stock is deemed to be a "penny stock" as defined in the Securities Exchange Act of 1934 (the "Exchange Act"). Penny stocks are stocks (i) with a price of less than five dollars per share; (ii) that are not traded on a recognized national exchange; (iii) whose prices are not quoted on an automated quotation system sponsored by a recognized national securities association; or (iv) whose issuer has net

tangible assets less than \$2,000,000 (if the issuer has been in continuous operation for at least three years); or \$5,000,000 (if continuous operations for less than three years); or with average revenues of less than \$6,000,000 for the last three years. The Exchange Act requires broker-dealers dealing in penny stocks to provide potential investors with a document disclosing the risks of penny stocks and to obtain a manually signed and dated written receipt of the document before effecting any transaction in a penny stock for the investor's account. Potential investors in our common stock are urged to obtain and read such disclosure carefully before purchasing any shares that are deemed to be "penny stock." Further, the Exchange Act requires broker-dealers dealing in penny stocks to approve the account of any investor for transactions in such stocks before selling any penny stock to that investor. These procedures require the broker-dealer to (i) obtain from the investor information concerning his, her or its financial situation, investment experience and investment objectives; (ii) reasonably determine, based on that information, that transactions in penny stocks are suitable for the investor, and that the investor has sufficient knowledge and experience as to be reasonably capable of evaluating the risks of penny stock transactions; (iii) provide the investor with a written statement setting forth the basis on which the broker dealer made the determination in (ii) above; and (iv) receive a signed and dated copy of such statement from the investor, confirming that it accurately reflects the investor's financial situation, investment experience and investment objectives. Compliance with these requirements may affect the ability or willingness of broker-dealers to sell our securities, and accordingly would affect the ability of stockholders to sell their securities in the public market. These additional procedures could also limit our ability to raise additional capital in the future.

**We do not currently pay dividends on our common stock and thus stockholders must look to appreciation of our common stock to realize a gain on their investments.**

We do not currently pay dividends on our common stock and intend to retain our cash and future earnings, if any, to fund our business plan. Our future dividend policy is within the discretion of our board of directors and will depend upon various factors, including our business, financial condition, results of operations and capital requirements. We therefore cannot offer any assurance that our board of directors will determine to pay special or regular dividends in the future. Accordingly, unless our board of directors determines to pay dividends, stockholders will be required to look to appreciation of our common stock to realize a gain on their investment. There can be no assurance that this appreciation will occur.

**Provisions in our certificate of incorporation and by-laws could have effects that conflict with the interest of shareholders.**

Some provisions in our certificate of incorporation and by-laws could make it more difficult for a third party to acquire control of us. For example, our board of directors is divided into three classes with directors having staggered terms of office, our board of directors has the ability to issue preferred stock without shareholder approval, and there are advance notification provisions for director nominations and submissions of proposals from shareholders to a vote by all the shareholders under the by-laws. Florida law also has anti-takeover provisions in its corporate statute.

**We have a shareholder protection rights plan that may delay or discourage someone from making an offer to purchase the company without prior consultation with the board of directors and management, which may conflict with the interests of some of the shareholders.**

On November 17, 2005, as amended on November 20, 2015, our board of directors adopted a shareholder protection rights plan which called for the issuance, on November 29, 2005, as a dividend, of rights to acquire fractional shares of preferred stock. The rights are attached to the shares of common stock and transfer with them. In the future the rights may become exchangeable for shares of preferred stock with various provisions that may discourage a takeover bid. Additionally, the rights have what are known as "flip-in" and "flip-over" provisions that could make any acquisition of the company more costly. The principal objective of the plan is to cause someone interested in acquiring the company to negotiate with

the board of directors rather than launch an unsolicited bid. This plan may limit, prevent, or discourage a takeover offer that some shareholders may find more advantageous than a negotiated transaction. A negotiated transaction may not be in the best interests of the shareholders.

**Item 1B. Unresolved Staff Comments.**

Not applicable.

**Item 2. Properties.**

Our headquarters are located in a 3,000 square foot leased facility in Jacksonville, Florida. We have an additional 7,000 square foot leased facility in Lake Mary, Florida that was primarily for engineering design activities. As a result of our restructuring in August 2018, we have ceased use of the Lake Mary facility and are attempting to sublease the facility for the remaining lease term. We believe our properties are in good condition and suitable for the conduct of our business. Refer to Note 8 to our consolidated financial statements included in Item 8 for information regarding our outstanding lease obligations.

**Item 3. Legal Proceedings.**

We are a party to a number of patent enforcement actions initiated by us against others for the infringement of our technologies, as well as proceedings brought by others against us in an attempt to invalidate certain of our patent claims. These patent-related proceedings are more fully described in Note 12 to our consolidated financial statements included in Item 8.

**Item 4. Mine Safety Disclosures.**

Not applicable.

## PART II

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

#### Market Information

Since August 17, 2018, our Common Stock has been listed on the OTCQB, an over-the-counter market, under the ticker symbol "PRKR". Over-the-counter market quotations reflect inter-dealer prices, without retail mark-up, mark-down, or commission, and may not necessarily represent actual transactions.

#### Holdings

As of March 6, 2020, we had approximately 72 holders of record and we believe there are approximately 7,700 beneficial holders of our common stock.

#### Dividends

We do not currently pay dividends on our common stock and intend to retain our cash and future earnings, if any, to fund our business plan. The payment of cash dividends in the future will be dependent upon our revenue and earnings, if any, capital requirements and general financial condition. The payment of any dividends will be within the discretion of our board of directors.

#### Purchases of Equity Securities by Issuer and Affiliates

No purchases of our equity securities have been made by us or affiliated purchasers within the fourth quarter of the fiscal year ended December 31, 2019.

### **Item 6. Selected Financial Data.**

Not applicable.

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

#### Executive Overview

We are in the business of innovating fundamental wireless technologies and products. We have designed and developed proprietary RF technologies and integrated circuits for use in wireless communication products. We have expended significant financial and other resources to research and develop our RF technologies and to obtain patent protection for those technologies in the U.S. and certain foreign jurisdictions. We believe certain patents protecting our proprietary technologies have been broadly infringed by others and therefore our business plan primarily consists of enforcement of our intellectual property rights through patent infringement litigation and licensing efforts. We have also designed and developed a consumer distributed WiFi product line that was marketed under the brand name Milo.

In August 2018, we implemented cost reduction measures that included a significant reduction in our workforce, the closure of our engineering design center in Lake Mary, Florida and a reduction in executive and management salaries in order to reduce our ongoing operating expenses. As a result of these measures, we ceased ongoing chip development activities and significantly curtailed our spending for development, sales and marketing of our Milo product line in order to focus our limited resources on our patent enforcement program, which requires a significant investment over a lengthy period of time. We ceased sales of our Milo products during the fourth quarter of 2019 in order to focus solely on patent enforcement actions.

We continue to aggressively pursue licensing opportunities with wireless communications companies that make, use or sell chipsets and/or products that incorporate RF. We believe there are a number of wireless communications companies that can benefit from the use of the RF technologies we have developed, whether through a license or, in certain cases, a joint product venture that may include licensing rights. Our licensing efforts to date have required litigation in order to enforce and/or defend our intellectual property rights. Since 2011, we have been involved in patent infringement litigation against Qualcomm and others for the unauthorized use of our technology. Refer to Note 12 to our consolidated financial statements included in Item 8 for a complete discussion of our legal proceedings. We have expended significant resources since 2011 and incurred significant debt for the enforcement and defense of our intellectual property rights.

### **Liquidity and Capital Resources**

At December 31, 2019, we had a working capital deficit of approximately \$5.5 million, an increase from our working capital deficit of \$2.1 million at December 31, 2018. We had cash and cash equivalents totaling approximately \$0.06 million at December 31, 2019.

We have incurred significant losses from operations and negative cash flows in every year since inception, largely as a result of our significant investments in developing and protecting our intellectual property. For the year ended December 31, 2019, we incurred a net loss of approximately \$9.5 million and had an accumulated deficit of approximately \$401.8 million. Our independent registered public accounting firm has included in their audit report an explanatory paragraph expressing substantial doubt about our ability to continue as a going concern. See Note 2 to our consolidated financial statements included in Item 8 for a discussion of our liquidity and our ability to continue as a going concern.

Our use of cash for operations has declined 67%, from \$10.3 million in 2018 to \$3.4 million in 2019. This decrease in cash usage is primarily the result of decreased operating expenses following a restructuring of our operations in the third quarter of 2018. Although our cash used for operations declined from 2018 to 2019, so did our receipt of proceeds from the sale of debt and equity securities which we utilize to fund our operations. We received net proceeds of approximately \$3.1 million from equity and debt financings in 2019, compared to \$10.6 million received in 2018. The decline in financing proceeds is largely a result of reduced liquidity in our common stock following our delisting from Nasdaq in August 2018 and declining share price. In addition, we used \$1.2 million in cash to repay outstanding debt obligations in 2019, compared to the use of \$0.1 million for debt repayments in 2018.

At December 31, 2019, we had approximately \$1.5 million in debt obligations due to be repaid in 2020, a decrease from \$2.4 million in current debt obligations at December 31, 2018. The decrease in our short-term debt repayment obligations is primarily the result of \$1.2 million in repayments under a secured promissory note, offset by new borrowings under unsecured short-term notes payable of \$0.2 million. See "Financial Condition" below for a complete discussion of the terms of our notes payable.

Our ability to meet our short-term liquidity needs, including our debt repayment obligations, is dependent upon one or more of (i) our ability to successfully negotiate licensing agreements and/or settlements relating to the use of our technologies by others in excess of our contingent payment obligations to Brickell and legal counsel; and/or (ii) our ability to raise additional capital from the sale of equity securities or other financing arrangements.

In the first quarter of 2020, we received net proceeds of approximately \$1.6 million from the sale of equity securities and convertible notes and \$0.5 million from the exercise of warrants. In addition, we received \$0.6 million in advances from a potential litigation funding party. These proceeds are being used to fund our ongoing operations, including litigation costs.



A significant portion of our litigation costs in 2018 and 2019 have been funded by contingent payment arrangements with legal counsel and a litigation funding arrangement with Brickell. Fee discounts offered by legal counsel in exchange for contingent payments upon successful outcome in our litigation are not recognized in expense until such time that the related proceeds on which the contingent fees are payable are considered probable. Contingent fees vary based on each firm's specific fee agreement.

In addition to contingent fee arrangements with legal counsel, since 2016, we have received an aggregate of \$18 million in funds from Brickell under a contingent funding arrangement. We account for our repayment obligation to Brickell as a long-term debt instrument recorded at its estimated fair value. See "Financial Condition" below for a complete discussion of our obligation to Brickell. At December 31, 2019, our aggregate repayment obligation to Brickell was recorded at its estimated fair value of \$26.7 million. Brickell is entitled to a priority prorated payment of at least 55% of proceeds received by us from funded patent-related actions up to a specified minimum return. Brickell's minimum return varies based on a number of factors including whether the proceeds are a result of a contingently-funded action, the magnitude, nature and timing of the proceeds received, and the contingent percentage agreed to between the parties.

Although current working capital will not be used to repay these contingent arrangements, based on our current outstanding legal proceedings, funding arrangements and contingent payment arrangements, we estimate that 40% to 65% of future proceeds could be payable to others, depending on the proceeding and the nature, size and timing of proceeds, among other factors.

Patent enforcement litigation is costly and time-consuming and the outcome is difficult to predict. We expect to continue to invest in the support of our patent enforcement and licensing programs. We expect that revenue generated from patent enforcement actions and/or technology licenses in 2020, if any, after deduction of payment obligations to Brickell and legal counsel, may not be sufficient to cover our operating expenses. In the event we do not generate revenues, or other patent-related proceeds, sufficient to cover our operational costs and contingent repayment obligation, we will be required to raise additional working capital through the sale of equity securities or other financing arrangements.

The long-term continuation of our business plan is dependent upon our ability to secure sufficient financing to support our business, and our ability to generate revenues and/or patent-related proceeds sufficient to offset expenses and meet our contingent payment obligation and other long-term debt repayment obligations. Failure to generate sufficient revenues, raise additional capital through debt or equity financings, and/or reduce operating costs could have a material adverse effect on our ability to meet our short and long-term liquidity needs and achieve our intended long-term business objectives.

## **Financial Condition**

### **Intangible Assets**

We consider our intellectual property, including patents, patent applications, trademarks, copyrights and trade secrets to be significant to our business. Our intangible assets are pledged as security for our secured contingent payment obligation with Brickell and our secured note payable with our litigation counsel. The net book value of our intangible assets was approximately \$2.9 million and \$3.9 million as of December 31, 2019 and 2018, respectively. These assets are amortized using the straight-line method over their estimated period of benefit, generally fifteen to twenty years. The decrease in the carrying value of our intangible assets is primarily the result of \$0.6 million in patent amortization expense recognized in 2019 as our portfolio matures and a \$0.4 million loss on abandonment of certain patents and patent applications. Management evaluates the recoverability of intangible assets periodically and takes into account events or circumstances that may warrant revised estimates of useful lives or that may indicate impairment exists. As part of our ongoing patent maintenance program, we may, from time to time, abandon a particular patent if we determine fees to maintain the patent exceed its expected recoverability. For the years ended December 31, 2019 and 2018, we incurred losses of approximately \$0.4 million and \$0.1 million, respectively, for the write off of specific patent assets. These losses are

included in operating expenses in the accompanying consolidated statements of comprehensive loss.

#### Secured Contingent Payment Obligation

Our secured contingent payment obligation to Brickell was recorded at its estimated fair value of \$26.7 million and \$25.6 million as of December 31, 2019 and 2018, respectively. Under the funding agreement, Brickell has a right to reimbursement and compensation from gross proceeds resulting from patent enforcement and other patent monetization actions on a priority basis. Our repayment obligation to Brickell is contingent upon receipt of proceeds from our patents and the amount of our obligation varies based on the magnitude, timing and nature of proceeds received by us. As a result, we have elected to account for this obligation at its estimated fair value which is subject to significant estimates and assumptions as discussed in "Critical Accounting Policies" below. The \$1.1 million increase in estimated fair value of this repayment obligation in 2019 is primarily the result of (i) increases in the minimum return due to Brickell the longer the obligation remains outstanding and (ii) changes in our estimated probabilities for the timing and amount of future repayments to Brickell. Refer to Note 10 to our consolidated financial statements included in Item 8 for a discussion of the fair value measurement of our contingent payment obligation.

Brickell is entitled to a priority payment of patent-related proceeds up to at least a specified minimum return which is determined as a percentage of the funded amount and varies based on the timing of repayment. In addition, Brickell is entitled to a pro rata portion of proceeds from specified legal actions to the extent aggregate proceeds from those actions exceed the specified minimum return. In the event of a change in control of the Company, Brickell has the right to be paid its return as defined under the agreement based on the transaction price for the change in control event.

Brickell holds a senior security interest in the majority of our assets until such time as the specified minimum return is paid, in which case, the security interest will be released except with respect to the patents and proceeds related to specific legal actions. The security interest is enforceable by Brickell in the event that we are in default under the agreement. We are currently in compliance with the provisions of the agreement.

We received no proceeds from Brickell in 2019. In 2018, we received aggregate proceeds of \$4.0 million from Brickell including proceeds of \$2.5 million received in December 2018. The December 2018 funding was critical to meet our ongoing obligations, particularly with regard to our litigation fees and expenses and therefore, in connection with the transaction, we issued Brickell a warrant to purchase up to 5.0 million shares of our common stock at an exercise price of \$0.16 per share. As the estimated fair value of the payment obligation to Brickell resulting from this additional funding exceeded the \$2.5 million in proceeds received, no value was assigned to the warrants.

#### Notes Payable

As of December 31, 2019, we had approximately \$2.3 million in notes payable, including an unsecured promissory note payable to Sterne, Kessler, Goldstein, & Fox, PLLC ("SKGF"), a related party, of approximately \$0.9 million, a secured promissory note payable to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("Mintz") of \$1.2 million, and short-term bridge loans from accredited investors of approximately \$0.2 million. The short-term bridge loans were repaid in the first quarter of 2020 with shares of our common stock (see Note 18).

Failure to comply with the payment terms of each of these notes constitutes an event of default which, if uncured, will result in the entire unpaid principal balance of the note and any unpaid, accrued interest to become immediately due and payable. In addition, an event of default results in an increase in the interest rate under the SKGF and Mintz notes to a default rate of 12% per annum. As of December 31, 2019, we are in default of the payment provisions of the secured note payable to Mintz and we are in dispute with Mintz regarding fees billed. We are actively working with Mintz to resolve the dispute and cure any default. There can be no assurance that we will be successful in curing our default on the Mintz note.

## Deferred Tax Assets and Related Valuation Allowance

Deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax bases of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established to reduce deferred tax assets when, based on available objective evidence, it is more likely than not that the benefit of such assets will not be realized. As of December 31, 2019, we had net deferred tax assets of approximately \$96 million, primarily related to our NOL carryforwards, which were fully offset by a valuation allowance due to the uncertainty related to realization of these assets through future taxable income. In addition, our ability to benefit from our NOL and other tax credit carryforwards could be limited under Section 382 as more fully discussed in Note 11 to our consolidated financial statements included in Item 8.

## **Results of Operations for Each of the Years Ended December 31, 2019 and 2018**

### Revenues and Gross Margins

We reported no licensing revenue for the years ended December 31, 2019 or 2018. Although we do anticipate licensing revenue and/or settlement gains to result from our licensing and patent enforcement actions, the amount and timing is highly unpredictable and there can be no assurance that we will achieve our anticipated results.

We reported product revenue of \$0.07 million and \$0.14 million for the years ended December 31, 2019 and 2018, respectively, from the sales of our Milo-branded products. Our product revenue declined due to overall reductions in development, sales and marketing for these products following our 2018 restructuring.

The gross margins on Milo product sales, before inventory impairment charges, were approximately 1% and 24% for the years ended December 31, 2019 and 2018, respectively. The decrease in gross margin is the result of sales price adjustments in 2019. Our revenues from Milo products fell short of our projections and we had limited resources to deploy towards increasing consumer awareness of our products. As a result, we made the decision to discontinue sales of Milo products during the fourth quarter of 2019. Additionally, during the year ended December 31, 2018, we recorded \$1.1 million in impairment charges to reduce excess inventories to their estimated net realizable value.

### Research and Development Expenses

Research and development expenses consist primarily of engineering and related management and support personnel costs; fees for outside engineering design services which we use from time to time to supplement our internal resources; depreciation expenses related to certain assets used in product development; prototype production and materials costs for both chips and end-user products; software licensing and support costs, which represent the annual licensing and support maintenance for engineering design and other software tools; and rent and other overhead costs for our engineering design facility. Personnel costs include share-based compensation which represents the grant date fair value of equity-based awards to our employees which is attributed to expense over the service period of the award. Subsequent to March 31, 2019, we halted substantially all research and development efforts and, where applicable, repurposed prior engineering resources to support our patent enforcement programs or our Milo sales and support.

Research and development costs were approximately \$0.3 million for the year ended December 31, 2019 compared to approximately \$2.9 million for the year ended December 31, 2018, representing a decrease of approximately \$2.6 million, or 90%. This decrease is primarily the result of a \$1.3 million decrease in personnel and related costs, a \$0.3 million decrease in consulting fees, and a \$0.1 million decrease in

software licensing and support costs. Additionally, research and development expenses decreased approximately \$0.6 million due to personnel and related costs being repurposed for selling, general and administrative purposes including litigation support and Milo sales and support.

The decreases in personnel and software and licensing are a result of the August 2018 restructuring of operations which included a significant workforce reduction, reduction in engineering executive compensation, and closure of the Lake Mary engineering design facility. The reduction in outside consulting services is the result of cost reduction efforts pertaining to our Milo product operations and integrated circuit development following our 2018 restructuring.

#### Selling, General, and Administrative Expenses

Selling, general and administrative expenses consist primarily of executive, director, sales and marketing, and finance and administrative personnel costs, including share-based compensation, costs incurred for advertising, insurance, shareholder relations and outside legal and professional services, including litigation expenses, and amortization and maintenance expenses related to our patent assets.

Our selling, general and administrative expenses were approximately \$7.6 million for the year ended December 31, 2019, as compared to approximately \$10.4 million for the year ended December 31, 2018, representing a decrease of approximately \$2.8 million or 27%. This is primarily due to a \$0.9 million decrease in personnel and related expense, including a decrease in share-based compensation expense of approximately \$0.2 million, a decrease in Milo product advertising costs of approximately \$0.6 million, a decrease in marketing and other business consulting and legal fees of approximately \$0.7 million, a decrease in noncash amortization expense of approximately \$0.4 million, a decrease in board compensation of approximately \$0.2 million and a decrease in travel expenses and shareholder relations costs of approximately \$0.1 million each. These decreases are somewhat offset by an increase in losses on disposals of patent and other long-lived assets of approximately \$0.3 million.

The decrease in personnel costs is primarily the result of the reduction in personnel and executive compensation as part of our 2018 restructuring, somewhat offset by the repurposing of technical personnel for litigation support commencing in the second quarter of 2019. Share-based compensation expense decreased primarily as a result of lower grant-date fair values on newer awards due to declining stock prices when compared to prior year awards.

The decreases in product advertising and marketing, consulting and legal fees, board compensation, shareholder relations costs and travel expenses are a result of our cost reduction measures that commenced in 2018. The decrease in noncash amortization expense is the result of the expiration and/or abandonment of a number of our patents and patent applications since the third quarter of 2018.

#### Restructuring Charges

We incurred approximately \$0.7 million in restructuring charges in 2018. These charges are a result of the implementation of cost reduction measures in August 2018 that included a significant reduction in our workforce, the closure of our engineering design center in Lake Mary, Florida, the cessation of ongoing chip development activities, and a significant reduction in our spending for sales and marketing of our Milo product line. These measures were undertaken in order to focus our limited resources toward our patent enforcement program which, if successful, has the ability to generate significant licensing and/or settlement revenue. The restructuring charges were primarily related to one-time termination benefits, the impairment of prepaid assets, and our estimated future lease obligation for our Lake Mary, Florida facility, net of estimated sublease income. At December 31, 2018, we recorded an estimated lease obligation for our Lake Mary facility of approximately \$0.2 million which is net of an estimated \$0.4 million in future sublease rental income. To date, we have not sublet this facility. We are actively marketing the Lake Mary facility for sublease, however there can be no assurance that our efforts will be successful. If we are unable to sublet our Lake Mary facility for the rental amount or term that we have

estimated, we will incur additional impairment charges related to this lease obligation.

The 2018 cost reduction measures have resulted in significant cost savings in 2019.

#### Change in Fair Value of Contingent Payment Obligation

Our losses from the changes in fair value of our contingent payment obligation were approximately \$1.1 million and \$5.7 million for the years ended December 31, 2019 and 2018, respectively. See “Financial Condition” above for a discussion of our contingent payment obligation and the factors impacting the change in fair value.

#### Critical Accounting Policies

We believe that the following are critical accounting policies and estimates that significantly impact the preparation of our consolidated financial statements:

##### *Inventory*

Inventory is stated at the lower of actual cost, as determined under the first-in, first-out method, or estimated net realizable value. We review our inventory for estimated obsolescence or unmarketable inventory and write down inventory for the difference between cost and estimated market value based upon assumptions about future demand. Future demand is affected by market conditions, technological obsolescence, new products and strategic plans, each of which is subject to change.

##### *Secured Contingent Payment Obligation*

We have accounted for our secured contingent repayment obligation as long-term debt. Our repayment obligation is contingent upon the receipt of proceeds from patent enforcement or other patent monetization actions. We have elected to measure our secured contingent payment obligation at its estimated fair value based on the variable and contingent nature of the repayment provisions. We have determined that the fair value of our secured contingent payment obligation falls within Level 3 in the fair value hierarchy which involves significant estimates and assumptions including projected future patent-related proceeds and the risk-adjusted rate for discounting future cash flows. Actual results could differ from the estimates made. Changes in fair value, including the component related to imputed interest, are included in the consolidated statements of comprehensive loss under the heading “Change in fair value of contingent payment obligation.” Refer to Note 10 to our consolidated financial statements included in Item 8 for a discussion of the significant estimates and assumptions used in estimated the fair value of our contingent payment obligation.

##### *Accounting for Share-Based Compensation*

We calculate the fair value of share-based equity awards to employees, including restricted stock, stock options and restricted stock units (“RSUs”), on the date of grant and recognize the calculated fair value as compensation expense over the requisite service periods of the related awards. The fair value of stock option awards is determined using the Black-Scholes option valuation model which requires the use of highly subjective assumptions and estimates including how long employees will retain their stock options before exercising them and the volatility of our common stock price over the expected life of the equity award. Changes in these subjective assumptions can materially affect the estimate of fair value of share-based compensation and consequently, the related amount recognized as expense in the consolidated statements of comprehensive loss.

#### *New Accounting Pronouncements*

As of January 1, 2019, we adopted Accounting Standards Codification ("ASC") 842, "Leases." ASC 842 requires lessees to recognize right-of-use ("ROU") assets and lease liabilities on the balance sheet for all finance and operating leases with lease terms of more than 12 months and disclose key information about leasing arrangements (see Note 8). ASC 842 allows for the application of the new standard on the adoption date without restatement of prior comparative periods or a modified retrospective transition method which requires application of the new standard at the beginning of the earliest period presented. We have elected to use the adoption date as the initial application date without restatement of prior comparative periods. We also elected the package of practical expedients permitted under the transition guidance which, among other things, does not require us to reassess lease classification. Upon adoption of ASC 842, we recognized an adjustment to beginning retained earnings of approximately \$0.04 million for the cumulative effect of the change in accounting principle. We also recorded a ROU asset of approximately \$0.56 million and an increase in our operating lease liabilities of approximately \$0.60 million, primarily related to operating leases for our office and warehouse facilities. Our accounting for finance leases remains substantially unchanged. Adoption of the standard did not materially impact operating results or cash flows.

As of January 1, 2019, we adopted Accounting Standards Update ("ASU") 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The amendments in this update allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. We have no stranded tax effects included in our other comprehensive loss and therefore the adoption of ASU 2018-02 did not impact our consolidated financial statements.

As of January 1, 2019, we adopted ASU 2018-07, "Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting." The amendments in this update simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. We did not previously have awards to nonemployees that would require reassessment and therefore the adoption of ASU 2018-07 did not impact our consolidated financial statements.

#### Off-Balance Sheet Transactions

As of December 31, 2019, we had outstanding warrants to purchase 12.2 million shares of our common stock. The estimated grant date fair value of these warrants of approximately \$1.3 million is included in shareholders' deficit in our consolidated balance sheet for the year ended December 31, 2019. The outstanding warrants have an average exercise price of \$0.44 per share and a weighted average remaining life of approximately 4 years.

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

Not applicable.

**Item 8. Financial Statements and Supplementary Data.**

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Not applicable	

## Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of ParkerVision, Inc.

### **Opinion on the Consolidated Financial Statements**

We have audited the accompanying consolidated balance sheet of ParkerVision, Inc. (the "Company") and its subsidiary as of December 31, 2019, and the related consolidated statements of comprehensive loss, shareholders' deficit and cash flows for the year then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and its subsidiary at December 31, 2019, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

### ***Basis for Opinion***

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audit. 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated 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 a part of our audit, 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 audit included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

### ***Emphasis of Matter Regarding Going Concern***

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 and Note 9 to the consolidated financial statements, the Company has suffered recurring losses from operations, is in payment default on certain debt, and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2 and Note 9. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter

/s/ MSL, P.A.

We have served as the Company's auditor since 2019.  
Fort Lauderdale, Florida  
April 14, 2020



## Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors  
ParkerVision, Inc.  
Jacksonville, Florida

### **Opinion on the Consolidated Financial Statements**

We have audited the accompanying consolidated balance sheet of ParkerVision, Inc. (the "Company") and its subsidiary as of December 31, 2018, and the related consolidated statements of comprehensive loss, shareholders' deficit and cash flows for the year then ended, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and its subsidiary at December 31, 2018, and the results of their operations and their cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

### ***Basis for Opinion***

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audit. 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 audit in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audit included performing procedures to assess the risks of material misstatement of the consolidated 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 consolidated financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audit provides a reasonable basis for our opinion.

### ***Emphasis of Matter Regarding Going Concern***

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the consolidated financial statements, the Company has suffered recurring losses from operations and has a net capital deficiency that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 2. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty. Our opinion is not modified with respect to this matter

/s/ BDO USA, LLP  
Certified Public Accountants

We served as the Company's auditor in 2018.  
Jacksonville, Florida

April 1, 2019

PARKERVISION, INC.  
CONSOLIDATED BALANCE SHEETS  
DECEMBER 31, 2019 AND 2018

	2019	2018
<b>CURRENT ASSETS:</b>		
Cash and cash equivalents	\$ 57	\$ 1,527
Accounts receivable, net	-	2
Finished goods inventories, net	-	98
Prepaid expenses	505	538
Other current assets	117	55
Held for sale assets	-	65
<b>Total current assets</b>	<b>679</b>	<b>2,285</b>
Property and equipment, net	70	129
Intangible assets, net	2,878	3,902
Operating lease right-of-use assets	283	-
Other assets, net	16	15
<b>Total assets</b>	<b>\$ 3,926</b>	<b>\$ 6,331</b>
<b>CURRENT LIABILITIES:</b>		
Accounts payable	\$ 2,328	\$ 655
Accrued expenses:		
Salaries and wages	78	122
Professional fees	499	379
Statutory court costs	369	114
Other accrued expenses	1,081	563
Related party note payable, current portion	86	37
Secured note payable, current portion	1,222	2,400
Unsecured notes payable	225	-
Operating lease liabilities, current portion	250	86
<b>Total current liabilities</b>	<b>6,138</b>	<b>4,356</b>
<b>LONG-TERM LIABILITIES:</b>		
Secured contingent payment obligation	26,651	25,557
Convertible notes, net	2,733	837
Related party note payable, net of current portion	793	799
Operating lease liabilities, net of current portion	305	91
Other long-term liabilities	403	1
<b>Total long-term liabilities</b>	<b>30,885</b>	<b>27,285</b>
<b>Total liabilities</b>	<b>37,023</b>	<b>31,641</b>
<b>COMMITMENTS AND CONTINGENCIES</b>		
<b>SHAREHOLDERS' DEFICIT:</b>		
Common stock, \$.01 par value, 110,000 and 75,000 shares authorized, 34,097 and 28,677 issued and outstanding at December 31, 2019 and 2018, respectively	341	287
Warrants outstanding	1,330	1,810
Additional paid-in capital	367,015	364,885
Accumulated deficit	(401,783)	(392,292)
<b>Total shareholders' deficit</b>	<b>(33,097)</b>	<b>(25,310)</b>
<b>Total liabilities and shareholders' deficit</b>	<b>\$ 3,926</b>	<b>\$ 6,331</b>

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

PARKERVISION, INC.  
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS  
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018  
(in thousands, except per share amounts)

	2019	2018
Product revenue	\$ 74	\$ 135
Cost of sales - product	73	103
Loss on impairment of inventory	6	1,134
Gross margin	<u>(5)</u>	<u>(1,102)</u>
Research and development expenses	334	2,875
Selling, general, and administrative expenses	7,602	10,427
Restructuring expenses	-	690
Total operating expenses	<u>7,936</u>	<u>13,992</u>
Interest and other income	3	2
Interest and other expense	(421)	(116)
Change in fair value of contingent payment obligation	(1,094)	(5,661)
Total interest and other	<u>(1,512)</u>	<u>(5,775)</u>
Net loss before income tax	(9,453)	(20,869)
Income tax expense	-	-
Net loss	(9,453)	(20,869)
Other comprehensive income, net of tax	-	-
Comprehensive loss	<u>\$ (9,453)</u>	<u>\$ (20,869)</u>
Basic and diluted net loss per common share	<u>\$ (0.30)</u>	<u>\$ (0.85)</u>
Weighted average common shares outstanding	31,461	24,429

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

PARKERVISION, INC.  
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' DEFICIT  
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018  
(in thousands)

	Common Stock, Par Value	Warrants Outstanding	Additional Paid-in Capital	Accumulated Deficit	Total Shareholders' Deficit
<b>Balance as of December 31, 2017</b>	\$ 212	\$ 826	\$ 359,141	\$ (371,423)	\$ (11,244)
Issuance of common stock and warrants in public and private offerings, net of issuance costs	45	1,950	3,281	-	5,276
Issuance of common stock upon exercise of warrants	20	(475)	455	-	-
Expiration of warrants	-	(491)	491	-	-
Issuance of convertible debt with beneficial conversion feature	-	-	442	-	442
Issuance of common stock upon conversion and payment of interest in kind on convertible debt	4	-	52	-	56
Share-based compensation, net of shares withheld for taxes	6	-	1,023	-	1,029
Net loss for the year	-	-	-	(20,869)	(20,869)
<b>Balance as of December 31, 2018</b>	287	1,810	364,885	(392,292)	(25,310)
Cumulative effect of change in accounting principle	-	-	-	(38)	(38)
Issuance of common stock upon exercise of warrants	29	(660)	660	-	29
Issuance of common stock and warrants for services	6	180	54	-	240
Issuance of convertible debt with beneficial conversion feature	-	-	550	-	550
Issuance of common stock upon conversion and payment of interest in kind on convertible debt	19	-	277	-	296
Share-based compensation, net of shares withheld for taxes	-	-	589	-	589
Net loss for the year	-	-	-	(9,453)	(9,453)
<b>Balance as of December 31, 2019</b>	\$ 341	\$ 1,330	\$ 367,015	\$ (401,783)	\$ (33,097)

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

PARKERVISION, INC.  
CONSOLIDATED STATEMENTS OF CASH FLOWS  
FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018  
(in thousands)

	2019	2018
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Net loss	\$ (9,453)	\$ (20,869)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	835	1,209
Share-based compensation	589	1,050
Noncash lease expense	280	-
Change in fair value of contingent payment obligation	1,094	5,661
Loss on disposal of equipment and other assets	412	489
Inventory impairment charges	6	1,134
Changes in operating assets and liabilities:		
Accounts receivable	2	25
Finished goods inventories	81	(207)
Prepaid expenses and other assets	221	62
Accounts payable and accrued expenses	2,790	1,034
Operating lease liabilities and deferred rent	(230)	115
Total adjustments	6,080	10,572
Net cash used in operating activities	(3,373)	(10,297)
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Proceeds from redemption of available-for-sale securities	-	26
Proceeds from sale of property and equipment	30	50
Purchases of property and equipment	(5)	(5)
Payments for patent costs and other intangible assets	(18)	(16)
Net cash provided by investing activities	7	55
<b>CASH FLOWS FROM FINANCING ACTIVITIES:</b>		
Net proceeds from issuance of common stock and warrants in public and private offerings	-	5,276
Net proceeds from exercise of options and warrants	29	-
Net proceeds from debt financings	3,068	5,294
Shares withheld for payment of taxes	-	(21)
Debt repayments	(1,200)	(132)
Principal payments on finance lease obligation	(1)	(2)
Net cash provided by financing activities	1,896	10,415
<b>NET CHANGE IN CASH AND CASH EQUIVALENTS</b>	<b>(1,470)</b>	<b>173</b>
CASH AND CASH EQUIVALENTS, beginning of year	1,527	1,354
CASH AND CASH EQUIVALENTS, end of year	\$ 57	\$ 1,527
<b>SUPPLEMENTAL CASH FLOW INFORMATION:</b>		
Cash paid for interest	\$ 4	\$ 39
Cash paid for income taxes	\$ -	\$ -
<b>SUPPLEMENTAL SCHEDULE OF NON-CASH ACTIVITIES:</b>		
Payment of interest in kind on convertible notes	\$ 197	\$ 26

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

PARKERVISION, INC.  
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS  
DECEMBER 31, 2019 and 2018

1. SIGNIFICANT ACCOUNTING POLICIES

ParkerVision, Inc. and its wholly-owned German subsidiary, ParkerVision GmbH (collectively “ParkerVision”, “we” or the “Company”) is in the business of innovating fundamental wireless hardware technologies and products. We have determined that our business currently operates under a single operating and reportable segment.

We have designed and developed proprietary radio frequency (“RF”) technologies and integrated circuits for use in wireless communication products. We have expended significant financial and other resources to research and develop our RF technologies and to obtain patent protection for those technologies in the United States of America (“U.S.”) and certain foreign jurisdictions. We believe certain patents protecting our proprietary technologies have been broadly infringed by others, and therefore the primary focus of our business plan is the enforcement of our intellectual property rights through patent infringement litigation and licensing efforts. We currently have patent enforcement actions ongoing in various U.S. district courts against mobile handset providers and their chip suppliers for the infringement of a number of our RF patents. We have made significant investments in developing and protecting our technologies, the returns on which are dependent upon the generation of future revenues for realization.

We also designed, developed and marketed a distributed WiFi product line under the brand name Milo®. We restructured our operations during the third quarter of 2018 in order to reduce operating expenses in light of our limited capital resources. Accordingly, we significantly reduced our ongoing investment in the Milo product. In early 2019, we ceased substantially all ongoing research and development efforts and, where applicable, repurposed resources to support our patent enforcement and product sales and support efforts. We ceased sales of our Milo products in the fourth quarter of 2019.

**Basis of Presentation**

Our consolidated financial statements are prepared in accordance with generally accepted accounting principles in the U.S. (“GAAP”). Certain reclassifications have been made to prior period amounts to conform to the current period presentation. The consolidated financial statements include the accounts of ParkerVision, Inc. and our wholly-owned German subsidiary, ParkerVision GmbH, after elimination of all intercompany transactions and accounts.

**Use of Estimates in the Preparation of Financial Statements**

The preparation of financial statements in conformity with GAAP requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. The more significant estimates made by us include projected future cash flows and risk-adjusted discount rates for estimating the fair value of our secured contingent payment obligation, the volatility and estimated lives of share-based awards used in the estimate of the fair market value of share-based compensation, the assessment of recoverability of long-lived assets, the amortization periods for intangible and long-lived assets, and the valuation allowance for deferred taxes. Actual results could differ from the estimates made. We periodically evaluate estimates used in the preparation of the financial statements for continued reasonableness. Appropriate adjustments, if any, to the estimates used are made prospectively based upon such periodic evaluation.

### Cash and Cash Equivalents

We consider cash and cash equivalents to include cash on hand, interest-bearing deposits, overnight repurchase agreements and investments with original maturities of three months or less when purchased.

### Inventory

Inventory is stated at the lower of actual cost, as determined under the first-in, first-out method, or estimated net realizable value. We review our inventory for estimated obsolescence or unmarketable inventory and write down inventory for the difference between cost and estimated market value based upon assumptions about future demand. Future demand is affected by market conditions, technological obsolescence, new products and strategic plans, each of which is subject to change. Due to the decision to discontinue Milo product sales in the fourth quarter of 2019, a full reserve was recorded against the remaining inventory on hand at December 31, 2019.

### Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation. Depreciation is determined using the straight-line method over the following estimated useful lives:

Manufacturing and office equipment	5-7 years
Leasehold improvements	Shorter of useful life or remaining life of lease
Furniture and fixtures	7 years
Computer equipment and software	3-5 years

The cost and accumulated depreciation of assets sold or retired are removed from their respective accounts, and any resulting net gain or loss is recognized in the accompanying consolidated statements of comprehensive loss. The carrying value of long-lived assets is reviewed on a regular basis for the existence of facts, both internally and externally, that may suggest impairment. Recoverability of assets to be held and used is measured by comparing the carrying amount of an asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the assets exceeds its estimated undiscounted future net cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds the fair value of the assets.

### Intangible Assets

Patents, copyrights and other intangible assets are amortized using the straight-line method over their estimated period of benefit. We estimate the economic lives of our patents and copyrights to be fifteen to twenty years. Management evaluates the recoverability of intangible assets periodically and takes into account events or circumstances that may warrant revised estimates of useful lives or that may indicate impairment exists.

### Secured Contingent Payment Obligation

We have accounted for our secured contingent repayment obligation as long-term debt in accordance with Accounting Standards Codification (“ASC”) 470-10-25, “Sales of Future Revenues or Various other Measures of Income.” Our repayment obligations are contingent upon the receipt of proceeds from patent enforcement and/or patent monetization actions. We have elected to measure our secured contingent payment obligation at its estimated fair value in accordance with ASC 825, “Financial Instruments” based on the variable and contingent nature of the repayment provisions. We have determined that the fair value of our secured contingent payment obligation falls within Level 3 in the fair value hierarchy which involves significant estimates and assumptions including projected future patent-related proceeds and the risk-adjusted rate for discounting future cash flows (see Note 10). Actual results could differ from the estimates made. Changes in fair value, including the component related to imputed interest, are included in the accompanying consolidated statements of comprehensive loss under the heading “Change in fair value of contingent payment obligation.”

**Leases**

In February 2016, the FASB established ASC 842, "Leases" by issuing Accounting Standards Update ("ASU") 2016-02 to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. ASC 842 was subsequently amended by ASU 2018-01, ASU 2018-10 and ASU 2018-11 which provided practical expedients for adoption of ASC 842. Under the new guidance, a lessee will be required to recognize assets and liabilities for capital and operating leases with lease terms of more than 12 months. ASC 842 is effective for interim and annual periods beginning after December 15, 2018. A modified retrospective transition approach is required for adoption, applying the new standard to all leases existing at the date of initial application. An entity may choose to use either the effective date or the beginning of the earliest comparative period presented in the financial statements as its date of initial application.

We adopted ASC 842 as of January 1, 2019, and we have elected to use the effective date as the initial application date. Consequently, financial information will not be updated and the disclosures required under the new standard will not be provided for dates and period prior to January 1, 2019. The new standard provides a number of practical expedients in transition and we elected the package of practical expedients which permits us not to reassess under the new standard our prior conclusions about lease identification, lease classification and treatment of initial direct costs. The adoption of this new standard resulted in the recognition of operating lease right-of-use ("ROU") assets and operating lease liabilities of approximately \$0.56 million and \$0.60 million, respectively, primarily related to our facilities leases. Refer to Note 8 for additional disclosures related to our leases.

**Revenue Recognition**

As of January 1, 2018, we adopted ASC 606, "Revenue from Contracts with Customers" which implements a common revenue standard that clarifies the principles for recognizing revenue. This new revenue recognition model provides a five-step analysis in determining when and how revenue is recognized. The adoption of ASC 606 had no material effect on our consolidated financial statements.

We derive revenue from licensing of our intellectual property, settlements from patent infringement disputes and sales of products. The timing of revenue recognition and the amount of revenue recognized depends upon a variety of factors, including the specific terms of each arrangement and the nature of our deliverables and obligations. In general, we recognize revenue when the performance obligations to our customers have been met. For the sale of products, the performance obligation is generally met at the time product is delivered to the customer. Estimated product returns are deducted from revenue and recorded as a liability. Revenue from the sale of our products includes shipping and handling charged to the customer. Product revenue is recorded net of sales tax collected from customers, discounts, and actual and estimated future returns.

The consideration received from patent license and settlement agreements is allocated to the various elements of the arrangement to the extent the revenue recognition differs between the elements of the arrangement. Elements related to past and future royalties as well as elements related to settlement will be recorded as revenue in our consolidated statements of comprehensive loss when our performance obligations related to each element have been met.

**Shipping and Handling Costs**

Shipping and handling costs related to product sales for the years ended December 31, 2019 and 2018 were approximately \$0.01 million each year. These costs are included in selling, general and administrative expenses in the accompanying consolidated statements of comprehensive loss.



**Advertising Expense**

Advertising costs are expensed as incurred. Advertising expenses of approximately \$0.04 million and \$0.7 million for the years ended December 31, 2019 and 2018, respectively, are included in selling, general, and administrative expenses in the accompanying consolidated statements of comprehensive loss.

**Research and Development Expenses**

Research and development costs are expensed as incurred and include salaries and benefits for employees engaged in research and development activities, costs paid to third party contractors, prototype expenses, an allocated portion of facilities costs, maintenance costs for software development tools, and depreciation.

**Accounting for Share-Based Compensation**

We have various share-based compensation programs which provide for equity awards including stock options, restricted stock units (“RSUs”) and restricted stock awards (“RSAs”). We calculate the fair value of employee share-based equity awards on the date of grant and recognize the calculated fair value as compensation expense over the requisite service periods of the related awards. We estimate the fair value of stock option awards using the Black-Scholes option valuation model. This valuation model requires the use of highly subjective assumptions and estimates including how long employees will retain their stock options before exercising them and the volatility of our common stock price over the expected life of the equity award. Such estimates, and the basis for our conclusions regarding such estimates, are outlined in detail in Note 14. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards. We account for forfeitures of share-based awards as they occur.

As of January 1, 2018, we adopted ASU No. 2017-09, “Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting.” This update provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting under ASC 718. The adoption of this guidance did not have a material effect on our consolidated financial statements.

As of January 1, 2019, we adopted ASU 2018-07, “Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting.” The amendments in this update simplify the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. We did not previously have awards to nonemployees that would require reassessment and therefore the adoption of ASU 2018-07 did not impact our consolidated financial statements.

**Income Taxes**

The provision for income taxes is based on loss before taxes as reported in the accompanying consolidated statements of comprehensive loss. Deferred tax assets and liabilities are recognized for the expected future tax consequences of events that have been included in the financial statements or tax returns. Deferred tax assets and liabilities are determined based on differences between the financial statement carrying amounts and the tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. Valuation allowances are established to reduce deferred tax assets when, based on available objective evidence, it is more likely than not that the benefit of such assets will not be realized. Our deferred tax assets exclude unrecognized tax benefits which do not meet a more-likely-than-not threshold for financial statement recognition for tax positions taken or expected to be taken in a tax return.

As of January 1, 2019, we adopted ASU 2018-02, “Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.”

The amendments in this update allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. We have no stranded tax effects included in our other comprehensive loss and therefore the adoption of ASU 2018-02 did not impact our consolidated financial statements.

### Loss per Common Share

Basic loss per common share is determined based on the weighted-average number of common shares outstanding during each year. Diluted loss per common share is the same as basic loss per common share as all potential common shares are excluded from the calculation, as their effect is anti-dilutive.

The number of shares underlying outstanding options, warrants, unvested RSUs, and convertible notes at December 31, 2019 and 2018 were as follows (in thousands):

	2019	2018
Options outstanding	11,410	1,228
Warrants outstanding	12,150	13,279
Unvested RSUs	-	14
Shares underlying convertible notes	20,846	2,746
	44,406	17,267

These potential shares were excluded from the computation of diluted loss per share as their effect would have been anti-dilutive.

## 2. LIQUIDITY AND GOING CONCERN

The accompanying consolidated financial statements as of and for the year ended December 31, 2019 were prepared assuming we will continue as a going concern, which contemplates that we will continue in operation and will be able to realize our assets and settle our liabilities and commitments in the normal course of business for a period of at least one year from the issuance date of these consolidated financial statements. These consolidated financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that could result should we be unable to continue as a going concern.

We have incurred significant losses from operations and negative cash flows in every year since inception and have utilized the proceeds from the sales of our equity and equity-linked securities and our contingent funding arrangements with third-parties to fund our operations, including our litigation costs. For the year ended December 31, 2019, we incurred a net loss of approximately \$9.5 million and negative cash flows from operations of approximately \$3.4 million. At December 31, 2019, we had a working capital deficit of approximately \$5.5 million and an accumulated deficit of approximately \$401.8 million. These circumstances raise substantial doubt about our ability to continue to operate as a going concern for a period of one year after the issuance date of these consolidated financial statements.

In 2018, we implemented significant cost reduction measures including cessation of our ongoing chip development activities, reductions in executive and key employee base salaries and curtailment of our spending for sales and marketing of our WiFi product line. We reduced costs further in 2019 with the downsizing of our corporate office facility and additional reductions in personnel and other operating costs. Our business plan is currently focused solely on our patent enforcement and technology licensing objectives. The timing and amount of proceeds from our patent enforcement actions are difficult to predict and there can be no assurance we will receive any proceeds from these enforcement actions.

Our ability to meet our liquidity needs for the twelve months after the issuance date of these financial statements is dependent upon one or more of (i) our ability to successfully negotiate licensing agreements and/or settlements relating to the use of our technologies by others in excess of our contingent payment obligations and (ii) our ability to raise additional capital from the sale of debt or equity securities or other financing arrangements. We anticipate that we will continue to invest in patent protection and licensing and enforcement of our wireless technologies. We expect that revenue generated from patent enforcement actions, and technology licenses over the twelve months after the issuance date of these financial statements, if any, after deduction of payment obligations to our third-party litigation funder and legal counsel, may not be sufficient to cover our operating expenses. In the event we do not generate revenues, or other patent-asset proceeds, sufficient to cover our operational costs and contingent repayment obligation, we will be required to raise additional working capital through the sale of equity securities or other financing arrangements.

During the first quarter of 2020, we received aggregate proceeds from the sale of debt and equity securities of approximately \$1.6 million, proceeds from the exercise of outstanding warrants of approximately \$0.5 million and advances from a potential litigation funding party of approximately \$0.6 million. In addition, we repaid approximately \$0.7 million in short-term debt and other accrued expenses through the use of shares of our common stock. Despite these funding efforts, our resources are not sufficient to meet our short-term liquidity needs and we will be required to seek additional capital.

The long-term continuation of our business plan is dependent upon our ability to secure sufficient financing to support our business, and our ability to generate revenues and/or patent-related proceeds sufficient to offset expenses and meet our contingent payment obligation and other long-term debt repayment obligations. Failure to generate sufficient revenues, raise additional capital through debt or equity financings, and/or reduce operating costs could have a material adverse effect on our ability to meet our short and long-term liquidity needs and achieve our intended long-term business objectives.

### 3. INVENTORIES

Inventories consisted of the following at December 31, 2019 and 2018 (in thousands):

	2019	2018
Raw materials	\$ -	\$ 139
Work-in-process	-	-
Finished goods	550	941
	550	1,080
Inventory reserves	(550)	(982)
	-	98

During the years ended December 31, 2019 and 2018, we recognized impairment charges to reduce our excess and obsolete inventories to their net realizable values. The following table provides a reconciliation of our inventory reserves for the years ended December 31, 2019 and 2018, respectively (in thousands):

	2019	2018
Inventory reserves at beginning of year	\$ 982	\$ -
Impairment charges	6	1,134
Write down of impaired inventories	(438)	(152)
Inventory reserves at end of year	<u>\$ 550</u>	<u>\$ 982</u>

#### 4. PREPAID EXPENSES

Prepaid expenses consisted of the following at December 31, 2019 and 2018 (in thousands):

	2019	2018
Prepaid services	\$ 221	\$ 252
Prepaid bonds for German statutory costs	188	199
Prepaid insurance	62	19
Prepaid licenses, software tools and support	17	51
Other prepaid expenses	17	17
	<u>\$ 505</u>	<u>\$ 538</u>

In 2018, we recorded impairment charges of approximately \$0.4 million related to prepaid licenses and production tooling as a result of the restructuring of our operations. These charges are included in "Restructuring expenses" in the accompanying statements of comprehensive loss (see Note 15).

#### 5. PROPERTY AND EQUIPMENT, NET

Property and equipment, at cost, consisted of the following at December 31, 2019 and 2018 (in thousands):

	2019	2018
Equipment and software, including equipment purchased under capital leases of \$6 and \$17 at December 31, 2019 and 2018, respectively	\$ 260	\$ 1,555
Leasehold improvements	33	786
Furniture and fixtures	43	182
	336	2,523
Less accumulated depreciation, including accumulated depreciation for equipment purchased under capital leases of \$3 and \$13 at December 31, 2019 and 2018, respectively	(266)	(2,394)
	<u>\$ 70</u>	<u>\$ 129</u>

Depreciation expense related to property and equipment was approximately \$0.04 million and \$0.13 million in 2019 and 2018, respectively. Depreciation expense includes depreciation related to finance leases of approximately \$0.001 million and \$0.002 million for the periods ended December 31, 2019 and 2018, respectively. Our finance leases have original terms of one to three years. The principal payments

for these finance leases are reflected as cash outflows from financing activities in the accompanying consolidated statements of cash flows. Future minimum lease payments under our capital leases that have initial terms in excess of one year are included in "Leases" in Note 8.

In connection with the relocation of our corporate headquarters in July 2019, we disposed of a number of assets that were no longer in use. For each of the years ended December 31, 2019 and 2018, we recorded a loss on disposal of fixed assets of approximately \$0.01 million.

In connection with the closure of our Lake Mary facility in 2018, we reclassified equipment with a net book value of approximately \$0.07 million to assets held for sale. We contracted with a third party for the consignment sale of these assets and completed sales for several assets in 2018 and 2019. For the year ended December 31, 2019, we recognized a net loss of approximately \$0.04 million on the sale and/or impairment of assets held for sale. For the year ended December 31, 2018, we recognized a gain of approximately \$0.01 million on assets held for sale. The gains and losses on the sale or impairment of held for sale assets is included in selling, general and administrative expenses in the accompanying statements of comprehensive loss.

## 6. INTANGIBLE ASSETS

Intangible assets consisted of the following at December 31, 2019 and 2018 (in thousands):

	2019	2018
Patents and copyrights	\$ 16,612	\$ 18,350
Less accumulated amortization	(13,734)	(14,448)
	<u>\$ 2,878</u>	<u>\$ 3,902</u>

Amortization expense for each of the years ended December 31, 2019 and 2018 was approximately \$0.6 million and \$1.1 million, respectively. For the years ended December 31, 2019 and 2018, we recorded losses on the disposal of intangible assets of approximately \$0.4 million and \$0.1 million, respectively.

Future estimated amortization expense for intangible assets that have remaining unamortized amounts as of December 31, 2019 is as follows (in thousands):

2020	\$ 473
2021	416
2022	373
2023	329
2024	303
2025 and thereafter	984
Total	<u>\$ 2,878</u>

## 7. ACCRUED LIABILITIES

Other accrued expenses consisted of the following at December 31, 2019 and 2018 (in thousands):

	2019	2018
Advances	\$ 500	\$ -
Board compensation	413	413
Other accrued expenses	168	150
	<u>\$ 1,081</u>	<u>\$ 563</u>

Advances are amounts received from litigation counsel as advanced reimbursement of out-of-pocket expenses expected to be incurred by us. Board compensation of \$0.4 million at December 31, 2019 and 2018 represents accrued and unpaid board and committee fees from prior periods. In the first quarter of 2020, current and prior board members agreed to waive unpaid cash fees in exchange for share-based compensation awards with an aggregate grant-date fair value of approximately \$0.1 million (see Note 18).

## 8. LEASES

We lease our office and other facilities and certain office equipment under long-term, non-cancelable operating and finance leases. Many of our leases include rental escalation clauses, renewal options and/or termination options that are factored into our determination of lease payments when it is reasonably certain that the option will be exercised. For leases with terms greater than 12 months, we record the related asset and obligation at the present value of lease payments over the term. We do not recognize ROU assets and lease liabilities for leases with terms at inception of twelve months or less.

At inception, we determine if an arrangement contains a lease and whether that lease meets the classification criteria of a finance or operating lease. Some of our lease arrangements contain lease components (e.g. minimum rent payments) and non-lease components (e.g. services). For certain equipment leases, we account for lease and non-lease components separately based on a relative fair market value basis. For all other leases, we account for the lease and non-lease components (e.g. common area maintenance) on a combined basis.

Following the adoption of ASC 842 as of January 1, 2019 (see Note 1), operating leases are included in operating lease right-of-use (ROU) assets and operating lease liabilities on the consolidated balance sheets. Operating lease ROU assets and liabilities are recognized at commencement date based on the present value of lease payments over the lease term using the implicit interest rate, when readily available, or our incremental borrowing rate for collateralized debt based on information available at the lease commencement date. Lease expense for operating leases is generally recognized on a straight-line basis over the lease term and is included in operating expenses on the consolidated statement of comprehensive loss. For the year ended December 31, 2019, we recognized operating lease costs of approximately \$0.4 million.

Finance leases are included in property and equipment and other accrued expenses on the consolidated balance sheets. Finance leases are recorded as an asset and an obligation at an amount equal to the present value of the minimum lease payments during the lease term. Amortization expense and interest expense associated with finance leases are included in selling, general, and administrative expense and interest expense, respectively, on the consolidated statements of comprehensive loss. Finance leases are not material to our consolidated financial statements as of or for the year ended December 31, 2019.

No new finance or operating leases commenced during the year ended December 31, 2019.

### Supplemental Cash Flow Information

The following table summarizes the supplemental cash flow information related to leases, including the ROU assets recognized upon adoption of the new lease standard (in thousands):

	Year Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities:	
Operating cash flows from operating leases	\$ 314
Operating cash flows from finance leases	-
Financing cash flows from finance leases	1
Non-cash activity	
Right-of-use assets obtained in exchange for operating lease liabilities	563
Assets obtained in exchange for finance lease liabilities	-

### Other Information

The table below summarizes other supplemental information related to leases:

	December 31, 2019
Weighted-average remaining lease term (in years):	
Operating leases	2.7
Finance leases	0.3
Weighted average discount rate	
Operating leases <sup>(1)</sup>	12.0%
Finance leases	8.7%

<sup>(1)</sup> Upon adoption of the new lease standard, discount rates used for existing leases were established at January 1, 2019.

## Undiscounted Cash Flows

The future maturities of lease liabilities consist of the following as of December 31, 2019 (in thousands):

	Operating Leases	Finance Leases
2020	\$ 295	\$ 1
2021	176	-
2022	166	-
2023	4	-
Thereafter	-	-
Total undiscounted lease payments	641	1
Less: imputed interest	(86)	-
Present value of lease liabilities	555	1
Less: current obligations under leases	(250)	(1)
Long-term lease obligations	\$ 305	\$ -

## Disclosures related to periods prior to adoption of the new lease standard

### Lease Commitments

The following table presents a summary of our facilities under non-cancelable lease agreements at December 31, 2018:

Description	Lease Start Date	Lease End Date	Renewal options remaining	Straight line monthly rental payment (in thousands)
Corporate office, Jacksonville, Florida	7/15/2018	7/31/2019	none	\$ 31
Wireless design facility, Lake Mary, Florida	7/1/2017	11/30/2022	2 options to extend for 36 months each	\$ 13
Warehouse and production facility, Jacksonville, Florida	7/1/2017	7/31/2020	none	\$ 2

Deferred rent is amortized to rent expense over the respective lease terms. In addition to sales tax payable on base rental amounts, certain leases obligate us to pay pro-rated annual operating expenses for the properties. Rent expense for our facilities for the year ended December 31, 2018, was approximately \$0.5 million.

### Contractual obligations

Future minimum lease payments under all non-cancelable operating leases and capital leases that have initial terms in excess of one year as of December 31, 2018 were as follows (in thousands):

Contractual obligations:	2019	2020	2021 and thereafter	Total
Operating leases	\$ 372	\$ 191	\$ 345	\$ 908
Capital leases	\$ 2	\$ 1	\$ -	\$ 3



Our contractual obligations as of December 31, 2018 for operating leases include approximately \$0.7 million related to our Lake Mary, Florida facility. We ceased use of this facility in 2018 and at December 31, 2018, we have recorded a lease liability of \$0.2 million which reflects the estimated net present value of our Lake Mary lease obligation, net of estimated future sublease rental income (see Note 15).

## 9. LONG-TERM DEBT

### **Notes Payable**

#### *Note Payable to a Related Party*

We have an unsecured promissory note payable of \$0.9 million to Sterne, Kessler, Goldstein, & Fox, PLLC ("SKGF"), a related party (see Note 16), for outstanding unpaid fees for legal services. The SKGF note, as amended in 2018, accrued interest at a rate of 8% per annum and provided for payments of principal and interest of approximately \$48,500 per month commencing October 31, 2018 through March 31, 2020. At December 31, 2018, we were in default on the payment terms of the SKGF note. In March 2019, we amended the note to provide for a waiver of past payment defaults, a decrease in the interest rate from 8% per annum to 4% per annum, an extension of the maturity date from March 2020 to April 2022, and a modification of payment terms. This amendment constituted a troubled debt restructuring and was accounted for on a prospective basis from the date of the amendment. As of June 29, 2019, we amended the note to provide for a postponement of past payment defaults and future payments until October 2019. In October 2019, we further amended the note to provide a continued waiver of any payment defaults and to modify the payment schedule such that repayments of principal and interest commence January 31, 2020 at a rate of \$10,000 per month with a final balloon payment due in April 2022. We are currently in compliance with all the terms of the note, as amended. For the years ended December 31, 2019 and 2018, we recognized interest expense of approximately \$0.04 million and \$0.06 million, respectively, related to this note.

#### *Unsecured Short-Term Notes Payable*

In May and June 2019, we entered into short-term promissory notes with accredited investors for aggregate proceeds of approximately \$0.23 million. The notes were unsecured, accrued interest at a rate of 18% per annum and had an original maturity date at the earlier of ninety (90) days following the issuance date or upon our receipt of additional litigation financing. Subsequently, the maturity date for the notes was extended to December 2019 and the interest rate was increased to 20% per annum. In the first quarter of 2020, we issued an aggregate of 1,740,426 shares of our common stock as an in-kind repayment of all outstanding principal and accrued interest on these short-term notes (see Note 18). Interest expense incurred on these short-term notes for the year-ended December 31, 2019, was approximately \$0.03 million.

#### *Secured Note Payable*

We have a note payable to Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. ("Mintz") for outstanding, unpaid attorney's fees and costs associated with our patent enforcement program. The Mintz note is non-interest bearing, except in the event of a default, and is secured by certain of our U.S. and foreign patents. The note, at Mintz's option, accelerates and becomes immediately due and payable in the case of standard events of default and/or in the event of a sale or other transfer of substantially all of our assets or a transfer of more than 50% of our capital stock in one or a series of transactions or through a merger or other similar transaction. In an event of default, the note will accrue interest at a rate of 12% per annum on any outstanding balance until such time that the note is paid in full.

The Mintz note provided for an initial installment of \$0.1 million upon execution and monthly installments of \$0.2 million beginning November 2018. We repaid an aggregate of \$1.2 million and \$0.1 million in 2019 and 2018, respectively, and therefore failed to meet our payment obligations under the Mintz note. Mintz waived past and future payment defaults, an increase in the default interest rate to 12% and acceleration of unpaid principal and interest through November 16, 2019, provided that no other event of default occurred. As of December 31, 2019, we were in payment default under the note, and accordingly, the note balance at December 31, 2019 includes approximately \$0.02 million in default interest. We are in active discussions with Mintz to cure the default and resolve outstanding fees, including approximately \$1.6 million included in accounts payable at December 31, 2019, which are currently in dispute. Currently, Mintz has not requested acceleration of unpaid principal and interest on the note, nor have they waived the outstanding default. In the first quarter of 2020, we paid Mintz an aggregate of approximately \$1.2 million against outstanding amounts owed to them.

At December 31, 2019, the aggregate maturities of our notes payable are as follows (in thousands):

2020	\$	1,533
2021		90
2022		703
Total	\$	2,326

The estimated fair value of our notes payable at December 31, 2019 is approximately \$2.2 million based on a risk-adjusted discount rate.

#### **Convertible Notes**

In 2019 and 2018, we sold five-year convertible promissory notes for aggregate proceeds of approximately \$2.4 million and \$1.3 million, respectively. Our convertible notes represent five-year promissory notes that are convertible, at the holders' option, into shares of our common stock at fixed conversion prices. Interest payments are made on a quarterly basis and are payable, at our option and subject to certain equity conditions, in either cash, shares of our common stock, or a combination thereof. To date, all interest payments on the convertible notes have been made in shares of our common stock. We have recognized the convertible notes as debt in our consolidated financial statements. The fixed conversion prices of certain of the notes were below market value of our common stock on the closing date resulting in a beneficial conversion feature with a value of approximately \$0.6 million and \$0.4 million for the years ended December 31, 2019 and 2018, respectively. The beneficial conversion feature is recorded as a discount on the convertible notes with a corresponding increase to additional paid in capital.

Convertible notes payable at December 31, 2019 and 2018, consist of the following (in thousands):

Description	Fixed Conversion Rate	Effective Interest Rate	Maturity Date	December 31,	
				2019	2018
Convertible notes dated September 10, 2018	\$0.40	8.3%	September 7, 2023	\$ 700	\$ 800
Convertible notes dated September 19, 2018	\$0.57	8.3%	September 19, 2023	425	\$ 425
Convertible notes dated February/March 2019	\$0.25	8.0%	February 28, 2024 to March 13, 2024	1,300	-
Convertible notes dated June/July 2019	\$0.10	8.0%	June 7, 2024 to July 15, 2024	390	-
Convertible notes dated July 18, 2019	\$0.08	46.1%	July 18, 2024	700	-
Convertible notes dated September 13, 2019	\$0.10	25.9%	September 13, 2024	50	-
<b>Total principal balance</b>				<b>3,565</b>	<b>1,225</b>
Less unamortized discount				832	388
				<b>\$ 2,733</b>	<b>\$ 837</b>

The July 18, 2019, notes bear interest at a stated rate of 7.5% per annum, while all other notes bear interest at a stated rate of 8% per annum. Interest is payable quarterly and we may elect to pay interest in either cash, shares of our common stock, or a combination thereof, subject to certain equity conditions. For the years ended December 31, 2019 and 2018, we recognized interest expense of approximately \$0.32 million and \$0.05 million, respectively, including approximately \$0.1 million and \$0.02 million, respectively, related to amortization of the discount and \$0.22 million and \$0.03 million, respectively, related to the contractual interest which we elected to pay in shares of our common stock. The unamortized discount on the convertible notes will be amortized over a remaining period of approximately 4.15 years.

The shares underlying the 2018 convertible notes, as well as shares reserved for future in-kind interest payments on the notes, were registered on a registration statement that was declared effective on November 13, 2018 (File No. 333-228184). The shares underlying the February and March 2019 convertible notes, as well as shares reserved for future in-kind interest payments on the notes, were registered on a registration statement that was declared effective on April 19, 2019 (File No. 333-230888). The shares underlying the June and July 2019 convertible notes, as well as shares reserved for future in-kind interest payments on the notes, were registered on a registration statement that was declared effective on September 11, 2019 (File No. 333-233390).

At the holders' option, the convertible notes outstanding at December 31, 2019 could be converted into an aggregate of approximately 20.8 million shares of our common stock based on the fixed conversion prices. An aggregate of \$0.1 million in outstanding principal was converted by the holders into 0.25 million shares of our common stock at a fixed conversion price of \$0.40 for each of the years ended December 31, 2019 and 2018.

With the exception of the July 2019 notes, we have the option to prepay the notes any time following the one-year anniversary of the issuance of the notes, subject to a premium on the outstanding principal prepayment amount of 25% prior to the two-year anniversary of the note issuance date, 20% prior to the three-year anniversary of the note issuance date, 15% prior to the four-year anniversary of the note

issuance date, or 10% thereafter. The notes provide for events of default that include failure to pay principal or interest when due, breach of any of the representations, warranties, covenants or agreements made by us, events of liquidation or bankruptcy, and a change in control. In the event of default, the interest rate increases to 12% per annum and the outstanding principal balance of the notes plus all accrued interest due may be declared immediately payable by the holders of a majority of the then outstanding principal balance of the notes.

### Secured Contingent Payment Obligation

The following table provides a reconciliation of our secured contingent payment obligation measured at estimated fair market value for the year ended December 31, 2019 and 2018, respectively (in thousands).

	2019	2018
Secured contingent payment obligation, beginning of year	\$ 25,557	\$ 15,896
Proceeds from contingent payment obligation	-	4,000
Change in fair value	1,094	5,661
Secured contingent payment obligation, end of year	\$ 26,651	\$ 25,557

Our secured contingent payment obligation represents the estimated fair value of our repayment obligation to Brickell Key Investments, LP ("Brickell") under a February 2016 funding agreement, as amended from time to time (the "CPIA"). To date, we have received aggregate proceeds of \$18 million, including \$4.0 million received in 2018, in exchange for Brickell's right to reimbursement and compensation from gross proceeds resulting from patent enforcement and other patent monetization actions. No additional proceeds were received from Brickell in 2019. To date, we have repaid an aggregate of \$3.3 million under the CPIA from patent license and settlement proceeds.

In connection with additional proceeds received in December 2018, we issued Brickell a warrant to purchase up to 5.0 million shares of our common stock at an exercise price of \$0.16 per share (see Note 13). As the estimated fair value of the payment obligation to Brickell resulting from this additional funding exceeded the \$2.5 million in proceeds received, no value was assigned to the warrants. The excess of fair value over the proceeds received of approximately \$0.8 million was included in the change in fair value of our contingent payment obligation in the accompanying consolidated statement of comprehensive loss for the year ended December 31, 2018.

Brickell is entitled to priority payment of 55% to 100% of proceeds received from all patent-related actions until such time that Brickell has been repaid in full. After repayment of the funded amount, Brickell is entitled to a portion of remaining proceeds up to a specified minimum return which is determined as a percentage of the funded amount and varies based on the timing of repayment. In addition, Brickell is entitled to a pro rata portion of proceeds from specified legal actions to the extent aggregate proceeds from those actions exceed the specified minimum return.

Brickell holds a senior security interest in the majority of our assets until such time as the specified minimum return is paid, in which case, the security interest will be released except with respect to the patents and proceeds related to specific legal actions. The security interest is enforceable by Brickell in the event that we are in default under the agreement which would occur if (i) we fail, after notice, to pay proceeds to Brickell, (ii) we become insolvent or insolvency proceedings are commenced (and not subsequently discharged) with respect to us, (iii) our creditors commence actions against us (which are not subsequently discharged) that affect our material assets, (iv) we, without Brickell's consent, incur indebtedness other than immaterial ordinary course indebtedness, or (v) there is an uncured non-

compliance of our obligations or misrepresentations under the agreement. As of December 31, 2019, we are in compliance with our obligations under this agreement.

In addition, in the event of a change in control of the Company, Brickell has the right to be paid its return as defined under the CPIA based on the transaction price for the change in control event.

We have elected to measure our secured contingent payment obligation at fair value based on probability-weighted estimated cash outflows, discounted back to present value using a discount rate determined in accordance with accepted valuation methods (see Note 10). The secured contingent payment obligation is remeasured to fair value at each reporting period with changes recorded in the consolidated statements of comprehensive loss until the contingency is resolved.

#### **Other Liabilities**

Other liabilities include \$0.4 million received from a third-party litigation funder as an advance against a funding transaction that was under negotiation. Upon the consummation of a financing transaction with the third-party, the upfront payment would be credited against the financing which is expected to be accounted for as a contingent payment obligation at fair value. If we fail to consummate a funding transaction, we may be obligated to pay, from future patent-related proceeds, an aggregate termination payment equal to five times the upfront payment received. At December 31, 2019, we believe the carrying value of the liability approximates fair value.

We received an additional \$0.6 million in January 2020 from this funder for an aggregate of \$1.0 million in upfront payments. In April 2020, we ceased negotiations with the third-party and, accordingly, we may be obligated to pay a termination fee of up to \$5 million from future patent-related proceeds.

#### **10. FAIR VALUE MEASUREMENTS**

ASC 820, "Fair Value Measurements" establishes a fair value hierarchy that prioritizes the inputs to valuation methods used to measure fair value. The three levels of the fair value hierarchy are as follows:

- Level 1: Quoted prices for identical assets or liabilities in active markets which we can access
- Level 2: Observable inputs other than those described in Level 1
- Level 3: Unobservable inputs

The following table summarizes financial assets and financial liabilities carried at fair value and measured on a recurring basis as of December 31, 2019 and 2018, segregated by classification within the fair value hierarchy (in thousands):

	Total	Fair Value Measurements		
		Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<b>December 31, 2019:</b>				
Liabilities:				
Secured contingent payment obligation	\$ 26,651	\$ -	\$ -	\$ 26,651
<b>December 31, 2018:</b>				
Liabilities:				
Secured contingent payment obligation	25,557	-	-	25,557

For the years ended December 31, 2019 and 2018, respectively, we had no transfers of assets or liabilities between the levels of the hierarchy.

In 2016, we recognized a secured contingent payment obligation upon our receipt of proceeds from Brickell for funding of certain patent-related actions. The fair value of the contingent payment obligation at December 31, 2019 and 2018 was estimated at \$26.7 million and \$25.6 million, respectively. These values were calculated using a probability-weighted income approach based on various cash flow scenarios as to the outcome of patent-related actions both in terms of timing and amount, discounted to present value using a risk-adjusted rate. The contingent payment obligation does not have a fixed duration; however, our cash flow projections assume a duration through 2022. The assumed cash outflows range from \$0 to \$58.8 million and the cash flow scenarios have probabilities of 5% to 25%. We used a risk-adjusted discount rate of approximately 15.6%, based on a two year risk-free rate of approximately 1.6% as adjusted by 8% for credit risk and 6% for litigation inherent risk. Changes in any of these Level 3 inputs could result in a higher or lower fair value measurement. For example, a decrease in the risk-adjusted discount rate from 15.6% to 8% would result in an increase in the fair value of approximately \$3.9 million. Refer to Note 9 for a reconciliation of our secured contingent payment obligation measured at estimated fair value for the years ended December 31, 2019 and 2018.

#### 11. INCOME TAXES AND TAX STATUS

Our net losses before income taxes for the years ended December 31, 2019 and 2018 are from domestic operations as well as losses from our wholly-owned German subsidiary. We elected to treat our German subsidiary as a disregarded entity for purposes of income taxes and accordingly, the losses from our German subsidiary has been included in our operating results.

No current or deferred tax provision or benefit was recorded in 2019 or 2018 as a result of current losses and fully deferred tax valuation allowances for all periods. We have recorded a valuation allowance to state our deferred tax assets at their estimated net realizable value due to the uncertainty related to realization of these assets through future taxable income.

A reconciliation between the provision for income taxes and the expected tax benefit using the federal statutory rate of 21% for each of the years ended December 31, 2019 and 2018, respectively are as follows (in thousands):

	2019	2018
Tax benefit at statutory rate	\$ (1,985)	\$ (4,382)
State tax benefit	(407)	(897)
Increase in valuation allowance	2,341	5,304
Research and development credit	-	(51)
Other	51	26
	<u>\$ -</u>	<u>\$ -</u>

Our deferred tax assets and liabilities relate to the following sources and differences between financial accounting and the tax bases of our assets and liabilities at December 31, 2019 and 2018 (in thousands):

	2019	2018
Gross deferred tax assets:		
Net operating loss carry-forward	\$ 83,865	\$ 84,192
Research and development credit	7,608	7,879
Stock compensation	(28)	1,027
Patents and other	1,479	1,495
Contingent payment obligation	3,119	2,842
Inventories	139	249
Fixed assets	2	25
Accrued liabilities	200	146
Deferred rent and lease liabilities	142	46
Charitable contributions	1	5
Capital loss carry-forward	-	3
Warranty reserve	3	4
	<u>96,530</u>	<u>97,913</u>
Less valuation allowance	(96,320)	(97,816)
	<u>210</u>	<u>97</u>
Gross deferred tax liabilities:		
Convertible debt	(210)	(97)
	<u>(210)</u>	<u>(97)</u>
Net deferred tax asset	<u>\$ -</u>	<u>\$ -</u>

Approximately \$0.2 million, net of tax effect, of unrecognized tax benefit related to the beneficial conversion feature of convertible debt would be recorded as an adjustment to contributed capital rather than a decrease in earnings, if recognized.

At December 31, 2019, we had cumulative net operating loss ("NOL") carry-forwards for income tax purposes of \$335.1 million, of which \$314.8 million is subject to expiration in varying amounts from 2020 to 2037. At December 31, 2019, we also had research and development tax credit carryforwards of \$7.6 million, which expire in varying amounts from 2020 through 2038.

Our ability to benefit from the tax credit carry-forwards could be limited under certain provisions of the Internal Revenue Code if there are ownership changes of more than 50%, as defined by Section 382 of the

Internal Revenue Code of 1986 (“[Section 382](#)”). Under Section 382, an ownership change may limit the amount of NOL, capital loss and R&D credit carry-forwards that can be used annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions increasing the ownership of certain shareholders or public groups in the stock of a corporation by more than 50 percentage points over a three-year period. We conduct a study annually of our ownership changes. Based on the results of our studies, we have determined that we do not have any ownership changes on or prior to December 31, 2019 which would result in limitations of our NOL, capital loss or R&D credit carry-forwards under Section 382.

### Uncertain Tax Positions

We file income tax returns in the U.S. federal jurisdiction, various state jurisdictions, and Germany. We have identified our Federal and Florida tax returns as our only major jurisdictions, as defined. The periods subject to examination for those returns are the 2000 through 2019 tax years. The following table provides a reconciliation of our unrecognized tax benefits due to uncertain tax positions for the years ended December 31, 2019 and 2018, respectively (in thousands):

	2019	2018
Unrecognized tax benefits – beginning of year	\$ 927	\$ 927
Unrecognized tax benefits – end of year	\$ 927	\$ 927

Future changes in the unrecognized tax benefit will have no impact on the effective tax rate so long as we maintain a full valuation allowance.

Our policy is that we recognize interest and penalties accrued on any unrecognized tax benefits as a component of our income tax expense. We do not have any accrued interest or penalties associated with any unrecognized tax benefits. For the years ended December 31, 2019 and 2018, we did not incur any income tax-related interest income, expense or penalties.

## 12. COMMITMENTS AND CONTINGENCIES

### Legal Proceedings

From time to time, we are subject to legal proceedings and claims which arise in the ordinary course of our business. These proceedings include patent enforcement actions initiated by us against others for the infringement of our technologies, as well as proceedings brought by others against us at the Patent Trial and Appeal Board of the U.S. Patent and Trademark Office (“[PTAB](#)”) and in the Federal Patent Court in Germany in an attempt to invalidate certain of our patent claims. We had several patent enforcement actions in Germany, which has a “loser pay” system whereby the non-prevailing party is responsible for statutory attorney fees and costs. To the extent a loss is probable and reasonably estimable as of the balance sheet date, the estimated loss is recorded in the accompanying consolidated statements of comprehensive loss and included in current liabilities under the heading “statutory court costs” in the consolidated balance sheets. As of December 31, 2019 and 2018, we have accrued an aggregate of \$0.37 million and \$0.11 million, respectively in estimated statutory court costs for our cases in Germany.

#### *ParkerVision v. Qualcomm and HTC (Middle District of Florida)*

We have a patent infringement complaint pending in the Middle District of Florida against Qualcomm and Qualcomm Atheros, Inc. (collectively “[Qualcomm](#)”), and HTC (HTC Corporation and HTC America, Inc.) (the “[Qualcomm Action](#)”) seeking unspecified damages and injunctive relief for infringement of certain of our patents. Certain of the defendants have filed counterclaims against us for non-infringement



and invalidity for all patents in the case. The case was filed in May 2014 and stayed in February 2016 pending decisions in other cases, including the appeal of a PTAB proceeding with regard to U.S. patent 6,091,940 (“the ‘940 Patent”) asserted in this case. In September 2018, the Federal Circuit issued its decision with regard to the ‘940 Patent and, in January 2019, the court lifted the stay in this case. In July 2019, the court issued an order that granted our proposed selection of patent claims from four asserted patents, including the ‘940 Patent, and denied Qualcomm’s request to limit the claims and patents. The court also agreed that we may elect to pursue accused products that were at issue at the time the case was stayed, as well as new products that were released by Qualcomm during the pendency of the stay. In September 2019, Qualcomm filed a motion for partial summary judgement in an attempt to exclude certain patents from the case, including the ‘940 Patent. The court denied this motion in January 2020. A claim construction hearing was held in this case in August 2015, prior to the stay, and a second claim construction hearing was held in November 2019. The court has not yet issued its claim construction order. This case is scheduled for trial beginning December 1, 2020. On March 16, 2020, in response to the impact of COVID-19, the parties filed a motion requesting a stay of all deadlines and discovery responses for a period of four weeks, or until April 14, 2020, at which time the situation will be assessed as to whether an additional stay or extension of the case schedule is required. The law firm of McKool Smith is representing us in this case on a contingency fee basis.

*Qualcomm v. ParkerVision – PTAB*

In August 2015, Qualcomm filed an aggregate often petitions for *Inter Partes* Review (“IPR”) with the PTAB seeking to invalidate certain claims related to three of the eleven patents originally asserted in our Qualcomm Action. The PTAB denied institution of three of the petitions, all of which relate to our U.S. patent 7,039,372 (“the ‘372 Patent”). We filed a motion to disclaim the challenged claims of U.S. patent 7,966,012 (“the ‘012 Patent”) and, accordingly, the PTAB entered an adverse judgment against us with respect to the one petition pertaining to the ‘012 Patent. In March 2017, the PTAB issued its decisions on the six outstanding IPRs, all of which relate to the ‘940 Patent. The PTAB ruled in our favor on three of the six petitions, ruled in Qualcomm’s favor on two of the six petitions and issued a split decision on the claims covered in the sixth petition. As a result of the PTAB decisions, certain claims of the ‘940 Patent were found to be un-patentable and certain claims were found not to be un-patentable. In May 2017, we filed a notice of appeal of these decisions with the U.S. Court of Appeals for the Federal Circuit (“CAFC”). Qualcomm also appealed the decisions that were unfavorable to them. On September 13, 2018, the CAFC upheld the PTAB ruling with regard to the ‘940 Patent. As a result of the ruling, we prevailed with regard to the method claims of the ‘940 Patent and Qualcomm prevailed on the apparatus claims. This matter is now closed although the patents at issue in this proceeding are the subject of the Qualcomm Action discussed above.

*ParkerVision v. Apple and Qualcomm (Middle District of Florida)*

In December 2015, we filed a patent infringement complaint in the Middle District of Florida against Apple, LG, Samsung and Qualcomm alleging infringement of four of our patents. In February 2016, the district court proceedings were stayed pending resolution of a corresponding case filed at the International Trade Commission (“ITC”). In July 2016, we entered into a patent license and settlement agreement with Samsung and, as a result, Samsung was dismissed from the district court action. In March 2017, we filed a motion to terminate the ITC proceedings and a corresponding motion to lift the stay in the district court case. This motion was granted in May 2017. In July 2017, we filed a motion to dismiss LG from the district court case (see *ParkerVision v. LG* below). Also in July 2017, Qualcomm filed a motion to change venue to the southern district of California and Apple filed a motion to dismiss for improper venue. In March 2018, the district court ruled against the Qualcomm and Apple motions. The parties also filed a joint motion in March 2018 to eliminate three of the four patents in the case in order to expedite proceedings leaving our U.S. patent 9,118,528 as the only remaining patent in this case. A claim construction hearing was held on August 31, 2018. In July 2019, the court issued its claim construction order in which the court adopted our proposed claim construction for two of the six terms and the “plain

and ordinary meaning” on the remaining terms. In addition, the court denied a motion filed by Apple for summary judgment. Fact discovery has closed in this case and a jury trial is scheduled to begin in August 2020. In March 2020, as a result of the impact of COVID-19, the parties filed a motion requesting an extension of certain deadlines in the case. Although currently a request has not been made to change the trial date, the parties plan to file a joint status report in April 2020, at which time the situation will be assessed as to whether additional modifications to the case schedule will be required.

*ParkerVision v. LG (District of New Jersey)*

In July 2017, we filed a patent infringement complaint in the district of New Jersey against LG for the alleged infringement of the same patents previously asserted against LG in the middle district of Florida (see *ParkerVision v. Apple and Qualcomm* above). We elected to dismiss the case in the middle district of Florida and re-file in New Jersey as a result of a Supreme Court ruling regarding proper venue. In March 2018, the court stayed this case pending a final decision in *ParkerVision v. Apple and Qualcomm* in the Middle District of Florida. As part of this stay, LG has agreed to be bound by the final claim construction decision in that case.

*ParkerVision v. LG Electronics (Munich, Germany)*

In June 2016, we filed a complaint in Munich District Court against LG Electronics Deutschland GmbH, a German subsidiary of LG Electronics, Inc. (“LGE”) seeking damages and injunctive relief for the alleged infringement of the German part of our European patent 1 206 831 (“the ‘831 Patent”). A hearing in this case was held in November 2016 at which time the court concluded that certain LGE products using Qualcomm RF circuitry infringe our patent. The final decision in this case was stayed pending resolution of the corresponding nullity, or validity, action filed by Qualcomm in the German Federal Patent Court in Munich (see *Qualcomm v. ParkerVision* below). In October 2018, we received an unfavorable decision in the nullity case for which we filed an appeal. In July 2019, we withdrew our appeal. As a result, our complaint in this case was dismissed, and we are subject to a claim reimbursement of statutory attorney’s fees and costs in this case which we have accrued in the accompanying consolidated financial statements as of December 31, 2019. We have posted a bond to cover this cost which is included in “Prepaid expenses” in the accompanying consolidated balance sheets.

*ParkerVision v. Apple (Munich, Germany) - the Apple I case*

In October 2016, we filed a complaint in Munich District Court against Apple, Inc., Apple Distribution International, and Apple Retail Germany B.V. & Co. KG (collectively “Apple”) seeking damages and injunctive relief for the alleged infringement of the ‘831 Patent (the “Apple I Case”). In February 2017, we amended our complaint adding the infringement of a second German patent and alleging infringement by Apple devices that incorporate an Intel transceiver chip. The Munich Regional Court bifurcated the new claims into a second case (see *ParkerVision v. Apple - the Apple II case* below). A hearing was held in May 2017 in the Apple I Case. In June 2017, the court deferred its ruling pending the decision from the German Federal Patent Court in the validity action filed by Qualcomm (see *Qualcomm v. ParkerVision* below). In October 2018, we received an unfavorable decision in the Qualcomm nullity case for which we filed an appeal which we subsequently withdrew. We opted not to post a bond to cover the potential statutory costs in this case. As a result, in March 2019, the district court declared the complaint withdrawn, a decision we opted not to appeal. In October 2019, we paid statutory attorney’s fees and costs totaling approximately \$0.06 million. This matter is now closed.

*Qualcomm v. ParkerVision – Federal Patent Court in Germany (as appealed to the German Supreme Court)*

In August 2016, Qualcomm filed a validity action in Federal Patent Court in Germany against the ‘831 Patent. The outcome of this validity action impacts our German patent infringement cases against LGE and Apple as discussed above. On October 17, 2018, following an oral hearing, the court ruled that the ‘831 Patent was invalid. Accordingly, we recorded a contingent loss for the estimated statutory fees and

costs in this case as of December 31, 2018. In January 2019, we appealed this decision to the German Supreme Court, but withdrew our appeal in July 2019. As a result, we are subject to statutory fees and costs in this case, which are accrued in the accompanying consolidated financial statements.

*ParkerVision v. Apple (Munich, Germany) – the Apple II case*

The Apple II case sought damages and injunctive relief for the alleged infringement of the German part of our European patent 1 135 853 (“the ‘853 Patent”). A preliminary hearing was held in November 2017. Subsequent to the hearing, the court requested that we supplement certain elements of the infringement claims against Apple devices. In May 2018, we filed our supplemental briefs as requested by the court. In October 2018, we also filed a supplemental expert report. The court appointed an expert in this case and a hearing was held in March 2019 for purposes of providing expert testimony. The court ruled in April 2019 that Apple does not infringe our ‘853 Patent. We did not appeal this decision. As a result, we are subject to a claim for reimbursement of statutory attorney’s fees and costs in this case which we have accrued in the accompanying consolidated financial statements as of December 31, 2019. We have posted a bond to cover this cost which is included in “Prepaid expenses” in the accompanying consolidated balance sheets.

*Intel v. ParkerVision (Federal Patent Court in Germany)*

In August 2017, Intel filed a nullity action in German Federal Patent Court claiming invalidity of the ‘853 Patent that is the subject of the Apple II case. In December 2019, following the adverse decision in the Apple II case, we elected not to proceed with a defense in this case. In December 2019, the Federal Patent Court determined that we will bear the costs for statutory attorney fees and costs in this case as the non-prevailing party. Accordingly, we have accrued a contingent loss of statutory fees and costs in the accompanying consolidated financial statements as of December 31, 2019.

*ParkerVision v. Intel (Western District of Texas)*

In February 2020, we filed a patent infringement complaint in the Western District of Texas against Intel alleging infringement of eight of our patents. The law firm of Goldberg Segalla is representing us in this case on a contingency fee basis.

### 13. STOCK AUTHORIZATION AND ISSUANCE

#### **Preferred Stock**

We have 15 million shares of preferred stock authorized for issuance at the direction of the board of directors (the “Board”). On November 17, 2005, our Board designated 0.1 million shares of authorized preferred stock as the Series E Preferred Stock in conjunction with its adoption of a Shareholder Protection Rights Agreement. As of December 31, 2019, we had no outstanding preferred stock.

#### **Common Stock**

We have 110 million shares of common stock authorized for issuance. Our shareholders approved amendments to our articles of incorporation in June and October 2018, increasing the number of authorized shares of common stock to 40 million and 75 million shares, respectively. In November 2019, our shareholders approved an amendment to our articles of incorporation to increase the number of our authorized shares of common stock from 75 million to 110 million shares.

As of December 31, 2019, we have 23.6 million shares reserved for issuance under outstanding warrants and options, 2.1 million shares reserved for future issuance under equity compensation plans, and 20.8 million and 7.2 million shares reserved for the conversion of principal and the payment of interest in-kind, respectively, under outstanding convertible notes.

## Stock and Warrant Issuances – Equity Based Financings

During the year ended December 31, 2019, the only equity-based financings were the sale of convertible notes (see Note 9). The following table presents a summary of completed equity-based financings for the years ended December 31, 2018 (in thousands, except for per share amounts):

Date	Transaction	# of Common Shares/ Units Sold	Average Price per Share/Unit	# of Warrants Issued (in 000's)	Average Exercise Price per Warrant	Net Proceeds (1)
July 2018 and September 2018	Offerings under PIPE Agreement	-	-	10,000	\$0.38	\$ 1,901
March 2018	Director Stock Purchase	217	\$0.83	-	-	\$ 180
March - May 2018	Offerings under ATM	1,359	\$0.87	-	-	\$ 1,148
January - June 2018	Offerings under Equity Line Agreement	2,940	\$0.70	-	-	\$ 2,047

(1)After deduction of applicable underwriters' discounts, placement agent fees, and other offering costs.

### *Private Placement with Aspire Capital*

In July 2018, we entered into a securities purchase agreement (the "PIPE Agreement") with Aspire Capital Fund LLC ("Aspire Capital") for the sale of up to \$2.0 million of shares of our common stock (or pre-funded warrants) and warrants, in two tranches. Upon the initial closing, we sold to Aspire Capital (i) a pre-funded warrant to purchase up to 2.5 million shares of our common stock with an exercise price of \$0.01 per share ("Pre-Funded Warrant") and (ii) a warrant to purchase up to 2.5 million shares of our common stock with an exercise price of \$0.74 per share (a "Warrant"), for an aggregate purchase price of approximately \$1.0 million. In addition, pursuant to the PIPE Agreement, in September 2018, we sold to Aspire Capital (i) a second Pre-Funded Warrant to purchase up to 2.5 million shares of common stock exercise price of \$0.01 per share and (ii) a second Warrant to purchase an additional 2.5 million shares of common stock at an exercise price of \$0.74 per share, for an additional aggregate purchase price of approximately \$1.0 million. The aggregate proceeds from the sale of Pre-Funded Warrants and Warrants to Aspire Capital are \$1.9 million after deduction of legal fees and registration costs of approximately \$0.05 million. The Warrants and Pre-Funded Warrants expire five years after their respective issuance date and have substantially similar other terms, except (i) for exercise price and (ii) that the Warrants are exercisable on the date that is six months after issuance and the Pre-Funded Warrants are immediately exercisable after issuance. The shares underlying the Pre-Funded Warrants and Warrants are registered under a registration statement that became effective in September 2018 (Registration No.333-226738).

For the year ended December 31, 2019, we issued approximately 2.9 million shares of our common stock upon exercise of 2.9 million Pre-Funded Warrants and received proceeds totaling approximately \$0.03 million. For the year ended December 31, 2018, we issued approximately 2.0 million shares of our common stock upon cashless exercise of 2.1 million Pre-Funded warrants. As of December 31, 2019, Aspire Capital had 5.0 million in outstanding warrants at an exercise price of \$0.74 per share. In February 2020, we entered into a warrant amendment agreement with Aspire Capital whereby we repriced the outstanding warrants and issued new, replacement warrants (see Note 18).

### *Director Stock Purchases*

On March 26, 2018, three of our directors purchased an aggregate of 0.2 million shares of our common stock in an unregistered sale of equity securities at a purchase price of \$0.83 per share. Director purchases of our common stock were made at or above market price at the date of purchase (see Note 16).

#### *At Market Issuance Sales Agreements*

In 2018, we completed the sale of approximately 1.4 million shares of our common stock at an average price of \$0.87 per share under an At Market Issuance Sales Agreement (“ATM”) with FBR Capital Markets & Co. (“FBR”). The shares were registered under a November 2016 shelf registration statement (Registration No. 333-214598). We had no additional amounts available under the shelf registration statement as of December 31, 2018.

#### *Equity Line Agreement*

In October 2017, we entered into a common stock purchase agreement (the “Equity Line Agreement”) with Aspire Capital. Under the Equity Line Agreement, Aspire Capital committed to purchase up to an aggregate of \$20 million in shares of our common stock over the 30-month term of the Equity Line Agreement. In consideration for entering into the Equity Line Agreement, we issued to Aspire Capital approximately 0.3 million shares of our common stock as a commitment fee. We filed a registration statement to register the sale of up to 4 million shares of our common stock by Aspire Capital under the Equity Line Agreement. The registration statement was declared effective November 27, 2017 (File No. 333-221250). As of December 31, 2018, we had issued all of the shares available under the registration statement. The term of the Equity Line Agreement expires in April 2020 and we do not anticipate registering any additional shares for sale under this agreement.

#### **Stock and Warrant Issuances – Payment for Services**

##### *Fisher Consulting*

In June 2019, we issued 625,000 shares of our common stock in exchange for a nonrefundable retainer for services under a consulting agreement with Mark Fisher, valued at approximately \$60,000. The value of the retainer was recognized as consulting expense over the six-month term of the agreement. The shares were registered on a registration statement that was declared effective on September 11, 2019 (File No. 333-233390).

##### *Park Consulting*

In July 2019, we issued a warrant to purchase up to 1,800,000 shares of our common stock with an exercise price of \$0.10 per share in exchange for a nonrefundable retainer for services under a consulting agreement with Park Consultants, LLC, valued at approximately \$180,000. The warrant is exercisable immediately after issuance and expires five years following the issuance date. The value of the warrant was determined using the Black-Scholes method. The value of the warrant is being recognized as consulting expense over the eighteen-month term of the consulting agreement. The shares underlying the warrant were registered on a registration statement that was declared effective on September 11, 2019 (File No. 333-233390).

#### **Warrant Issuance in Connection with Debt Financing**

In December 2018, we issued a warrant for the purchase of up to 5.0 million shares of our common stock at \$0.16 per share to Brickell in connection with an amendment to the CPIA (see Note 9). The CPIA is recorded as a liability at its estimated fair value. At the transaction date, the estimated fair value of the liability to Brickell exceeded the net proceeds received from Brickell. Accordingly, no value was assigned to the warrants issued in connection with the transaction. The warrant is immediately exercisable, expires five years from the date of issuance and includes cashless exercise and registration rights. The shares underlying the warrant were registered on a registration statement that was declared effective on April 19, 2019 (File No. 333-230888).

#### **Common Stock Warrants**

As of December 31, 2019 and 2018, we had outstanding warrants for the purchase of up to 12.2 million shares and 13.3 million shares of our common stock, respectively. The estimated grant date fair value of these warrants of \$1.3 million and \$1.8 million at December 31, 2019 and 2018, respectively, is included

in shareholders' deficit in our consolidated balance sheets. As of December 31, 2019, our outstanding warrants have an average exercise price of \$0.44 per share and a weighted average remaining life of approximately four years.

**Shareholder Protection Rights Agreement**

On November 20, 2015, we amended our Shareholder Protection Rights Agreement ("Rights Agreement") dated November 21, 2005. The amendment extends the expiration date of the Rights Agreement from November 21, 2015 to November 20, 2020 and decreases the exercise price of the rights to \$14.50 after giving effect to the one-for-ten reverse stock split that became effective March 30, 2016.

The Rights Agreement provided for the issuance, on November 29, 2005, as a dividend, rights to acquire fractional shares of Series E Preferred Stock. We did not assign any value to the dividend as the value of these rights is not believed to be objectively determinable. The principal objective of the Rights Agreement is to cause someone interested in acquiring us to negotiate with our Board rather than launch an unsolicited or hostile bid. The Rights Agreement subjects a potential acquirer to substantial voting and economic dilution. Each share of common stock issued by ParkerVision will include an attached right.

The rights initially are not exercisable and trade with the common stock of ParkerVision. In the future, the rights may become exchangeable for shares of Series E Preferred Stock with various provisions that may discourage a takeover bid. Additionally, the rights have what are known as "flip-in" and "flip-over" provisions that could make any acquisition of us more costly to the potential acquirer. The rights may separate from the common stock following the acquisition of 15% or more of the outstanding shares of common stock by an acquiring person. Upon separation, the holder of the rights may exercise their right at an exercise price of \$14.50 per right (the "Exercise Price"), subject to adjustment and payable in cash. Upon payment of the Exercise Price, the holder of the right will receive from us that number of shares of common stock having an aggregate market price equal to twice the Exercise Price, as adjusted. The Rights Agreement also has a flip over provision allowing the holder to purchase that number of shares of common/voting equity of a successor entity, if we are not the surviving corporation in a business combination, at an aggregate market price equal to twice the Exercise Price. We have the right to substitute for any of our shares of common stock that we are obligated to issue, shares of Series E Preferred Stock at a ratio of one ten-thousandth of a share of Series E Preferred Stock for each share of common stock. The Series E Preferred Stock, if and when issued, will have quarterly cumulative dividend rights payable when and as declared by the Board, liquidation, dissolution and winding up preferences, voting rights and will rank junior to other securities of ParkerVision unless otherwise determined by the Board. The rights may be redeemed upon approval of the Board at a redemption price of \$0.01. As of December 31, 2019, there are no Series E preferred shares outstanding.

**14. SHARE-BASED COMPENSATION**

The following table presents share-based compensation expense included in our consolidated statements of comprehensive loss for the years ended December 31, 2019 and 2018, respectively (in thousands):

	2019	2018
Research and development expense	\$ 5	\$ 169
Selling, general, and administrative expense	584	831
Restructuring expense	-	50
Total share-based compensation expense	<u>\$ 589</u>	<u>\$ 1,050</u>

We did not capitalize any expense related to share-based payments. As of December 31, 2019, there was \$1.1 million of total unrecognized compensation cost related to all non-vested share-based compensation awards. That cost is expected to be recognized over a weighted-average period of approximately 1.4 years.

## **Stock Incentive Plans**

### *2019 Long-Term Incentive Equity Plan*

We adopted a long-term incentive equity plan in August 2019 that provides for the grant of stock-based awards to employees, officers, directors and consultants, not to exceed 12.0 million shares of common stock (the "2019 Plan"). The 2019 Plan provides for benefits in the form of nonqualified stock options, stock appreciation rights, restricted stock awards, and other stock based awards. Forfeited and expired options under the 2019 Plan become available for reissuance. The plan provides that non-employee directors may not be granted awards that exceed the lesser of 1.0 million shares or \$175,000 in value, calculated based on grant-date fair value.

On August 7, 2019, our Board approved the grant of nonqualified stock options for the purchase of an aggregate of 10,550,000 shares of our common stock with an exercise price of \$0.17 per share, vesting in 8 equal quarterly increments commencing September 1, 2019. The option grants were made to executive officers, key employees and non-employee directors and have an aggregate grant date fair value of approximately \$1.5 million. At December 31, 2019, 1,450,000 shares of common stock were available for future grants under the 2019 Plan.

### *2011 Long-Term Incentive Equity Plan*

We adopted a long-term incentive equity plan in September 2011 that, as amended in 2014, 2016 and 2017, provides for the grant of stock-based awards to employees, officers, directors and consultants, not to exceed 3.0 million shares of common stock (the "2011 Plan"). The 2011 Plan provides for benefits in the form of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock awards, and other stock based awards. Forfeited and expired options under the 2011 Plan become available for reissuance. The plan provides that no participant may be granted awards in excess of 150,000 shares in any calendar year. At December 31, 2019, 588,127 shares of common stock were available for future grants under the 2011 Plan.

### *2008 Equity Incentive Plan*

We adopted an equity incentive plan in August 2008 (the "2008 Plan"). The 2008 Plan provides for the grant of stock-based awards to employees (excluding named executives), directors and consultants, not to exceed 50,000 shares of common stock. The 2008 Plan provides for benefits in the form of incentive stock options, nonqualified stock options, stock appreciation rights, restricted stock awards, and other stock based awards. Forfeited and expired options under the 2008 Plan become available for reissuance. The plan provides that no participant may be granted awards in excess of 5,000 shares in any calendar year. At December 31, 2019, 20,473 shares of common stock were available for future grants under the 2008 Plan.

### *2000 Performance Equity Plan*

We adopted a performance equity plan in July 2000 (the "2000 Plan"). The 2000 Plan provided for the grant of options and other stock awards to employees, directors and consultants, not to exceed 500,000 shares of common stock. The 2000 Plan provided for benefits in the form of incentive and nonqualified stock options, stock appreciation rights, restricted stock awards, stock bonuses and various stock benefits or cash. No additional awards may be granted under this plan.

### Restricted Stock Awards

RSAs are issued as executive and employee incentive compensation and as payment for services to others. The value of the award is based on the closing price of our common stock on the date of grant. RSAs are generally immediately vested.

### Restricted Stock Units

RSUs are issued as incentive compensation to executives, employees, and non-employee directors. Each RSU represents a right to one share of our common stock, upon vesting. The RSUs are not entitled to voting rights or dividends, if any, until vested. RSUs generally vest over a one to three year period for employee awards and a one year period for non-employee director awards. The fair value of RSUs is generally based on the closing price of our common stock on the date of grant and is amortized to share-based compensation expense over the estimated life of the award, generally the vesting period.

#### *RSAs and RSUs*

The following table presents a summary of RSA and RSU activity under the 2000, 2008, 2011, and 2019 Plans (collectively, the "Stock Plans") as of December 31, 2019 (shares in thousands):

	Non-vested Shares	
	Shares	Weighted-Average Grant Date Fair Value
Non-vested at beginning of year	14	\$ 1.98
Granted	-	-
Vested	(11)	1.98
Forfeited	(3)	1.98
Non-vested at end of year	-	\$ -

The total fair value of RSAs and RSUs vested under the Stock Plans for the year ended December 31, 2019 was \$2,000.

### Stock Options

Stock options are issued as incentive compensation to executives, employees and non-employee directors. Stock options are generally granted with exercise prices at or above fair market value of the underlying shares at the date of grant. The fair value of options granted is estimated using the Black-Scholes option pricing model. Generally, fair value is determined as of the grant date. Options for employees, including executives and non-employee directors, are generally granted under the Stock Plans.



The following table presents a summary of option activity under the Stock Plans for the year ended December 31, 2019 (shares in thousands):

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term	Aggregate Intrinsic Value (\$)
Outstanding at beginning of year	1,228	\$ 7.09		
Granted	10,550	0.17		
Exercised	-	-		
Forfeited	(64)	0.63		
Expired	(304)	22.18		
Outstanding at end of year	11,410	0.33	4.60 years	\$ -
Vested at end of year	3,435	\$ 0.68	4.67 years	\$ -

The weighted average per share fair value of option shares granted during the years ended December 31, 2019 and 2018 was \$0.14 and \$0.46, respectively. The total fair value of option shares vested was \$0.5 million for each of the years ended December 31, 2019 and 2018.

The fair value of option grants under the Stock Plans for the years ended December 31, 2019 and 2018, respectively, was estimated using the Black-Scholes option-pricing model with the following assumptions:

	Year ended December 31,	
	2019	2018
Expected option term <sup>1</sup>	5 years	5 to 6 years
Expected volatility factor <sup>2</sup>	119.1%	68.8% to 93.6%
Risk-free interest rate <sup>3</sup>	1.6%	2.6% to 3.0%
Expected annual dividend yield	0%	0%

<sup>1</sup> The expected term was generally determined based on historical activity for grants with similar terms and for similar groups of employees and represents the period of time that options are expected to be outstanding. For employee options, groups of employees with similar historical exercise behavior are considered separately for valuation purposes.

<sup>2</sup> The stock volatility for each grant is measured using the weighted average of historical daily price changes of our common stock over the most recent period equal to the expected option life of the grant.

<sup>3</sup> The risk-free interest rate for periods equal to the expected term of the share option is based on the U.S. Treasury yield curve in effect at the measurement date.

*Options by Price Range*

The options outstanding at December 31, 2019 under all plans have exercise price ranges, weighted average contractual lives, and weighted average exercise prices as follows (weighted average lives in years and shares in thousands):

Range of Exercise Prices	Options Outstanding			Options Vested		
	Number Outstanding at December 31, 2019	Wtd. Avg. Exercise Price	Wtd. Avg. Remaining Contractual Life	Number Exercisable at December 31, 2019	Wtd. Avg. Exercise Price	Wtd. Avg. Remaining Contractual Life
\$0.171 - \$0.60	10,988	\$ 0.19	4.62	3,013	\$ 0.22	4.75
\$1.98 - \$13.80	411	2.81	4.24	411	2.81	4.24
\$38.80 - \$45.10	11	43.72	0.83	11	43.72	0.83
	<u>11,410</u>	<u>\$ 0.33</u>	<u>4.60</u>	<u>3,435</u>	<u>\$ 0.68</u>	<u>4.67</u>

Upon exercise of options under all plans, we issue new shares of our common stock. For shares issued upon exercise of equity awards granted under the Stock Plans, the shares of common stock are registered. For shares issued upon exercise of non-plan awards, the shares are not registered unless they have been subsequently registered by us on a registration statement. We had no option exercises for the years ended December 31, 2019 or 2018.

15. RESTRUCTURING CHARGES

In August 2018, as a result of our limited capital resources, our Board approved plans to reduce our ongoing operating expenses, including a reduction in workforce of approximately 30 employees and closure of our engineering design facility in Lake Mary, Florida. As a result of the cost reduction measures, we ceased any ongoing integrated circuit design activities and significantly reduced our sales and marketing expenditures with respect to our Milo products. Expenses related to our restructuring are included in operating expenses in our consolidated statements of comprehensive loss under the heading "Restructuring charges."

Restructuring charges for the year ended December 31, 2018 include the following (in thousands):

	2018
One-time termination benefits	\$ 135
Lease expense	163
Asset impairment charges	375
Other	17
	<u>\$ 690</u>

## Termination Benefits

Accrued one-time termination benefits consist of the following (in thousands):

	2018
Accrued termination benefits, beginning of period	\$ -
Termination benefits recognized	135
Termination benefits settled	(115)
Accrued termination benefits, end of period	\$ 20

## Lease Payable

In connection with the cease-use date of our Lake Mary, Florida facility, we recorded a lease payable for the estimated fair value of remaining lease rental payments, less estimated sublease rentals, net of deferred rent. Our lease payable consists of the following (in thousands):

	2018
Lease payable, beginning of period	\$ -
Present value of future minimum lease payments less estimated future sublease rentals, net of deferred rent of \$62	182
Settlements	(48)
Change in estimate	43
Lease payable, end of period	177
Current portion of lease payable	86
Long-term portion of lease payable	\$ 91

On January 1, 2019, we adopted ASC 842 (refer to Note 8, "Leases") and recognized an operating lease liability of \$0.52 million and a right-of-use asset of \$0.34 million related to our Lake Mary facility.

## 16. RELATED PARTY TRANSACTIONS

We paid approximately \$0.02 million and \$0.03 million in 2019 and 2018, respectively, for patent-related legal services to SKGF, of which Robert Sterne, one of our directors since September 2006, is a partner. In addition, we paid approximately \$0.06 million in 2018 for principal and interest on the SKGF Note (refer to "Note Payable to a Related Party" included Note 9). No payments were made in 2019 on the SKGF Note. The SKGF Note has an outstanding balance, including accrued interest, of approximately \$0.9 million at December 31, 2019.

On September 10, 2018, we sold an aggregate of \$0.4 million in promissory notes, convertible into shares of our common stock at a fixed conversion price of \$0.40 to related parties on the same terms as other convertible notes sold in the same transaction (refer to "Convertible Notes" included in Note 9). Jeffrey Parker, our chief executive officer and chairman of the Board, and Paul Rosenbaum and Lewis Titterton, two of our non-employee directors, each purchased a convertible note with a face value of \$0.1 million. In addition, Stacie Wilf, sister to Jeffrey Parker, purchased a convertible note with a face value of \$0.1 million.

On March 26, 2018, three of our directors purchased an aggregate of 0.2 million shares of our common stock in an unregistered sale of equity securities at a purchase price of \$0.83 per share, which represented the closing bid price of our common stock on the purchase date. (see Note 13).

## 17. CONCENTRATIONS OF CREDIT RISK

Financial instruments that potentially subject us to a concentration of credit risk principally consist of cash and cash equivalents. Cash and cash equivalents are primarily held in bank accounts and overnight investments. At times our cash balances on deposit with banks may exceed the balance insured by the F.D.I.C.

## 18. SUBSEQUENT EVENTS

### **Debt and Equity Financings**

In January 2020, we sold an aggregate of \$0.5 million in convertible notes to accredited investors. The notes mature five years from the date of issuance and are convertible, at the holders' option, into shares of our common stock at a fixed conversion price of \$0.13 per share. The notes bear interest at a stated rate of 8% per annum. Interest is payable quarterly, and we may elect, subject to certain equity conditions, to pay interest in cash, shares of our common stock, or a combination thereof. We also entered into a registration rights agreement with the investors pursuant to which we will register the shares underlying the notes. We have committed to file the registration statement by the 120th calendar day following the closing date and to cause the registration statement to become effective by the 180th calendar day following the closing date. The registration rights agreement provides for liquidated damages upon the occurrence of certain events including failure by us to file the registration statement or cause it to become effective by the deadlines set forth above. The amount of the liquidated damages is 1.0% of the aggregate subscription upon the occurrence of the event, and monthly thereafter, up to a maximum of 6%.

Also in January 2020, we received proceeds of approximately \$0.2 million from the sale, on a private placement basis, of an aggregate of 1,169,232 shares of our common stock at a price of \$0.13 per share, and 166,667 shares (together, the "Shares") of our common stock at a price of \$0.15 per share to accredited investors. The subscription agreements for the private placement transactions contain customary representations and warranties of the purchaser. We also entered into a registration rights agreement with the investors pursuant to which we will register the Shares. We have committed to file the registration statement by the 120th calendar day following the closing date and to cause the registration statement to become effective by the 180th calendar day following the closing date. The registration rights agreement provides for liquidated damages upon the occurrence of certain events including failure by us to file the registration statement or cause it to become effective by the deadlines set forth above. The amount of the liquidated damages is 1.0% of the aggregate subscription upon the occurrence of the event, and monthly thereafter, up to a maximum of 6%.

On February 28, 2020, we entered into a warrant amendment agreement (the "Warrant Amendment Agreement") with Aspire Capital, with respect to warrants issued in July and September 2018 that are exercisable, collectively, into 5,000,000 shares of common stock (the "Existing Warrants"). The Warrant Amendment Agreement provides for a reduction in the exercise price for the Existing Warrants from \$0.74 to \$0.35 per share and the issuance of a new warrant for the purchase of 5,000,000 shares of common stock at an exercise price of \$0.74 per share (the "New Warrant"). The Warrant Amendment Agreement also adds a call provision to the Existing Warrants whereby we may, after December 31, 2020, call for cancellation of all or a portion of the Existing Warrants in exchange for consideration of \$0.001 per warrant share. The call provision is subject to certain conditions, including the continued existence of an effective registration statement for the underlying warrant shares and the availability of sufficient authorized shares to allow for the exercise of the Existing Warrant. In connection with the Warrant Amendment Agreement, Aspire Capital exercised a portion of the Existing Warrant for the purchase of approximately 1.5 million shares for net proceeds to us of approximately \$0.5 million. We agreed to file a registration statement to register the shares underlying the New Warrant.

In March 2020, we received aggregate proceeds of \$0.9 million from the sale, on a private placement basis, of an aggregate of 2,571,432 shares of our common stock at a price of \$0.35 per share to accredited investors. The subscription agreements for the private placement transactions contain customary representations and warranties of the purchaser. We also entered into a registration rights agreement with the investors pursuant to which we will register the shares. We have committed to file the registration statement by the 60th calendar day following the closing date and to cause the registration statement to become effective by the 120th calendar day following the closing date. The registration rights agreement provides for liquidated damages upon the occurrence of certain events including failure by us to file the registration statement or cause it to become effective by the deadlines set forth above. The amount of the liquidated damages is 1.0% of the aggregate subscription upon the occurrence of the event, and monthly thereafter, up to a maximum of 6%.

The net proceeds of approximately \$2.1 million from the 2020 debt and equity financings will be used to fund our operations, including litigation costs.

#### **Stock Issuance as Repayment of Outstanding Obligations**

On January 9, 2020, we issued 214,000 unregistered shares of our common stock as an in-kind payment of approximately \$0.028 million in outstanding principal and accrued interest on a June 7, 2019 promissory note with an accredited investor (see “Unsecured Short-term Notes Payable in Note 9).

On January 15, 2020 we issued 500,000 unregistered shares of our common stock as an in-kind payment of approximately \$0.075 million in outstanding amounts payable to Stacie Wilf, a related party.

On February 28, 2020, we issued an aggregate of 1,526,426 unregistered shares of our common stock as an in-kind payment of approximately \$0.24 million in outstanding principal and accrued interest on a May 15, 2019 promissory note with an accredited investor. (see “Unsecured Short-term Notes Payable in Note 9).

#### **Share Based Compensation Arrangements**

On January 14, 2020, the Board granted nonqualified stock options to purchase 218,000 shares at an exercise price of \$0.21 and 171,000 RSAs to former directors in settlement of approximately \$0.3 million in past Board and committee compensation fees. The options and RSAs vest immediately upon grant and the options expire five years from the grant date.

On February 9, 2020, the Board approved equity awards under the Company's 2019 Long Term Incentive Plan (the “2019 Plan”) to executives as consideration for the executives' voluntary reduction in base salaries since July 2018. The grants were made to the following individuals in the following amounts: RSUs for 300,000 shares to Jeffrey Parker, the Company's Chief Executive Officer, RSUs for 150,000 shares to each of David Sorrells and Gregory Rawlins, the Company's Chief Technical Officers, and an option to purchase 150,000 shares at an exercise price of \$0.31 per share to Cynthia Poehlman, the Company's Chief Financial Officer. Fifty percent (50%) of the RSUs vest on May 9, 2020 and the remaining RSUs vest in four equal quarterly installments commencing August 9, 2020. The options vest 50% upon grant with the remainder vesting in four equal quarterly installments commencing May 10, 2020.

In addition, on February 9, 2020, the Board approved equity awards to independent directors under the 2019 Plan for the directors' continued waiver of all cash fees for board or committee service. The grants were made to the following directors in the following amounts: RSUs for 150,000 shares to Frank Newman and an option for the purchase of 150,000 shares at an exercise price of \$0.31 per share to each of Robert Sterne and Paul Rosenbaum. The non-employee director awards all vest 50% upon grant with the remaining portion vesting in four equal quarterly installments commencing May 9, 2020. The Board

also awarded an immediately vested option to purchase 100,000 shares at an exercise price of \$0.31 per share under the Company's 2011 Long Term Incentive Equity Plan to Robert Sterne in exchange for Mr. Sterne's waiver of approximately \$0.1 million in accrued and unpaid fees for board and committee service from 2016 to 2018. Each of the options awarded expire on February 9, 2027.

## **Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.**

On September 10, 2019, we dismissed BDO USA LLP (“BDO”) as our independent registered public accounting firm. The Audit Committee participated in and approved the decision to change our independent registered public accounting firm.

BDO’s audit report on our consolidated financial statements as of and for the year ended December 31, 2018 did not contain an adverse opinion or a disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope, or accounting principles, except that BDO’s report for the year ended December 31, 2018 included an explanatory paragraph regarding our ability to continue as a going concern.

During the year ended December 31, 2018, and through the subsequent interim period through September 10, 2019, there were (i) no disagreements (as described in Item 304(a)(1)(iv) of Regulation S-K and the related instructions) between us and BDO on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedures, which, if not resolved to BDO’s satisfaction, would have caused BDO to make reference thereto in their reports on the consolidated financial statements for such years, and (ii) no “reportable events” within the meaning of Item 304(a)(1)(v) of Regulation S-K.

The Audit Committee appointed MSL, P.A. (“MSL”) as our independent registered public accounting firm for our year ended December 31, 2019. During the fiscal years ended December 31, 2018, and through the subsequent interim period through September 10, 2019, neither we nor anyone acting on our behalf consulted with MSL regarding (i) the application of accounting principles to a specific transaction, either completed or proposed, or the type of audit opinion that might be rendered on our financial statements, and neither a written report or oral advice was provided to us that MSL concluded was an important factor considered by us in reaching a decision as to any accounting, auditing, or financial reporting issue, (ii) any matter that was the subject of a disagreement within the meaning of Item 304(a)(1)(iv) of Regulation S-K, or (iii) any reportable event within the meaning of Item 304(a)(1)(v) of Regulation S-K.

### **Item 9A. Controls and Procedures.**

#### Evaluation of Disclosure Controls and Procedures

Under Rules 13a-15(e) and 15d-15(e) of the Exchange Act, “disclosure controls and procedures” are controls and other procedures that are designed to ensure that the information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified under the rules and forms of the SEC. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that such information is accumulated and communicated to our management, including our chief executive officer and our chief financial officer, as appropriate to allow timely decisions regarding required disclosures. Our management, with the participation of our chief executive officer and our chief financial officer, has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2019. Based on such evaluation, our chief executive officer and our chief financial officer have concluded that as of December 31, 2019, our disclosure controls and procedures were effective.

## Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting and for the assessment of the effectiveness of internal control over financial reporting. Under Rules 13a-15(f) and 15d-15(f) of the Exchange Act, "internal control over financial reporting" is defined as a process designed by, or under the supervision of, our chief executive officer and our chief financial officer, and effected by our board of directors, management and other personnel, to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles.

Internal control over financial reporting includes policies and procedures that pertain to the maintenance of records, that in reasonable detail, accurately and fairly reflect our transactions and our dispositions of assets; provide reasonable assurance that transactions are recorded as necessary to permit preparation of our financial statements in accordance with generally accepted accounting; provide reasonable assurance that receipts and expenditures of the company are made only in accordance with authorizations of management and directors; and provide reasonable assurance regarding the prevention or the timely detection of the unauthorized acquisition, use or disposition of the company's assets that could have a material effect on our financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also 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 and procedures may deteriorate.

Management, with the participation of our chief executive officer and our chief financial officer, conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2019 using the criteria established in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission in 2013. Based on this evaluation, management concluded that our internal control over financial reporting was effective as of December 31, 2019.

### Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the fiscal quarter ended December 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

### **Item 9B. Other Information.**

None.



**Item 10. Directors, Executive Officers and Corporate Governance.**Directors

Our Board is divided into three classes with only one class of directors typically being elected in each year and each class serving a three-year term. In April 2019, Mr. Lewis Titterton resigned from our Board due to family medical issues. Mr. Titterton's resignation was not due to any disagreement with us on any matter relating to our operations, policies, or practices, financial or otherwise. Our current directors, including their backgrounds and qualifications are as follows:

Name	Age	Position with the Company
Frank N. Newman	77	Class II Director, Audit Committee Member
Jeffrey L. Parker	63	Class I Director, Chairman of the Board and Chief Executive Officer
Paul A. Rosenbaum	77	Class III Director, Audit Committee Chair
Robert G. Sterne	68	Class III Director

*Frank N. Newman*

Frank Newman has been a director of ours since December 2016. Mr. Newman has served since 2011 as chairman of Promontory Financial Group China Ltd., an advisory group for financial institutions and corporations in China. From 2005 to 2010, he served as chairman and chief executive officer of Shenzhen Development Bank, a national bank in China. Prior to 2005, Mr. Newman served as chairman, president, and chief executive officer of Bankers Trust and chief financial officer of Bank of America and Wells Fargo Bank. Mr. Newman served as Deputy Secretary of the U.S. Treasury from 1994 to 1995 and as Under Secretary of Domestic Finance from 1993 to 1994. He has authored two books and several articles on economic matters, published in the U.S., mainland China, and Hong Kong. Mr. Newman has served as a director for major public companies in the U.S., United Kingdom, and China, and as a member of the Board of Trustees of Carnegie Hall. He earned his BA, magna cum laude, in economics at Harvard. Mr. Newman brings a substantial knowledge of international banking and business relationships to the Board. His financial background adds an important expertise to the Board with regard to financing future business opportunities.

*Jeffrey L. Parker*

Jeffrey Parker has been the Chairman of our Board and our Chief Executive Officer since our inception in August 1989 and was our president from April 1993 to June 1998. From March 1983 to August 1989, Mr. Parker served as executive vice president for Parker Electronics, Inc., a joint venture partner with Carrier Corporation performing research, development, manufacturing, and sales and marketing for the heating, ventilation and air conditioning industry. Mr. Parker is a named inventor on 31 U.S. patents. Among other qualifications, as Chief Executive Officer, Mr. Parker has relevant insight into our operations, our industry, and related risks as well as experience bringing disruptive technologies to market.

*Paul A. Rosenbaum*

Paul A. Rosenbaum has been a director of ours since December 2016 and a member of our Audit Committee since September 2018. Mr. Rosenbaum has extensive experience as a director and executive officer for both public and private companies in a number of industries. Since 1994, Mr. Rosenbaum has served as chief executive of SWR Corporation, a privately-held corporation that designs, sells, and markets specialty industrial chemicals. In September 2017, Mr. Rosenbaum was appointed to the Board of Commissioners for the Oregon Liquor Control Commission and has served as chairman since March 2018. Since 2009, Mr. Rosenbaum has been a member of the Providence St. Vincent Medical Foundation Council of Trustees, and previously served as president of the Council. In addition, from September 2000 until June 2009, Mr. Rosenbaum served as chairman and chief executive officer of Rentrak Corporation (“Rentrak”), a Nasdaq publicly traded company that provides transactional media measurement and analytical services to the entertainment and media industry. From June 2009 until July 2011, Mr. Rosenbaum served in a non-executive capacity as chairman of Rentrak. From 2007 until 2016, Mr. Rosenbaum served on the Board of Commissioners for the Port of Portland, including as vice chairman from 2012 to 2016. Mr. Rosenbaum was chief partner in the Rosenbaum Law Center from 1978 to 2000 and served in the Michigan Legislature from 1972 to 1978, during which time he chaired the Michigan House Judiciary Committee, was legal counsel to the Speaker of the House of the state of Michigan and wrote and sponsored the Michigan Administrative Procedures Act. Additionally, Mr. Rosenbaum served on the National Conference of Commissioners on Uniform State Laws, as vice chairman of the Criminal Justice and Consumer Affairs Committee of the National Conference of State Legislatures, and on a committee of the Michigan Supreme Court responsible for reviewing local court rules.

Among other qualifications, Mr. Rosenbaum has extensive experience as a director and executive officer of a publicly held corporation and has relevant insights into operations and our litigation strategies.

*Robert G. Sterne*

Robert Sterne has been a director of ours since September 2006 and also served as a director of ours from February 2000 to June 2003. Since 1978, Mr. Sterne has been a partner of the law firm of Sterne, Kessler, Goldstein & Fox PLLC, specializing in patent and other intellectual property law. Mr. Sterne provides legal services to us as one of our patent and intellectual property attorneys. Mr. Sterne has co-authored numerous publications related to patent litigation strategies. He has received multiple awards for contributions to intellectual property law including Law 360’s 2016 Top 25 Icons of IP and the Financial Times 2015 Top 10 Legal Innovators in North America. Among other qualifications, Mr. Sterne has an in-depth knowledge of our intellectual property portfolio and patent strategies and is considered a leader in best practices and board responsibilities concerning intellectual property.

Information About Our Executive Officers

Our current executive officers are as follows:

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Name	Age	Position with the Company
Jeffrey Parker	63	Chairman of the Board and Chief Executive Officer (“CEO”)
Cynthia Poehlman	53	Chief Financial Officer and Corporate Secretary (“CFO”)

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The background for Mr. Jeffrey Parker is included above under the heading “Directors”.

*Cynthia Poehlman*

Cynthia Poehlman has been our chief financial officer since June 2004 and our corporate secretary since August 2007. From March 1994 to June 2004, Ms. Poehlman was our controller and our chief accounting officer. Ms. Poehlman has been a certified public accountant in the state of Florida since 1989.

#### *Former Executive Officers*

Messrs. David Sorrells and Gregory Rawlins both served as our Chief Technology Officers (“CTO”) through 2019. In March 2020, given our reduced scope of operations, in particular our research and development activities, our Board determined to eliminate the Chief Technology Officer role. Both Mr. Sorrells and Mr. Rawlins remain employed by us in technical support roles.

#### Family Relationships

There are no family relationships among our officers or directors.

#### Code of Ethics

The Board has adopted a code of ethics applicable to all of our directors, officers and employees, including our chief executive officer and our chief financial and accounting officer, that is designed to deter wrongdoing and to promote honest and ethical conduct, full, fair, accurate, timely and understandable disclosure in reports that we file or submit to the SEC and in our other public communications, compliance with applicable government laws, rules and regulations, prompt internal reporting of violations of the code to an appropriate person designated in the code and accountability for adherence to the code. A copy of the code of ethics may be found on our website at [www.parkervision.com](http://www.parkervision.com).

#### Shareholder Nominations

There have been no material changes to the procedures by which security holders may recommend nominees to our Board.

#### Audit Committee and Financial Expert

Subsequent to our Board resizing in September 2018, we maintained an audit committee comprised of two independent directors. Messrs. Lewis Titterton and Paul Rosenbaum served as the members of our audit committee with Mr. Titterton serving as audit committee chairman. In April 2019, Mr. Titterton resigned from our Board of Directors due to family medical issues. Since Mr. Titterton’s resignation, Mr. Paul Rosenbaum has served as the chairman of our audit committee, and in April 2020, Mr. Newman stepped into the vacant audit committee position. Our audit committee is governed by a Board-approved charter which, among other things, establishes the audit committee’s membership requirements and its powers and responsibilities. Our Board has determined that Mr. Rosenbaum and Mr. Newman are audit committee financial experts within the meaning of the rules and regulations of the SEC.

## Item 11. Executive Compensation.

### Summary Compensation Table

The following table summarizes the total compensation of each of our “named executive officers” as defined in Item 402(m) of Regulation S-K (the “Executives”) for the fiscal years ended December 31, 2019 and 2018. Given the complexity of disclosure requirements concerning executive compensation, and in particular with respect to the standards of financial accounting and reporting related to equity compensation, there is a difference between the compensation that is reported in this table versus that which is actually paid to and received by the Executives. The amounts in the Summary Compensation Table that reflect the full grant date fair value of an equity award, do not necessarily correspond to the actual value that has been realized or will be realized in the future with respect to these awards.

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Name and Principal Position	Year	Salary (\$)	Bonus (\$)	Stock Awards (\$) <sup>(1)</sup>	Option Awards (\$) <sup>(1)</sup>	All Other (\$)	Total (\$)
Jeffrey Parker, CEO	2019	\$ 260,000	\$ -	\$ -	\$ 845,766	\$ 24,000 <sup>5</sup>	\$ 1,129,766
	2018	297,500	-	-	-	24,000 <sup>5</sup>	321,500
Cynthia Poehlman, CFO	2019	180,000	-	-	140,961	-	320,961
	2018	205,962	-	-	-	-	205,962
David Sorrells, CTO	2019	158,577	-	-	-	-	158,577
	2018	252,303 <sup>2</sup>	2,149	-	-	-	254,452
John Stuckey, CMO <sup>3</sup>	2019	-	-	-	-	-	-
	2018	175,696	-	-	-	7,692 <sup>3</sup>	183,388
Gregory Rawlins, CTO Heathrow	2019	200,000	-	-	105,721	-	305,721
	2018	228,846 <sup>4</sup>	-	-	-	-	228,846

1. The amounts represented in columns (e) and (f) represents the full grant date fair value of equity awards in accordance with ASC 718. Refer to Note 14 to the consolidated financial statements for the year ended December 31, 2019 included in Item 8 for the assumptions made in the valuation of equity awards.
2. Includes \$8,481 which represents the grant-date fair value of restricted stock received by the executive in lieu of salary.
3. Mr. Stuckey’s employment was terminated in August 2018. The amount reported in column (g) represents amounts paid in connection with termination of executive’s employment, including \$7,215 which represents the grant-date fair value of restricted stock received by the executive in lieu of cash.
4. Includes \$7,692 which represents the grant-date fair value of restricted stock received by the executive in lieu of salary.
5. Represents an automobile allowance in the amount of \$24,000.

In August 2018, each of our Executives agreed to a 20% reduction in base salary in connection with our planned restructuring. Mr. Sorrells agreed to an additional reduction in base salary in March 2019. In consideration of our Executive’s voluntary salary reductions, in February 2020, our Board approved equity awards under our 2019 Long Term Incentive Plan including 300,000 RSUs to Mr. Parker, 150,000 RSUs to each of Messrs. Rawlins and Sorrells and 150,000 share options at an exercise price of \$0.31 per share to Ms. Poehlman. Refer to Note 18 to our consolidated financial statements for the year ended December 31, 2019 included in Item 8 for the terms of the equity awards.

We do not have employment agreements with any of our Executives. We have non-compete arrangements in place with all of our employees, including our Executives, that impose post-termination restrictions on (i) employment or consultation with competing companies or customers, (ii) recruiting or hiring employees for a competing company, and (iii) soliciting or accepting business from our customers. We also have a tax-qualified defined contribution 401(k) plan for all of our employees, including our Executives. We did not make any employer contributions to the 401(k) plan in 2019 or 2018.

#### Outstanding Equity Awards at Fiscal Year End

The following table summarizes information concerning the outstanding equity awards, including unexercised options, unvested stock and equity incentive awards, as of December 31, 2019 for each of our Executives:

Name	Option Awards			
	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option Exercise Price (\$)	Option Expiration Date
	(a)	(b)	(c)	(d)
Jeffrey Parker	20,000	-	1.98	8/15/2024
	1,500,000	4,500,000	0.17	8/7/2029
Cynthia Poehlman	20,000	-	1.98	8/15/2024
	250,000	750,000	0.17	8/7/2029
David Sorrells	20,000	-	1.98	8/15/2024
Gregory Rawlins	20,000	-	1.98	8/15/2024
	187,500	562,500	0.17	8/7/2029

#### Director Compensation

Following our Board restructuring in September 2018, the Board eliminated all cash fees for Board and committee service. Our non-employee directors receive equity compensation, generally annually, in the form of nonqualified stock options or RSUs. In 2018, each of our non-employee directors received 125,000 nonqualified share options, vesting over a one-year period, with an exercise price of \$0.60 per share for and a grant-date fair value of approximately \$58,000. In 2019, each of our non-employee directors received 800,000 nonqualified share options, vesting over a two-year period, with an exercise price of \$0.17 per share and a grant-date fair value of approximately \$113,000. Any unvested share-based awards to non-employee directors are forfeited if the director resigns or is removed from the Board for cause.

We reimburse our non-employee directors for their reasonable expenses incurred in attending meetings and we encourage participation in relevant educational programs for which we reimburse all or a portion of the costs incurred for these purposes.

Directors who are also our employees are not compensated for serving on our Board.

The following table summarizes the compensation of our current and former non-employee directors for the year ended December 31, 2019.

Name	Fees Earned or Paid in Cash (\$) <sup>1</sup>	Stock Awards(\$)	Option Awards(\$) <sup>2</sup>	Total (\$)
(a)	(b)	(c)	(d)	(e)
Frank Newman <sup>3</sup>	-	-	\$ 112,769	\$ 112,769
Paul Rosenbaum <sup>3</sup>	-	-	112,769	112,769
Robert Sterne <sup>4</sup>	-	-	112,769	112,769

- Following our Board restructuring in September 2018, the Board eliminated all cash fees for Board and committee service.
- The amounts represented in column (d) represent the full grant date fair value of share-based awards in accordance with ASC 718. Refer to Note 14 of the consolidated financial statements included in Item 8 for the assumptions made in the valuation of stock awards.
- At December 31, 2019, Messrs. Newman and Rosenbaum each have an aggregate of 975,000 nonqualified stock options outstanding, of which 375,000 are exercisable.
- At December 31, 2019, Mr. Sterne has 1,029,046 nonqualified stock options outstanding, of which 429,046 are exercisable.

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

Equity Compensation Plan Information

The following table gives information as of December 31, 2019 about shares of our common stock authorized for issuance under all of our equity compensation plans (in thousands, except for per share amounts):

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
	(a)		(c)
Equity compensation plans approved by security holders <sup>(1)</sup>	860	\$2.23	609
Equity compensation plans not approved by security holders	10,550	0.17	1,450
<b>Total</b>	<b>11,410</b>		<b>2,059</b>

- Includes the 2000 Plan, the 2008 Plan, and the 2011 Plan. The types of awards that may be issued under each of these plans is discussed more fully in Note 14 to our consolidated financial statements included in Item 8.

## Security Ownership of Certain Beneficial Holders

The following table sets forth certain information as of March 23, 2020 with respect to the stock ownership of (i) those persons or groups who beneficially own more than 5% of our common stock, (ii) each of our directors, (iii) each of our executive officers, and (iv) all of our directors and executive officers as a group (based upon information furnished by those persons).

As of March 30, 2020, 43,102,745 shares of our common stock were issued and outstanding.

Name of Beneficial Owner	Amount and Nature of Beneficial Ownership	Percent of Class <sup>1</sup>
<b>EXECUTIVE OFFICERS AND DIRECTORS</b>		
Jeffrey Parker <sup>8</sup>	2,697,270 <sup>2</sup>	5.9%
Cynthia Poehlman <sup>8</sup>	538,943 <sup>3</sup>	1.2%
Frank Newman <sup>8</sup>	621,250 <sup>4</sup>	1.4%
Paul Rosenbaum <sup>8</sup>	1,328,194 <sup>5</sup>	3.0%
Robert Sterne <sup>8</sup>	771,061 <sup>6</sup>	1.8%
All directors, director nominees and executive officers as a group (5 persons)	5,956,718 <sup>7</sup>	12.4%

- 1 Percentage is calculated based on all outstanding shares of common stock plus, for each person or group, any shares of common stock that the person or the group has the right to acquire within 60 days pursuant to options, warrants, conversion privileges or other rights. Unless otherwise indicated, each person or group has sole voting and dispositive power over all such shares of common stock.
- 2 Includes 2,270,000 shares of common stock issuable upon currently exercisable options, 150,000 RSUs that will vest within 60 days, 153,324 shares held by Mr. Parker directly, 117,259 shares held by Jeffrey Parker and Deborah Parker Joint Tenants in Common, over which Mr. Parker has shared voting and dispositive power, and 6,687 shares owned of record by Mr. Parker's child over which he disclaims ownership. Excludes 3,750,000 shares of common stock issuable upon options that may become exercisable in the future and 150,000 shares of common stock underlying unvested RSUs.
- 3 Includes 488,750 shares of common stock issuable upon currently exercisable options and excludes 681,250 shares of common stock issuable upon options that may become exercisable in the future.
- 4 Includes 475,000 shares of common stock issuable upon currently exercisable options and 18,750 RSUs that will vest within 60 days and excludes 500,000 shares of common stock issuable upon options that may become exercisable in the future and 56,250 RSUs that may vest in the future.
- 5 Includes 568,750 shares of common stock issuable upon currently exercisable options and 250,000 shares of common stock issuable upon conversion of convertible notes. Excludes 556,250 shares of common stock issuable upon options that may become exercisable in the future.
- 6 Includes 722,796 shares of common stock issuable upon currently exercisable options and excludes 556,250 shares of common stock issuable upon options that may become exercisable in the future.
- 7 Includes 4,525,296 shares of common stock issuable upon currently exercisable options, 168,750 RSUs that will vest within 60 days, and 250,000 shares of common stock issuable upon conversion of convertible notes held by directors and officers and excludes 6,043,750 shares of common stock issuable upon options that may become exercisable in the future and 206,250 RSUs that may vest in the future (see notes 2, 3, 4, 5, and 6 above).
- 8 The person's address is 9446 Philips Highway, Suite 5A, Jacksonville, Florida 32256.

### **Item 13. Certain Relationships and Related Transactions and Director Independence.**

#### Related Party Transactions

We paid approximately \$22,000 and \$30,000 in 2019 and 2018, respectively for patent-related legal services to SKGF, of which Robert Sterne, is a partner. In addition, we paid approximately \$59,000 in 2018 for principal and interest on an unsecured note payable to SKGF. The note was issued in 2016 to convert outstanding unpaid legal fees to an unsecured promissory note. The note was amended multiple times in 2018 and 2019 to defer principal payments. The note, as amended, allows for interest at 4% per annum, monthly installments of \$10,000 per month beginning January 2020, with a final balloon payment due on April 30, 2022. At December 31, 2019, the outstanding balance of the note, including unpaid interest is \$879,000.

On September 10, 2018, we sold an aggregate of \$400,000 in promissory notes, convertible into shares of our common stock at a fixed conversion price of \$0.40 to related parties on the same terms as other convertible notes sold in the same transaction. Jeffrey Parker, our chief executive officer and chairman of the Board, Paul Rosenbaum and Lewis Titterton, two of our non-employee directors, each purchased a convertible note with a face value of \$100,000. In addition, Stacie Wilf, sister to Jeffrey Parker, purchased a convertible note with a face value of \$100,000.

On March 26, 2018 three of our directors purchased an aggregate of 200,000 shares of our common stock in an unregistered sale of equity securities at a purchase price of \$0.83 per share, which represented the closing bid price of our common stock on the purchase date. In February 2017, one of our directors, Mr. Paul Rosenbaum, purchased 80,510 shares of our common stock in an unregistered sale of equity securities at a purchase price of \$2.11 per share, which represented the closing bid price of our common stock on the purchase date.

#### Director Independence

We follow the rules of Nasdaq in determining if a director is independent. The Board also consults with our counsel to ensure that the Board's determination is consistent with those rules and all relevant securities and other laws and regulations regarding the independence of directors. The Board has affirmatively determined that Messrs. Newman, Rosenbaum, and Sterne are independent directors.

### **Item 14. Principal Accountant Fees and Services.**

The firm of MSL, P.A. acts as our principal accountants. From April 2018 to September 2019, the firm of BDO USA, LLP acted as our principal accountants ("Prior Accountants"). The following is a summary of fees paid to the principal accountants and Prior Accountants for services rendered.

*Audit Fees.* For the year ended December 31, 2019, the aggregate fees billed by our principal accountants for professional services rendered for the audit of our annual financial statements, the review of our financial statements included in our quarterly reports, and services provided in connection with regulatory filings were approximately \$101,200. In addition, for the years ended December 31, 2019 and 2018, the aggregate fees billed by our Prior Accountants for professional services rendered in connection with the audit of our annual financial statements, the review of our financial statements included in our quarterly reports, and services provided in connection with regulatory filings were approximately \$188,700 and \$326,700, respectively.

*Audit Related Fees.* For the years ended December 31, 2019 and 2018, there were no fees billed for professional services by our principal accountants or Prior Accountants for assurance and related services.



*Tax Fees.* For the years ended December 31, 2019 and 2018, there were no fees billed for professional services rendered by our principal accountants for tax compliance, tax advice or tax planning.

*All Other Fees.* For the years ended December 31, 2019 and 2018, there were no fees billed for other professional services by our principal accountants.

All the services discussed above were approved by our audit committee. The audit committee pre-approves the services to be provided by our principal accountants, including the scope of the annual audit and non-audit services to be performed by the principal accountants and the principal accountants' audit and non-audit fees.

**Item 15. Exhibits and Financial Statement Schedules.**

(a) Documents filed as part of this report:

(1) Financial statements:

Consolidated Balance Sheets as of December 31, 2019 and 2018

Consolidated Statements of Comprehensive Loss for the years ended December 31, 2019 and 2018

Consolidated Statements of Shareholders' Deficit for the years ended December 31, 2019 and 2018

Consolidated Statements of Cash Flows for the years ended December 31, 2019 and 2018

Notes to Consolidated Financial Statements for the years ended December 31, 2019 and 2018

(2) Financial statement schedules:

Not applicable.

(3) Exhibits.

Exhibit Number	Description
3.1	<a href="#"><u>Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed March 29, 2016)</u></a>
3.2	<a href="#"><u>Amended and Restated Bylaws (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed August 14, 2007)</u></a>
3.3	<a href="#"><u>Articles of Amendment to Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed August 18, 2016)</u></a>
3.4	<a href="#"><u>Articles of Amendment to Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed July 13, 2017)</u></a>
3.5	<a href="#"><u>Articles of Amendment to the Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.5 of Form S-1 filed August 9, 2018)</u></a>
3.6	<a href="#"><u>Articles of Amendment to the Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed October 30, 2018)</u></a>
3.7	<a href="#"><u>Articles of Amendment to the Amended and Restated Articles of Incorporation (incorporated by reference from Exhibit 3.1 of Current Report on Form 8-K filed November 15, 2019)</u></a>
3.8	<a href="#"><u>Certificate of Designations of the Preferences, Limitations and Relative Rights of Series E Preferred Stock, dated November 21, 2005 (incorporated by reference from Exhibit 4.02 of Current Report on Form 8-K filed November 22, 2005)</u></a>
4.1	<a href="#"><u>Form of common stock certificate (incorporated by reference from Exhibit 4.1 of Annual Report on Form 10-K for the year ended December 31, 2015)</u></a>

- 4.2 [Shareholder Protection Rights Agreement between the Registrant and American Stock Transfer & Trust Company, as Rights Agent \(incorporated by reference from Exhibit 4.01 of Form 8-K filed November 22, 2005\)](#)
- 4.3 [First Amendment to Shareholder Protection Rights Agreement dated as of November 20, 2015 between the Registrant and American Stock Transfer & Trust Company, as Rights Agent \(incorporated by reference from Exhibit 4.1 of Form 8-K filed November 20, 2015\)](#)
- 4.4 [Form of Rights Certificate pursuant to First Amendment to Shareholder Protection Rights Agreement dated November 20, 2015 \(incorporated by reference from Exhibit 4.2 of Form 8-K filed November 20, 2015\)](#)
- 4.5 [Description of Registered Securities](#) \*
- 10.1 [2000 Performance Equity Plan \(incorporated by reference from Exhibit 10.11 of Registration Statement No. 333-43452, filed August 10, 2000\)](#) \*\*
- 10.2 [Form of 2002 Indemnification Agreement for Directors and Officers \(incorporated by reference from Exhibit 10.1 of Quarterly Report on Form 10-Q for the period ended September 30, 2002, filed November 14, 2002\)](#) \*\*
- 10.3 [Standard Form of Employee Option Agreement \(incorporated by reference from Exhibit 4.11 of Annual Report on Form 10-K for the year ended December 31, 2006, filed March 8, 2007\)](#) \*\*
- 10.4 [2008 Equity Incentive Plan \(Non-Named Executives\), as amended \(incorporated by reference from Exhibit 4.1 of Form S-8 filed October 24, 2008\)](#) \*\*
- 10.5 [2011 Long-Term Incentive Equity Plan, as amended and restated \(incorporated by reference from Exhibit 10.1 of Form 8-K filed July 13, 2017\)](#)\*\*
- 10.6 [Claims Proceeds Investment Agreement between Registrant and Brickell Key Investments LP \(incorporated by reference from Exhibit 10.2 of Quarterly Report on Form 10-Q filed May 16, 2016\)](#)
- 10.7 [Warrant Agreement between Registrant and Brickell Key Investments LP \(incorporated by reference from Exhibit 10.3 of Quarterly Report on Form 10-Q filed May 16, 2016\)](#)
- 10.8 [Amendment to Claims Proceeds Investment Agreement between Registrant and Brickell Key Investments LP \(incorporated by reference from Exhibit 10.1 of Quarterly Report on Form 10-Q filed August 15, 2016\)](#)
- 10.9 [Warrant Agreement between Registrant and Brickell Key Investments LP dated May 26, 2016 \(incorporated by reference from Exhibit 10.2 of Quarterly Report on Form 10-Q filed August 15, 2016\)](#)
- 10.10 [Amendment to Claims Proceeds Investment Agreement between Registrant and Brickell Key Investments LP dated December 28, 2017 \(incorporated by reference from Exhibit 10.11 of Annual Report on Form 10-K filed March 29, 2018\)](#)
- 10.11 [Amendment to Claims Proceeds Investment Agreement between Registrant and Brickell Key Investments LP dated April 26, 2018 \(incorporated by reference from Exhibit 10.21 of Registration Statement on Form S-1 filed August 9, 2018\)](#)
- 10.12 [Notice of Exercise of Rights Under Claims Proceeds Investment Agreement between Registrant and Brickell Key Investments LP dated December 20, 2018 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K/A filed December 28, 2018\)](#)
- 10.13 [Warrant Agreement between Registrant and Brickell Key Investments LP \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed December 21, 2018\)](#)
- 10.14 [Settlement and Patent License Agreement between Registrant and Samsung Electronics Co., Ltd. dated July 15, 2016 \(incorporated by reference from Exhibit 10.1 of Quarterly Report on Form 10-Q filed November 14, 2016\)](#)
- 10.15 [At Market Issuance Sales Agreement between Registrant and FBR Capital Markets & Co., dated December 30, 2016 \(incorporated by reference from Exhibit 1.01 of Current Report on Form 8-K filed December 30, 2016\)](#)

- 10.16 [At Market Issuance Sales Agreement between Registrant and FBR Capital Markets & Co., dated August 14, 2017 \(incorporated by reference from Exhibit 1.01 of Current Report on Form 8-K filed August 14, 2017\)](#)
- 10.17 [Subscription Agreement between Registrant and a director dated February 21, 2017 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed February 27, 2017\)](#)
- 10.18 [Common Stock Purchase Agreement, dated October 17, 2017, between Registrant and Aspire Capital Fund, LLC. \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed October 18, 2017\)](#)
- 10.21 [Registration Rights Agreement, dated October 17, 2017, between Registrant and Aspire Capital Fund, LLC. \(incorporated by reference from Exhibit 4.1 of Current Report on Form 8-K filed October 18, 2017\)](#)
- 10.22 [Form of Subscription Agreement between Registrant and directors dated March 26, 2018 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed March 27, 2018\)](#)
- 10.23 [List of Directors for Subscription Agreement dated March 26, 2018 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed March 27, 2018\)](#)
- 10.24 [Securities Purchase Agreement between Registrant and Aspire Capital Fund LLC dated July 26, 2018 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed July 30, 2018\)](#)
- 10.25 [Form of Warrant Agreement between Registrant and Aspire Capital Fund LLC \(incorporated by reference from Exhibit 4.1 of Current Report on Form 8-K filed July 30, 2018\)](#)
- 10.26 [Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated September 10, 2018 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed September 11, 2018\)](#)
- 10.27 [Form of Convertible Promissory Note dated September 10, 2018 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed September 11, 2018\)](#)
- 10.28 [Registration Rights Agreement between Registrant and Holders of Convertible Notes dated September 10, 2018 \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed September 11, 2018\)](#)
- 10.29 [List of Holders of Convertible Notes dated September 10, 2018 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed September 11, 2018\)](#)
- 10.30 [Patent Security Agreement Between Registrant and Mintz Levin Cohn Ferris Glovsky and Popeo, P.C. \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed September 14, 2018\)](#)
- 10.31 [Secured Promissory Note Between Registrant and Mintz Levin Cohn Ferris Glovsky and Popeo, P.C. \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed September 19, 2018\)](#)
- 10.32 [Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated September 18, 2018 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed September 18, 2018\)](#)
- 10.33 [Form of Convertible Promissory Note dated September 18, 2018 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed September 19, 2018\)](#)
- 10.34 [Registration Rights Agreement between Registrant and Holders of Convertible Notes dated September 18, 2018 \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed September 19, 2018\)](#)
- 10.35 [Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated February 25, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed March 4, 2019\)](#)

- 10.36 [Form of Convertible Promissory Note dated February 28, 2019 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed March 4, 2019\)](#)
- 10.37 [Registration Rights Agreement between Registrant and Holders of Convertible Notes \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed March 4, 2019\)](#)
- 10.38 [List of Holders of Convertible Notes dated February 28, 2019 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed March 4, 2019\)](#)
- 10.39 [Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated March 13, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed March 14, 2019\)](#)
- 10.40 [Registration Rights Agreement between Registrant and Holders of Convertible Notes \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed March 14, 2019\)](#)
- 10.41 [Form of Convertible Promissory Note dated March 13, 2019 \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed March 14, 2019\)](#)
- 10.42 [List of Holders of Convertible Notes dated March 13, 2019 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed March 14, 2019\)](#)
- 10.43 [Securities Purchase Agreement between Registrant and Mark Fisher dated June 7, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed June 13, 2019\)](#)
- 10.44 [Secured Note Agreement dated June 7, 2019 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed June 13, 2019\)](#)
- 10.45 [Registration Rights Agreement between Registrant and Holder of Convertible Note \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed June 13, 2019\)](#)
- 10.46 [Security Agreement dated June 7, 2019 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed June 13, 2019\)](#)
- 10.47 [Consulting Agreement dated June 7, 2019 \(incorporated by reference from Exhibit 10.5 of Current Report on Form 8-K filed June 7, 2019\)](#)
- 10.48 [Form of Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated June 19, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed June 25, 2019\)](#)
- 10.49 [Form of Convertible Promissory Note dated June 19, 2019 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 10-K filed June 25, 2019\)](#)
- 10.50 [Form of Registration Rights Agreement between Registrant and Holders of Convertible Notes \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed June 25, 2019\)](#)
- 10.51 [List of Holders of Convertible Notes dated June 19, 2019 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed June 25, 2019\)](#)
- 10.52 [Warrant agreement dated July 22, 2019 \(incorporated by reference from exhibit 4.1 of Current Report on Form 8-K filed July 23, 2019\)](#)
- 10.53 [Form of Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated July 18, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed July 23, 2019\)](#)
- 10.54 [Form of Convertible Promissory Note dated July 18, 2019 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed July 23, 2019\)](#)
- 10.55 [Form of Registration Rights Agreement between Registrant and Holders of Convertible Notes \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed July 23, 2019\)](#)
- 10.56 [List of Holders of Convertible Notes dated July 18, 2019 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed July 23, 2019\)](#)

- 10.57 [Consulting Agreement dated July 22, 2019 \(incorporated by reference from Exhibit 10.5 of Current Report on Form 8-K filed July 23, 2019\)](#)
- 10.58 [2019 Long-term Incentive Plan dated August 9, 2019 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed August 9, 2019\)](#)
- 10.59 [Form of Securities Purchase Agreement between Registrant and Holders of Convertible Notes dated January 8, 2020 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.60 [Form of Convertible Promissory Note dated January 8, 2020 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.61 [Form of Registration Rights Agreement between Registrant and Holders of Convertible Notes dated January 8, 2020 \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.62 [List of Holders of Convertible Notes dated January 8, 2020 \(incorporated by reference from Exhibit 10.4 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.63 [Form of Subscription Agreement between Registrant and Accredited Investors dated January 9, 2020 \(incorporated by reference from Exhibit 10.5 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.64 [Form of Registration Rights Agreement between Registrant and Accredited Investors dated January 9, 2020 \(incorporated by reference from Exhibit 10.6 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.65 [List of Accredited Investors dated January 9, 2020 \(incorporated by reference from Exhibit 10.7 of Current Report on Form 8-K filed January 10, 2020\)](#)
- 10.66 [Subscription Agreement between Registrant and an Accredited Investor dated January 20, 2020 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed January 21, 2020\)](#)
- 10.67 [Registration Rights Agreement between Registrant and an Accredited Investor dated January 20, 2020 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed January 21, 2020\)](#)
- 10.68 [Warrant Amendment Agreement between Registrant and Aspire Capital Fund, LLC dated February 28, 2020 \(incorporated by reference from Exhibit 10.1 of Current Report on Form 8-K filed March 5, 2020\)](#)
- 10.69 [Warrant Agreement between Registrant and Aspire Capital Fund, LLC dated February 28, 2020 \(incorporated by reference from Exhibit 4.1 of Current Report on Form 8-K filed March 5, 2020\)](#)
- 10.70 [Form of Subscription Agreement between Registrant and Accredited Investors dated March 5, 2020 \(incorporated by reference from Exhibit 10.2 of Current Report on Form 8-K filed March 5, 2020\)](#)
- 10.71 [Form of Registration Rights Agreement between Registrant and Accredited Investors dated March 5, 2020 \(incorporated by reference from Exhibit 10.3 of Current Report on Form 8-K filed March 5, 2020\)](#)
- 10.72 [Form of Subscription Agreement between Registrant and Accredited Investors dated March 13, 2020\\*](#)
- 10.73 [Form of Registration Rights Agreement between Registrant and Accredited Investors dated March 13, 2020\\*](#)
- 10.74 [List of Accredited Investors to March 5, 2020 and March 13, 2020 Subscription Agreements \\*](#)
- 21.1 [Schedule of Subsidiaries \(incorporated by reference from Exhibit 21.1 of Annual Report on Form 10-K filed March 29, 2018\)](#)
- 23.1 [Consent of MSL, P.A.\\*](#)
- 23.2 [Consent of BDO USA LLP\\*](#)
- 31.1 [Rule 13a-14 and 15d-14 Certification of Jeffrey L. Parker\\*](#)

31.2 [Rule 13a-14 and 15d-14 Certification of Cynthia L. Poehlman\\*](#)

32.1 [Section 1350 Certification of Jeffrey L. Parker and Cynthia L. Poehlman\\*](#)

101.INS XBRL Instance Document\*  
101.SCH XBRL Taxonomy Extension Schema\*  
101.CAL XBRL Taxonomy Extension Calculation Linkbase\*  
101.DEF XBRL Taxonomy Extension Definition Linkbase\*  
101.LAB XBRL Taxonomy Extension Label Linkbase\*  
101.PRE XBRL Taxonomy Extension Presentation Linkbase\*

\* Filed herewith

\*\* Management contract or compensatory plan or arrangement.

**Item 16. Form 10-K Summary**

None.



## SIGNATURES

Pursuant to the requirements of Section 13 of the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: April 14, 2020

### **PARKERVISION, INC.**

By: /s/ Jeffrey L. Parker  
Jeffrey L. Parker  
Chief Executive Officer

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

Signature	Title	Date
By: <u>/s/ Jeffrey L. Parker</u> Jeffrey L. Parker	Chief Executive Officer and Chairman of the Board (Principal Executive Officer)	April 14, 2020
By: <u>/s/ Cynthia L. Poehlman</u> Cynthia L. Poehlman	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) and Corporate Secretary	April 14, 2020
By: <u>/s/ Frank N. Newman</u> Frank N. Newman	Director	April 14, 2020
By: <u>/s/ Paul A. Rosenbaum</u> Paul A. Rosenbaum	Director	April 14, 2020
By: <u>/s/ Robert G. Sterne</u> Robert G. Sterne	Director	April 14, 2020

**DESCRIPTION OF REGISTRANT'S SECURITIES  
REGISTERED PURSUANT TO SECTION 12 OF THE  
SECURITIES EXCHANGE ACT OF 1934**

The following description of the securities of ParkerVision Inc. (the "Company", "we", "our" or similar terms) is based upon the Company's amended and restated articles of incorporation ("Charter"), the Company's bylaws ("Bylaws") and applicable provisions of law. We have summarized certain portions of the Charter and Bylaws below. The summary is not complete and is subject to, and is qualified in its entirety by express reference to, the provisions of our Charter and Bylaws, each of which is filed as an exhibit to the Annual Report on Form 10-K of which this Exhibit 4.5 is a part.

**Authorized Capital Stock**

Pursuant to our Charter, our authorized capital stock consists of 125,000,000 shares, of which 110,000,000 is voting Common Stock, \$0.01 par value per share, and 15,000,000 is Preferred Stock, \$1.00 per share.

**Common Stock**

*Authorization.* The outstanding shares of the Company's common stock are duly authorized, validly issued, fully paid and nonassessable.

*Listing.* The Company's common stock is traded on the OTCQB Market under the ticker symbol "PRKR."

*Voting Rights.* Common stockholders of record are entitled to one vote for each share held on all matters to be voted on by stockholders.

*Preemptive Rights, Etc.* Our stockholders have no preemptive or other subscription rights. There are no sinking fund provisions applicable to our common stock, except that upon the consummation of our initial business combination, subject to the limitations described herein, we will provide our stockholders with the opportunity to redeem their shares of our common stock for cash equal to their pro rata share of the aggregate amount then on deposit in the trust account.

**Preferred Stock**

Our Charter provides that shares of preferred stock may be issued from time to time in one or more series. Our board of directors will be authorized to fix the voting rights, if any, designations, powers, preferences, the relative, participating, optional or other special rights and any qualifications, limitations and restrictions, applicable to the shares of each series. Our board of directors will be able, without stockholder approval, to issue preferred stock with voting and other rights that could adversely affect the voting power and other rights of the holders of the common stock and could have anti-takeover effects.

*Series E Preferred Stock*

On November 17, 2005, the board of directors designated 100,000 shares of authorized preferred stock as the Series E Preferred Stock in conjunction with its adoption of a Shareholder Protection Rights Plan (as described below). Certain rights of this series of preferred stock are defined in terms of a "Reference Package." The "Reference Package" is initially 1,000 shares of common stock, as adjusted for stock dividends, subdivisions and combinations. The holders of full or fractional shares of this series are entitled to receive dividends, when and as declared by the board of directors, on each date that dividends or other distributions (other than dividends or distributions payable in our common stock) are payable on or in respect of common stock comprising part of the Reference Package, in an amount per whole share of this series equal to the aggregate amount of dividends or other distributions that would be payable on such date to a holder of the Reference Package. In addition, on the last day of March, June, September and December in each year, the holders of this series are entitled to receive dividends in an amount per whole share of this series equal to the excess (if any) of \$100 over the aggregate dividends paid per whole share of this series

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during the three-month period ending on such last day. Dividends on each full and each fractional share of this series are cumulative from the date such full or fractional share is originally issued. In the event of any liquidation, dissolution or winding up of our affairs, whether voluntary or involuntary, the holders of full and fractional shares of this series shall be entitled, before any distribution or payment is made on any date to the holders of the common stock or any other stock of ours ranking junior to this series upon liquidation, to be paid in full an amount per whole share of this series equal to the greater of \$100 or the aggregate amount distributed or to be distributed in connection with such liquidation, dissolution or winding up to a holder of the Reference Package, together with accrued dividends to such distribution or payment date, whether or not earned or declared.

Our Series E Preferred Stock shall rank junior to all other series or classes of our preferred stock, now existing or hereafter created, as to payment of dividends and the distribution of assets, unless the terms of any such other series or class shall provide otherwise.

Each whole share of this series shall, on any matter, vote as a class with any other capital stock comprising part of the Reference Package and voting on such matter and shall have the number of votes thereon that a holder of the Reference Package would have.

### **Shareholder Protection Rights Plan**

We have a Shareholder Protection Rights Agreement (“Rights Agreement”), originally adopted on November 21, 2005 and amended on November 20, 2015, pursuant to which we issued, on November 29, 2005, as a dividend, one right to acquire a fraction of a share of Series E Preferred Stock for each then outstanding share of Common Stock. Each share of Common Stock issued by us after such date also has included, and any subsequent shares of Common Stock issued by us prior to the Separation Time (as defined in the Rights Agreement) will include, an attached right. The following description of the Rights Agreement, and any description of the Rights Agreement included in a prospectus supplement, may not be complete and is subject to and qualified in its entirety by reference to the terms and provisions of the Rights Agreement.

The principal objective of the Rights Agreement is to cause someone interested in acquiring us to negotiate with our Board rather than launch an unsolicited or hostile bid. The Rights Agreement subjects a potential acquirer to substantial voting and economic dilution.

The rights initially are not exercisable and trade with our Common Stock. In the future, the rights may become exercisable with various provisions that may discourage a takeover bid. If a potential acquirer initiates a takeover bid or becomes the beneficial owner of 15% or more of our Common Stock, the rights will separate from the Common Stock. Upon separation, the holders of the rights may exercise their rights at an exercise price of \$14.50 per right (the “Exercise Price”), subject to adjustment and payable in cash. Additionally, the rights have what are known as “flip-in” and “flip-over” provisions that could make any acquisition of us more costly to the potential acquirer. The “flip-in” provision provides that, in the event a potential acquirer acquires 15% or more of the outstanding shares of our Common Stock, upon payment of the exercise price, the holders of the rights will receive from us that number of shares of Common Stock having an aggregate market price equal to twice the Exercise Price, as adjusted. The “flip-over” provision allows the holder to purchase that number of shares of common/voting equity of a successor entity, if we are not the surviving corporation in a business combination, with an aggregate market price equal to twice the Exercise Price.

We have the right to substitute for any of our shares of Common Stock that we are obligated to issue, shares of Series E Preferred Stock at a ratio of one thousandth of a share of Series E Preferred Stock for each share of Common Stock.

The rights may be redeemed upon approval of the Board at a redemption price of \$0.01 per right. The Rights Agreement expires on November 20, 2020.

### **Classified Board; Director Nominations; Special Meetings**

Our Board is divided into three classes, with only one class of directors elected at each annual meeting, and our shareholders may remove our directors only for cause. Nominations for our Board may be made by our Board or by

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any holder of Common Stock. A shareholder entitled to vote for the election of directors may nominate a person for election as director only if the shareholder provides written notice of his nomination to our secretary not later than 120 days in advance of the same day and month that our proxy statement was released to shareholders in connection with the previous year's annual meeting of shareholders or, if no annual meeting was held in the previous year, then by the end of the fiscal year to which the annual meeting in which the nomination will be made relates. A special meeting of our shareholders may be called only by our Board or our chief executive officer. These provisions and the Board's right to issue shares of our preferred stock from time to time, in one or more classes or series without stockholder approval, are intended to enhance the likelihood of continuity and stability in the composition of the policies formulated by our Board. These provisions are also intended to discourage some tactics that may be used in proxy fights.

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## SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (this "Agreement") is dated as of March 13, 2020 between ParkerVision, Inc., a Florida corporation (the "Company"), and each purchaser identified on the signature pages hereto (each, including its successors and assigns, a "Purchaser" and collectively, the "Purchasers").

WHEREAS, subject to the terms and conditions set forth in this Agreement and pursuant to Section 4(2) of the Securities Act of 1933, as amended (the "Securities Act"), and Rule 506 promulgated thereunder, the Company desires to issue and sell to each Purchaser, and each Purchaser, severally and not jointly, desires to purchase from the Company, securities of the Company as more fully described in this Agreement.

NOW, THEREFORE, IN CONSIDERATION of the mutual covenants contained in this Agreement, and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the Company and each Purchaser agree as follows:

### ARTICLE I. DEFINITIONS

1.1 Definitions. In addition to the terms defined elsewhere in this Agreement, for all purposes of this Agreement, the following terms have the meanings set forth in this Section 1.1:

"Action" shall have the meaning ascribed to such term in Section 3.1(i).

"Affiliate" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 405 under the Securities Act.

"Board of Directors" means the board of directors of the Company.

"Business Day" means any day except Saturday, Sunday, any day which is a federal legal holiday in the United States or any day on which banking institutions in the State of New York are authorized or required by law or other governmental action to close.

"Closing" means the closing of the purchase and sale of the Securities pursuant to Section 2.1.

"Closing Date" means the Trading Day when all of the Transaction Documents have been executed and delivered by the applicable parties thereto, and all conditions precedent to (i) the Purchasers' obligations to pay the Subscription Amount and (ii) the Company's obligations to deliver the Securities have been satisfied or waived.

"Commission" means the United States Securities and Exchange Commission.

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“Common Stock” means the common stock of the Company, par value \$0.01 per share, and any other class of securities into which such securities may hereafter be reclassified or changed into.

“Common Stock Equivalents” means any securities of the Company or any subsidiary which would entitle the holder thereof to acquire at any time Common Stock, including, without limitation, any debt, preferred stock, rights, options, warrants or other instrument that is at any time convertible into or exercisable or exchangeable for, or otherwise entitles the holder thereof to receive, Common Stock.

“Company Counsel” means Graubard Miller, with offices located at The Chrysler Building, 405 Lexington Avenue, New York, New York 10174.

“Disclosure Schedules” means the Disclosure Schedules of the Company delivered concurrently herewith.

“Effective Date” means the earliest of the date that (a) the Registration Statement has been declared effective by the Commission, (b) all of the Shares have been sold pursuant to Rule 144 or may be sold pursuant to Rule 144 or (c) the one year anniversary of the Closing Date provided that all of the Shares may be sold pursuant to an exemption from registration under Section 4(1) of the Securities Act (assuming, for the purpose of making this determination, that all of the holders of the Shares are non-Affiliates of the Company) and Company Counsel has delivered to such holders a standing written unqualified opinion that resales may then be made by such holders of the Shares pursuant to such exemption which opinion shall be in form and substance reasonably acceptable to such holders.

“Evaluation Date” shall have the meaning ascribed to such term in Section 3.1(q).

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“GAAP” shall have the meaning ascribed to such term in Section 3.1(g).

“Indebtedness” shall have the meaning ascribed to such term in Section 3.1(y).

“Intellectual Property” shall have the meaning ascribed to such term in Section 3.1(n).

“Legend Removal Date” shall have the meaning ascribed to such term in Section 4.1(c).

“Lien” means a lien, charge, security interest, encumbrance, right of first refusal, preemptive right or other restriction.

“Material Adverse Effect” shall have the meaning assigned to such term in Section 3.1(a).

“Material Permits” shall have the meaning ascribed to such term in Section 3.1(l).

“Per Share Purchase Price” equals **\$0.35**, subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement and prior to the Closing Date.

“Person” means an individual or corporation, partnership, trust, incorporated or unincorporated association, joint venture, limited liability company, joint stock company, government (or an agency or subdivision thereof) or other entity of any kind.

“Proceeding” means an action, claim, suit, investigation or proceeding (including, without limitation, an informal investigation or partial proceeding, such as a deposition), whether commenced or threatened.

“Public Information Failure” shall have the meaning ascribed to such term in Section 4.2(b).

“Public Information Failure Payments” shall have the meaning ascribed to such term in Section 4.2(b).

“Purchaser Party” shall have the meaning ascribed to such term in Section 4.8.

“Registration Rights Agreement” means the Registration Rights Agreement, dated the date hereof, among the Company and the Purchasers, in the form of Exhibit A attached hereto.

“Registration Statement” means a registration statement meeting the requirements set forth in the Registration Rights Agreement and covering the resale by the Purchasers of the Shares.

“Required Approvals” shall have the meaning ascribed to such term in Section 3.1(d).

“Rule 144” means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

“SEC Reports” shall have the meaning ascribed to such term in Section 3.1(g).

“Securities” means the Shares.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

“Shares” means the shares of Common Stock issued or issuable to each Purchaser pursuant to this Agreement.

“Short Sales” means all “short sales” as defined in Rule 200 of Regulation SHO under the Exchange Act (but shall not be deemed to include the location and/or reservation of borrowable shares of Common Stock).

“Subscription Amount” means, as to each Purchaser, the aggregate amount to be paid for Shares purchased hereunder as specified below such Purchaser’s name on the signature page of this Agreement and next to the heading “Subscription Amount,” in United States dollars and in immediately available funds.

“Trading Day” means a day on which the principal Trading Market is open for trading.

“Trading Market” means the following markets or exchanges on which the Common Stock is listed or quoted for trading on the date in question: the NYSE American, the Nasdaq Capital Market, the Nasdaq Global Market, the Nasdaq Global Select Market, the New York Stock Exchange or the Over-the-Counter Bulletin Board (the OTCQB, the OTCQX or the “Pink Sheets” published by The OTC Markets Group, Inc. or a similar organization or agency succeeding to its functions or reporting prices), or any successors to any of the foregoing.

“Transaction Documents” means this Agreement, the Registration Rights Agreement, all exhibits and schedules thereto and hereto and any other documents or agreements executed in connection with the transactions contemplated hereunder.

“Transfer Agent” means American Stock Transfer and Trust Company, the current transfer agent of the Company, with a mailing address of 6201 15th Avenue, Brooklyn, NY 11219, and any successor transfer agent of the Company.

## **ARTICLE II. PURCHASE AND SALE**

2.1 Closing. On the Closing Date, upon the terms and subject to the conditions set forth herein, substantially concurrent with the execution and delivery of this Agreement by the parties hereto, the Company agrees to sell, and the Purchasers, severally and not jointly, agree to purchase, up to an aggregate of [.] Shares. Each Purchaser shall deliver to the Company via wire transfer of immediately available funds equal to its Subscription Amount and the Company shall deliver to each Purchaser its respective Shares, as determined pursuant to Section 2.2(a), and the Company and each Purchaser shall deliver the other items set forth in Section 2.2 deliverable at the Closing. Upon satisfaction of the covenants and conditions set forth in Sections 2.2 and 2.3,



the Closing shall occur at the offices of Company Counsel or such other location as the parties shall mutually agree.

Deliveries.

(a) On or prior to the Closing Date, the Company shall deliver or cause to be delivered to each Purchaser the following:

- (i) this Agreement duly executed by the Company;
- (ii) a copy of the irrevocable instructions to the Transfer Agent instructing the Transfer Agent to issue to the Purchaser that number of Shares equal to such Purchaser's Subscription Amount divided by the Per Share Purchase Price, registered in the name of such Purchaser;
- (iii) the Registration Rights Agreement duly executed by the Company.

(b) On or prior to the Closing Date, each Purchaser shall deliver or cause to be delivered to the Company the following:

- (i) this Agreement duly executed by such Purchaser;
- (ii) such Purchaser's Subscription Amount by wire transfer to the account as specified in writing by the Company; and
- (iii) the Registration Rights Agreement duly executed by such Purchaser.

2.2 Closing Conditions.

(a) The obligations of the Company hereunder in connection with the Closing are subject to the following conditions being met:

- (i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) on the Closing Date of the representations and warranties of the Purchasers contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);
- (ii) all obligations, covenants and agreements of each Purchaser required to be performed at or prior to the Closing Date shall have been performed; and
- (iii) the delivery by each Purchaser of the items set forth in Section 2.2(b) of this Agreement.

(c) The respective obligations of the Purchasers hereunder in connection with the Closing are subject to the following conditions being met:

- (i) the accuracy in all material respects (or, to the extent representations or warranties are qualified by materiality or Material Adverse Effect, in all respects) when made and on the Closing Date of the representations and warranties of the Company contained herein (unless as of a specific date therein in which case they shall be accurate as of such date);
- (ii) all obligations, covenants and agreements of the Company required to be performed at or prior to the Closing Date shall have been performed;
- (iii) the delivery by the Company of the items set forth in Section 2.2(a) of this Agreement.

### **ARTICLE III. REPRESENTATIONS AND WARRANTIES**

3.1 Representations and Warranties of the Company. Except as set forth in the Disclosure Schedules, which Disclosure Schedules shall be deemed a part hereof and shall qualify any representation or otherwise made herein to the extent of the disclosure contained in the corresponding section of the Disclosure Schedules, the Company hereby makes the following representations and warranties to each Purchaser:

(a) Subsidiaries; Organization and Qualification. All of the direct and indirect subsidiaries of the Company are set forth on Schedule 3.1(a). The Company owns, directly or indirectly, all of the capital stock or other equity interests of each Subsidiary free and clear of any Liens, and all of the issued and outstanding shares of capital stock of each Subsidiary are validly issued and are fully paid, non-assessable and free of preemptive and similar rights to subscribe for or purchase securities. The Company and each of its subsidiaries is an entity duly incorporated or otherwise organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization (as applicable), with the requisite power and authority to own and use its properties and assets and to carry on its business as currently conducted. Neither the Company nor any subsidiary is in violation or default of any of the provisions of its articles of incorporation, bylaws or other organizational or charter documents. Each of the Company and its subsidiaries is duly qualified to conduct business and is in good standing as a foreign corporation or other entity in each jurisdiction in which the nature of the business conducted or property owned by it makes such qualification necessary, except where the failure to be so qualified or in good standing, as the case may be, could not have or reasonably be expected to result in (i) a material adverse effect on the legality, validity or enforceability of any Transaction Document, (ii) a material adverse effect on the results of operations, assets, business, prospects or condition (financial or otherwise) of the Company, taken as a whole, or (iii) a material adverse effect on the

Company's ability to perform in any material respect its obligations under any Transaction Document (any of (i), (ii) or (iii), a "Material Adverse Effect"), and no Proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing or seeking to revoke, limit or curtail such power and authority or qualification.

(b) Authorization; Enforcement. The Company has the requisite corporate power and authority to enter into and to consummate the transactions contemplated by this Agreement and each of the other Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. The execution and delivery of this Agreement and each of the other Transaction Documents by the Company and the consummation by it of the transactions contemplated hereby and thereby have been duly authorized by all necessary action on the part of the Company and no further action is required by the Company, the Board of Directors or the Company's stockholders in connection herewith or therewith other than in connection with the Required Approvals. This Agreement and each other Transaction Document to which it is a party has been (or upon delivery will have been) duly executed by the Company and, when delivered in accordance with the terms hereof and thereof, will constitute the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(c) No Conflicts. The execution, delivery and performance by the Company of this Agreement and the other Transaction Documents by the Company, the issuance and sale of the Securities and the consummation by the Company of the other transactions contemplated hereby and thereby do not and will not (i) conflict with or violate any provision of the Company's articles of incorporation, bylaws or other organizational or charter documents, or (ii) conflict with, or constitute a default (or an event that with notice or lapse of time or both would become a default) under, result in the creation of any Lien upon any of the properties or assets of the Company under, or give to others any rights of termination, amendment, acceleration or cancellation (with or without notice, lapse of time or both) of, any agreement, credit facility, debt or other instrument (evidencing a Company debt or otherwise) or other understanding to which the Company is a party or by which any property or asset of the Company is bound or affected, or (iii) subject to the Required Approvals, conflict with or result in a violation of any law, rule, regulation, order, judgment, injunction, decree or other restriction of any court or governmental authority to which the Company is subject (including federal and state securities laws and regulations), or by which any property or asset of the Company is bound or affected; except in the case of each of clauses (ii) and (iii), such as could not have or reasonably be expected to result in a Material Adverse Effect.

(d) Filings, Consents and Approvals. The Company is not required to obtain any consent, waiver, authorization or order of, give any notice to, or make any filing or

registration with, any court or other federal, state, local or other governmental authority or other Person in connection with the execution, delivery and performance by the Company of the Transaction Documents, other than (i) such filings, if any, as are required to be made under applicable Federal and state securities laws, including the filings required pursuant to Section 4.4, the filing with the Commission of a Registration Statement and the filing with the Commission of a Form D, (ii) such notices or applications, if any, as are required to be given or made to the Trading Market for the issuance and sale of the Securities and the listing of the Shares for trading thereon and (iii) such filings as are required to be made under applicable state securities laws (the “Required Approvals”).

(e) Issuance of the Securities. The Securities are duly authorized and, when issued and paid for in accordance with the applicable Transaction Documents, will be duly and validly issued, fully paid and nonassessable, free and clear of all Liens imposed by the Company other than restrictions on transfer provided for in the Transaction Documents. The Company has reserved from its duly authorized capital stock the maximum number of shares of Common Stock issuable pursuant to this Agreement.

(f) Capitalization. Capitalization. The capitalization of the Company as of the date hereof is as set forth on Schedule 3.1(f) of the Disclosure Schedules. Except as set forth in the SEC Reports or Schedule 3.1(f), the Company has not issued any capital stock since its most recently filed periodic report under the Exchange Act, other than pursuant to the exercise of employee stock options and the vesting of restricted stock units under the Company’s equity incentive plans and pursuant to the conversion or exercise or exchange of Common Stock Equivalents outstanding as of the date of the most recently filed periodic report under the Exchange Act. No Person has any right of first refusal, preemptive right, right of participation, or any similar right to participate in the transactions contemplated by the Transaction Documents. Except as set forth in the SEC Reports or Schedule 3.1(f) and except for outstanding awards under the Company’s equity incentive plans, there are no outstanding options, warrants, scrip rights to subscribe to, calls or commitments of any character whatsoever relating to, or securities, rights or obligations convertible into or exercisable or exchangeable for, or giving any Person any right to subscribe for or acquire any shares of Common Stock or the capital stock of any Subsidiary, or contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to issue additional shares of Common Stock or Common Stock Equivalents or capital stock of any Subsidiary. The issuance and sale of the Securities will not obligate the Company or any Subsidiary to issue shares of Common Stock or other securities to any Person (other than the Purchasers) and will not result in a right of any holder of Company securities to adjust the exercise, conversion, exchange or reset price under any of such securities. There are no outstanding securities or instruments of the Company or any Subsidiary that contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem a security of the Company or such Subsidiary. All of the outstanding shares of capital stock of the Company are duly authorized, validly issued,

fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, and none of such outstanding shares was issued in violation of any preemptive rights or similar rights to subscribe for or purchase securities. No further approval or authorization of any stockholder, the Board of Directors or others is required for the issuance and sale of the Securities. There are no stockholders agreements, voting agreements or other similar agreements with respect to the Company's capital stock to which the Company is a party or, to the knowledge of the Company, between or among any of the Company's stockholders.

(g) SEC Reports: Financial Statements. The Company has filed all reports, schedules, forms, statements and other documents required to be filed by it under the Securities Act and the Exchange Act, including pursuant to Section 13(a) or 15(d) thereof, for the two years preceding the date hereof (or such shorter period as the Company was required by law or regulation to file such material) (the foregoing materials filed prior to the date hereof, including the exhibits thereto and documents incorporated by reference therein, being collectively referred to herein as the "SEC Reports") on a timely basis or has received a valid extension of such time of filing and has filed any such SEC Reports prior to the expiration of any such extension. As of their respective dates, the SEC Reports complied in all material respects with the requirements of the Securities Act and the Exchange Act and the rules and regulations of the Commission promulgated thereunder, and none of the SEC Reports, when filed, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The financial statements of the Company included in the SEC Reports comply in all material respects with applicable accounting requirements and the rules and regulations of the Commission with respect thereto as in effect at the time of filing. Such financial statements have been prepared in accordance with United States generally accepted accounting principles applied on a consistent basis during the periods involved ("GAAP"), except as may be otherwise specified in such financial statements or the notes thereto and except that unaudited financial statements may not contain all footnotes required by GAAP, and fairly present in all material respects the financial position of the Company as of and for the dates thereof and the results of operations and cash flows for the periods then ended, subject, in the case of unaudited statements, to normal, immaterial, year-end audit adjustments.

(h) Material Changes: Undisclosed Events, Liabilities or Developments. Since the date of the latest audited financial statements included within the SEC Reports, except as specifically disclosed in the SEC Reports, (i) there has been no event, occurrence or development that has had or that could reasonably be expected to result in a Material Adverse Effect, (ii) the Company has not incurred any liabilities (contingent or otherwise) other than (A) trade payables and accrued expenses incurred in the ordinary course of business consistent with past practice and (B) liabilities not required to be reflected in the Company's financial statements pursuant to GAAP or required to be disclosed in filings made with the Commission, (iii) the Company has not altered its

method of accounting, (iv) the Company has not declared or made any dividend or distribution of cash or other property to its stockholders or purchased, redeemed or made any agreements to purchase or redeem any shares of its capital stock, except in connection with the payment of the exercise price of, or withholding taxes for, awards under the Company's equity incentive plans, and (v) the Company has not issued any equity securities to any officer, director or Affiliate, except pursuant to the Company's existing equity incentive plans. The Company does not have pending before the Commission any request for confidential treatment of information. Except for the issuance of the Securities contemplated by this Agreement, no event, liability, fact, circumstance, occurrence or development has occurred or exists with respect to the Company or its business, properties, operations, financial condition or prospects that would be required to be publicly disclosed by the Company under applicable securities laws at the time this representation is made that has not been publicly disclosed at least one (1) Trading Day prior to the date that this representation is made.

(i) Litigation. Except as set forth in the SEC Reports, there is no action, suit, inquiry, notice of violation, Proceeding or investigation pending or, to the knowledge of the Company, threatened against or affecting the Company or any of its properties before or by any court, arbitrator, governmental or administrative agency or regulatory authority (federal, state, county, local or foreign) (collectively, an "Action") which (i) adversely affects or challenges the legality, validity or enforceability of any of the Transaction Documents or the Securities or (ii) could, if there were an unfavorable decision, have or reasonably be expected to result in a Material Adverse Effect. Neither the Company, nor any director or officer thereof, is or has been the subject of any Action involving a claim of violation of or liability under federal or state securities laws or a claim of breach of fiduciary duty. To the knowledge of the Company, there is not pending or contemplated, any investigation by the Commission involving the Company or any current or former director or officer of the Company. The Commission has not issued any stop order or other order suspending the effectiveness of any registration statement filed by the Company under the Exchange Act or the Securities Act.

(j) Labor Relations. No material labor dispute exists or, to the knowledge of the Company, is imminent with respect to any of the employees of the Company which could reasonably be expected to result in a Material Adverse Effect. None of the Company's employees is a member of a union that relates to such employee's relationship with the Company, and the Company is not a party to a collective bargaining agreement, and the Company believes that its relationship with its employees is good. No executive officer of the Company, to the knowledge of the Company, is, or is now expected to be, in violation of any material term of any employment contract, confidentiality, disclosure or proprietary information agreement or non-competition agreement, or any other contract or agreement or any restrictive covenant, and the continued employment of each such executive officer does not subject the Company to any liability with respect to any of the foregoing matters. The Company is in compliance with all U.S. federal, state, local and foreign laws and regulations relating to employment and employment practices, terms and conditions of employment and wages and hours,

except where the failure to be in compliance could not, individually or in the aggregate, reasonably be expected to have a Material Adverse Effect.

(k) Compliance. The Company (i) is not in default under or in violation of (and no event has occurred that has not been waived that, with notice or lapse of time or both, would result in a default by the Company under), nor has the Company received notice of a claim that it is in default under or that it is in violation of, any indenture, loan or credit agreement or any other agreement or instrument to which it is a party or by which it or any of its properties is bound (whether or not such default or violation has been waived), (ii) is not in violation of any judgment, decree or order of any court, arbitrator or other governmental authority, or (iii) is not and has not been in violation of any statute, rule or regulation of any governmental authority, including without limitation all foreign, federal, state and local laws applicable to its business and all such laws that affect the environment, except in each case as could not reasonably be expected to result in a Material Adverse Effect.

(l) Environmental Laws. The Company and its Subsidiaries (i) are in compliance with all federal, state, local and foreign laws relating to pollution or protection of human health or the environment (including ambient air, surface water, groundwater, land surface or subsurface strata), including laws relating to emissions, discharges, releases or threatened releases of chemicals, pollutants, contaminants, or toxic or hazardous substances or wastes (collectively, "Hazardous Materials") into the environment, or otherwise relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of Hazardous Materials, as well as all authorizations, codes, decrees, demands, or demand letters, injunctions, judgments, licenses, notices or notice letters, orders, permits, plans or regulations, issued, entered, promulgated or approved thereunder ("Environmental Laws"); (ii) have received all permits licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses; and (iii) are in compliance with all terms and conditions of any such permit, license or approval where in each clause (i), (ii) and (iii), the failure to so comply could be reasonably expected to have, individually or in the aggregate, a Material Adverse Effect.

(m) Regulatory Permits. The Company possesses all certificates, authorizations and permits issued by the appropriate federal, state, local or foreign regulatory authorities necessary to conduct its business as described in the SEC Reports, except where the failure to possess such permits could not reasonably be expected to result in a Material Adverse Effect ("Material Permits"), and the Company has not received any notice of proceedings relating to the revocation or modification of any Material Permit.

(n) Title to Assets. The Company has good and marketable title in fee simple to all real property owned by it that is material to the business of the Company and good and marketable title in all personal property owned by it that is material to the business of the Company, in each case free and clear of all Liens, except for Liens as do not

materially affect the value of such property and do not materially interfere with the use made and proposed to be made of such property by the Company and Liens for the payment of federal, state or other taxes, the payment of which is neither delinquent nor subject to penalties. Any real property and facilities held under lease by the Company are held by it under valid, subsisting and enforceable leases with which the Company is in compliance.

(o) Intellectual Property. The Company owns, possesses, or can acquire on reasonable terms, all Intellectual Property necessary for the conduct of its business as now conducted or as described in the SEC Reports to be conducted, except as such failure to own, possess, or acquire such rights would not result in a Material Adverse Effect. Except as set forth in the SEC Reports, (i) to the knowledge of the Company, there is no infringement, misappropriation or violation by third parties of any such Intellectual Property, except as such infringement, misappropriation or violation would not result in a Material Adverse Effect; (ii) there is no pending or, to the knowledge of the Company, threatened action, suit, proceeding or claim by others challenging the Company's rights in or to any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iii) the Intellectual Property owned by the Company and to the knowledge of the Company, the Intellectual Property licensed to the Company has not been adjudged invalid or unenforceable, in whole or in part, and there is no pending or threatened action, suit, proceeding or claim by others challenging the validity or scope of any such Intellectual Property, and the Company is unaware of any facts which would form a reasonable basis for any such claim; (iv) there is no pending or threatened action, suit, proceeding or claim by others that the Company infringes, misappropriates or otherwise violates any Intellectual Property or other proprietary rights of others, the Company has not received any written notice of such claim, and the Company is unaware of any other fact which would form a reasonable basis for any such claim; and (v) to the Company's knowledge, no employee of the Company is in or has ever been in violation of any term of any employment contract, patent disclosure agreement, invention assignment agreement, non-competition agreement, non-solicitation agreement, nondisclosure agreement or any restrictive covenant to or with a former employer where the basis of such violation relates to such employee's employment with the Company or actions undertaken by the employee while employed with the Company, except as such violation would not result in a Material Adverse Effect. "Intellectual Property" shall mean all patents, patent applications, trade and service marks, trade and service mark registrations, trade names, copyrights, licenses, inventions, trade secrets, technology, know-how and other intellectual property.

(p) Insurance. The Company is insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are prudent and customary in the businesses in which the Company is engaged, including, but not limited to, directors and officers insurance coverage. The Company has no reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business without a significant increase in cost.



(q) Transactions With Affiliates and Employees. Except as set forth in the SEC Reports, none of the officers or directors of the Company and, to the knowledge of the Company, none of the employees of the Company is presently a party to any transaction with the Company (other than for services as employees, officers and directors), including any contract, agreement or other arrangement providing for the furnishing of services to or by, providing for rental of real or personal property to or from, or otherwise requiring payments to or from any officer, director or such employee or, to the knowledge of the Company, any entity in which any officer, director, or any such employee has a substantial interest or is an officer, director, trustee or partner, in each case in excess of \$120,000, other than for (i) payment of salary or consulting fees for services rendered, (ii) reimbursement for expenses incurred on behalf of the Company and (iii) other employee benefits, including equity awards under any equity incentive plans of the Company.

(r) Sarbanes-Oxley. The Company is in compliance with any and all requirements of the Sarbanes-Oxley Act of 2002 that are applicable to the Company, and any and all rules and regulations promulgated by the Commission thereunder, that are applicable to the Company and effective as of the date hereof and as of the Closing Date. The Company maintains a system of internal accounting controls sufficient to provide reasonable assurance that: (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization, and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences. The Company has established disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and designed such disclosure controls and procedures to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms. The Company's certifying officers have evaluated the effectiveness of the disclosure controls and procedures of the Company as of the end of the period covered by the most recently filed periodic report under the Exchange Act (such date, the "Evaluation Date"). The Company presented in its most recently filed periodic report under the Exchange Act the conclusions of the certifying officers about the effectiveness of the disclosure controls and procedures based on their evaluations as of the Evaluation Date. Since the Evaluation Date, there have been no changes in the internal control over financial reporting (as such term is defined in the Exchange Act) of the Company that have materially affected, or is reasonably likely to materially affect, the internal control over financial reporting of the Company.

(s) Certain Fees. No brokerage or finder's fees or commissions are or will be payable by the Company to any broker, financial advisor or consultant, finder, placement agent, investment banker, bank or other Person with respect to the transactions contemplated by the Transaction Documents. The Purchasers shall have no obligation

with respect to any fees or with respect to any claims made by or on behalf of other Persons for fees of a type contemplated in this Section that may be due in connection with the transactions contemplated by the Transaction Documents.

(t) Private Placement. Assuming the accuracy of the Purchasers' representations and warranties set forth in Section 3.2, no registration under the Securities Act is required for the offer and sale of the Securities by the Company to the Purchasers as contemplated hereby. The issuance and sale of the Securities hereunder does not contravene the rules and regulations of the Trading Market.

(u) Investment Company. The Company is not, and is not an Affiliate of, and immediately after receipt of payment for the Securities, will not be or be an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended. The Company shall conduct its business in a manner so that it will not become an "investment company" subject to registration under the Investment Company Act of 1940, as amended.

(v) Registration Rights. Other than with respect to the Company's existing registration statements filed under the Securities Act, or as otherwise disclosed in the SEC Reports or Schedule 3.1(v) and other than each of the Purchasers, no Person has any right to cause the Company or any Subsidiary to effect the registration under the Securities Act of any securities of the Company or any Subsidiaries.

(w) Listing and Maintenance Requirements. The Company's Common Stock is registered pursuant to Section 12(b) of the Exchange Act. Except as disclosed in the SEC Reports or otherwise publicly disclosed in a Company press release, the Company has not, in the 12 months preceding the date hereof, received notice from any Trading Market on which the Common Stock is or has been listed or quoted to the effect that the Company is not in compliance with the maintenance requirements of such Trading Market. The Common Stock is currently eligible for electronic transfer through the Depository Trust Company or another established clearing corporation and the Company is current in payment of the fees to the Depository Trust Company (or such other established clearing corporation) in connection with such electronic transfer.

(x) Disclosure. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, the Company confirms that neither it nor any other Person acting on its behalf has provided any of the Purchasers or their agents or counsel with any information that it believes constitutes or might constitute material, non-public information. The Company understands and confirms that the Purchasers will rely on the foregoing representation in effecting transactions in securities of the Company. All of the disclosure furnished by or on behalf of the Company to the Purchasers regarding the Company and its Subsidiaries, their respective businesses and the transactions contemplated hereby, including the Disclosure Schedules to this Agreement, is true and correct and does not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements

made therein, in the light of the circumstances under which they were made, not misleading. .

(y) Tax Status. Except for matters that could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect, the Company (i) has made or filed all necessary federal, state, foreign and local income and franchise tax returns, reports and declarations required by any jurisdiction to which it is subject, (ii) has paid all taxes and other governmental assessments and charges that are material in amount, shown or determined to be due on such returns, reports and declarations and (iii) has set aside on its books provision reasonably adequate for the payment of all material taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and the officers of the Company know of no basis for any such claim.

(z) Foreign Corrupt Practices. Neither the Company nor any Subsidiary, nor to the knowledge of the Company or any Subsidiary, any agent or other person acting on behalf of the Company or any Subsidiary, has (i) directly or indirectly, used any funds for unlawful contributions, gifts, entertainment or other unlawful expenses related to foreign or domestic political activity, (ii) made any unlawful payment to foreign or domestic government officials or employees or to any foreign or domestic political parties or campaigns from corporate funds, (iii) failed to disclose fully any contribution made by the Company or any Subsidiary (or made by any person acting on its behalf of which the Company is aware) which is in violation of law or (iv) violated in any material respect any provision of FCPA.

(aa) Accountants. The Company's accounting firm is Moore Stephens Lovelace, P.A. To the knowledge of the Company, such accountants, who the Company expects will express their opinion with respect to the financial statements to be included in the Company's next Annual Report on Form 10-K, are a registered public accounting firm as required by the Securities Act.

(bb) Acknowledgment Regarding Purchasers' Purchase of Securities. The Company acknowledges and agrees that each of the Purchasers is acting solely in the capacity of an arm's length purchaser with respect to the Transaction Documents and the transactions contemplated thereby. The Company further acknowledges that no Purchaser is acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to the Transaction Documents and the transactions contemplated thereby and any advice given by any Purchaser or any of their respective representatives or agents in connection with the Transaction Documents and the transactions contemplated thereby is merely incidental to the Purchasers' purchase of the Securities. The Company further represents to each Purchaser that the Company's decision to enter into this Agreement and the other Transaction Documents has been based solely on the independent evaluation of the transactions contemplated hereby by the Company and its representatives.

(cc) Acknowledgement Regarding Purchaser's Trading Activity. Anything in this Agreement or elsewhere herein to the contrary notwithstanding (except for Sections 3.2(g) and 4.12 hereof), it is understood and acknowledged by the Company that: (i) none of the Purchasers has been asked by the Company to agree, nor has any Purchaser agreed, to desist from purchasing or selling, long and/or short, securities of the Company, or "derivative" securities based on securities issued by the Company or to hold the Securities for any specified term; (ii) past or future open market or other transactions by any Purchaser, specifically including, without limitation, Short Sales or "derivative" transactions, before or after the closing of this or future private placement transactions, may negatively impact the market price of the Company's publicly-traded securities; (iii) any Purchaser, and counter-parties in "derivative" transactions to which any such Purchaser is a party, directly or indirectly, presently may have a "short" position in the Common Stock, and (iv) each Purchaser shall not be deemed to have any affiliation with or control over any arm's length counter-party in any "derivative" transaction. The Company further understands and acknowledges that (y) one or more Purchasers may engage in hedging activities at various times during the period that the Securities are outstanding, and (z) such hedging activities (if any) could reduce the value of the existing stockholders' equity interests in the Company at and after the time that the hedging activities are being conducted. The Company acknowledges that such aforementioned hedging activities do not constitute a breach of any of the Transaction Documents.

(dd) Regulation M Compliance. During the applicable restricted period as defined in Regulation M, the Company has not, and to its knowledge no one acting on its behalf has, (i) taken, directly or indirectly, any action designed to cause or to result in the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of any of the Securities, (ii) sold, bid for, purchased, or, paid any compensation for soliciting purchases of, any of the Securities, or (iii) paid or agreed to pay to any Person any compensation for soliciting another to purchase any other securities of the Company.

(ee) No General Solicitation. Neither the Company nor any person acting on behalf of the Company has offered or sold any of the Securities by any form of general solicitation or general advertising. The Company has offered the Securities for sale only to the Purchasers and certain other "accredited investors" within the meaning of Rule 501 under the Securities Act.

(ff) No Disqualification Events. With respect to the Securities to be offered and sold hereunder in reliance on Rule 506 under the Securities Act, none of the Company, any of its predecessors, any affiliated issuer, any director, executive officer, other officer of the Company participating in the offering hereunder, any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, nor any promoter (as that term is defined in Rule 405 under the Securities Act) connected with the Company in any capacity at the time of sale (each, an "Issuer Covered Person" and, together, "Issuer Covered Persons") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the

Securities Act (a "Disqualification Event"), except for a Disqualification Event covered by Rule 506(d)(2) or (d)(3). The Company has exercised reasonable care to determine whether any Issuer Covered Person is subject to a Disqualification Event. The Company has complied, to the extent applicable, with its disclosure obligations under Rule 506(e), and has furnished to the Purchasers a copy of any disclosures provided thereunder.

(a) Other Covered Persons. The Company is not aware of any person (other than any Issuer Covered Person) that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of any Regulation D Securities.

(b) Notice of Disqualification Events. The Company will notify the Purchasers in writing, prior to the Closing Date of (i) any Disqualification Event relating to any Issuer Covered Person and (ii) any event that would, with the passage of time, become a Disqualification Event relating to any Issuer Covered Person.

(c) No Additional Agreements. The Company has not entered into any agreement or understanding with any Purchaser or other individual purchasing Shares with respect to the transactions contemplated hereby or by any of the other Transaction Documents other than as specified herein or therein. For the avoidance of doubt, each Purchaser has the same rights with respect to the purchase of Shares as each of the other Purchasers other than as explicitly set forth herein or in any of the other Transaction Documents.

3.2 Representations and Warranties of the Purchasers. Each Purchaser, for itself and for no other Purchaser, hereby represents and warrants as of the date hereof and as of the Closing Date to the Company as follows (unless as of a specific date therein):

(a) Organization; Authority. If such Purchaser is an entity, such purchaser duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization with full right, corporate or partnership power and authority to enter into and to consummate the transactions contemplated by the Transaction Documents and otherwise to carry out its obligations hereunder and thereunder. If such Purchaser is an entity, the execution and delivery of the Transaction Documents and performance by such Purchaser of the transactions contemplated by the Transaction Documents have been duly authorized by all necessary corporate or similar action on the part of such Purchaser. Each Transaction Document to which it is a party has been duly executed by such Purchaser, and when delivered by such Purchaser in accordance with the terms hereof, will constitute the valid and legally binding obligation of such Purchaser, enforceable against it in accordance with its terms, except: (i) as limited by general equitable principles and applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies and (iii) insofar as indemnification and contribution provisions may be limited by applicable law.

(b) Own Account. Such Purchaser understands that the Securities are “restricted securities” and have not been registered under the Securities Act or any applicable state securities law and is acquiring the Securities as principal for its own account and not with a view to or for distributing or reselling such Securities or any part thereof in violation of the Securities Act or any applicable state securities law, has no present intention of distributing any of such Securities in violation of the Securities Act or any applicable state securities law and has no direct or indirect arrangement or understandings with any other persons to distribute or regarding the distribution of such Securities (this representation and warranty not limiting such Purchaser’s right to sell the Securities pursuant to the Registration Statement or otherwise in compliance with applicable federal and state securities laws) in violation of the Securities Act or any applicable state securities law. Such Purchaser is acquiring the Securities hereunder in the ordinary course of its business.

(c) Purchaser Status. At the time such Purchaser was offered the Securities, it was, and as of the date hereof it is, an “accredited investor” as defined in Rule 501 under Securities Act.

(d) Experience of Such Purchaser. Such Purchaser, either alone or together with its representatives, has such knowledge, sophistication and experience in business and financial matters so as to be capable of evaluating the merits and risks of the prospective investment in the Securities, and has so evaluated the merits and risks of such investment. Such Purchaser is able to bear the economic risk of an investment in the Securities and, at the present time, is able to afford a complete loss of such investment.

(e) General Solicitation. Such Purchaser is not purchasing the Securities as a result of any advertisement, article, notice or other communication regarding the Securities published in any newspaper, magazine or similar media or broadcast over television or radio or presented at any seminar or any other general solicitation or general advertisement.

(f) Access to Information. Such Purchaser acknowledges that it has had the opportunity to review the Transaction Documents (including all exhibits and schedules thereto) and the SEC Reports and has been afforded (i) the opportunity to ask such questions as it has deemed necessary of, and to receive answers from, representatives of the Company concerning the terms and conditions of the offering of the Securities and the merits and risks of investing in the Securities; (ii) access to information about the Company and its financial condition, results of operations, business, properties, management and prospects sufficient to enable it to evaluate its investment; and (iii) the opportunity to obtain such additional information that the Company possesses or can acquire without unreasonable effort or expense that is necessary to make an informed investment decision with respect to the investment.

(g) Certain Transactions and Confidentiality. Other than consummating the transactions contemplated hereunder, such Purchaser has not directly or indirectly, nor has any Person acting on behalf of or pursuant to any understanding with such Purchaser,

executed any purchases or sales, including Short Sales, of the securities of the Company during the period commencing from the time that such Purchaser first received a term sheet (written or oral) from the Company or any other Person representing the Company setting forth the material terms of the transactions contemplated hereunder and ending immediately prior to the execution hereof. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the representation set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement. Other than to other Persons party to this Agreement, such Purchaser has maintained the confidentiality of all disclosures made to it in connection with this transaction (including the existence and terms of this transaction). Notwithstanding the foregoing, for avoidance of doubt, nothing contained herein shall constitute a representation or warranty, or preclude any actions, with respect to the identification of the availability of, or securing of, available shares to borrow in order to effect short sales or similar transactions in the future.

#### **ARTICLE IV. OTHER AGREEMENTS OF THE PARTIES**

##### Transfer Restrictions.

(a) The Securities may only be disposed of in compliance with state and federal securities laws. In connection with any transfer of Securities other than pursuant to an effective registration statement or Rule 144, to the Company or to an Affiliate of a Purchaser or in connection with a pledge as contemplated in Section 4.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor and reasonably acceptable to the Company, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the Securities Act. As a condition of transfer, any such transferee shall agree in writing to be bound by the terms of this Agreement and the Registration Rights Agreement and shall have the rights of a Purchaser under this Agreement and the Registration Rights Agreement.

(b) The Purchasers agree to the imprinting, so long as is required by this Section 4.1, of a legend on any of the Securities in the following form:

THIS SECURITY HAS NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR

PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS SECURITY MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT WITH A REGISTERED BROKER-DEALER OR OTHER LOAN WITH A FINANCIAL INSTITUTION THAT IS AN "ACCREDITED INVESTOR" AS DEFINED IN RULE 501(a) UNDER THE SECURITIES ACT OR OTHER LOAN SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that a Purchaser may from time to time pledge pursuant to a bona fide margin agreement with a registered broker-dealer or grant a security interest in some or all of the Securities to a financial institution that is an "accredited investor" as defined in Rule 501(a) under the Securities Act and who agrees to be bound by the provisions of this Agreement and the Registration Rights Agreement and, if required under the terms of such arrangement, such Purchaser may transfer pledged or secured Securities to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval of the Company and no legal opinion of legal counsel of the pledgee, secured party or pledgor shall be required in connection therewith. Further, no notice shall be required of such pledge. At the appropriate Purchaser's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities may reasonably request in connection with a pledge or transfer of the Securities, including, if the Securities are subject to registration pursuant to the Registration Rights Agreement, the preparation and filing of any required prospectus supplement under Rule 424(b)(3) under the Securities Act or other applicable provision of the Securities Act to appropriately amend the list of Selling Stockholders (as defined in the Registration Rights Agreement) thereunder.

(c) Certificates evidencing the Shares shall not contain any legend (including the legend set forth in Section 4.1(b) hereof), (i) while a registration statement covering the resale of such security is effective under the Securities Act, (ii) following any sale of such Shares pursuant to Rule 144 or pursuant to a Registration Statement, (iii) if such Shares are eligible for sale under Rule 144, without the requirement for the Company to be in compliance with the current public information required under Rule 144 as to such Securities and without volume or manner-of-sale restrictions, or (iv) if such legend is not required under applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the staff of the Commission). The Company shall cause its counsel to issue a legal opinion to the Transfer Agent promptly after such time if required by the Transfer Agent to effect the removal of the legend hereunder. The Company agrees that, at such time as such legend is no longer required under this Section 4.1(c), it will, no later than three Trading Days following the delivery by a Purchaser to the Transfer Agent of a certificate representing Shares issued with a restrictive legend, together with such documents or instruments as may be required by the Transfer Agent (such third Trading Day, the "Legend Removal Date"), deliver or cause



to be delivered to such Purchaser a certificate representing such shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to the Transfer Agent that enlarge the restrictions on transfer set forth in this Section 4. Certificates for Securities subject to legend removal hereunder shall be transmitted by the Transfer Agent to the Purchaser by crediting the account of the Purchaser's prime broker with the Depository Trust Company System as directed by such Purchaser.

(d) Each Purchaser, severally and not jointly with the other Purchasers, agrees that such Purchaser will sell any Securities pursuant to either the registration requirements of the Securities Act, including any applicable prospectus delivery requirements, or an exemption therefrom, and that if Securities are sold pursuant to a Registration Statement, they will be sold in compliance with the plan of distribution set forth therein, and acknowledges that the removal of the restrictive legend from certificates representing Securities as set forth in this Section 4.1 is predicated upon the Company's reliance upon this understanding.

#### 4.3 Furnishing of Information; Public Information.

(a) Until the earliest of the time that no Purchaser owns Securities, the Company covenants to maintain the registration of the Common Stock under Section 12(b) or 12(g) of the Exchange Act and to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the Exchange Act even if the Company is not then subject to the reporting requirements of the Exchange Act.

(b) At any time during the period commencing from the six (6) month anniversary of the date hereof and ending at such time that all of the Securities may be sold without the requirement for the Company to be in compliance with Rule 144(c)(1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company (i) shall fail for any reason to satisfy the current public information requirement under Rule 144(c) or (ii) has ever been an issuer described in Rule 144 (i) (1)(i) or becomes such an issuer in the future, and the Company shall fail to satisfy any condition set forth in Rule 144(i)(2) (a "Public Information Failure") then, in addition to such Purchaser's other available remedies, the Company shall pay to a Purchaser, in cash, as partial liquidated damages and not as a penalty, by reason of any such delay in or reduction of its ability to sell the Securities, an amount in cash equal to one percent (1.0%) of the aggregate Subscription Amount of such Purchaser's Securities on the day of a Public Information Failure and on every thirtieth (30<sup>th</sup>) day (pro rated for periods totaling less than thirty days) thereafter until the earlier of (a) the date such Public Information Failure is cured and (b) such time that such public information is no longer required for the Purchasers to transfer the Underlying Shares pursuant to Rule 144, up to a maximum of three percent (3%) of the aggregate Subscription Amount of such Purchaser's Securities on the day of a Public Information Failure. The payments to which a Purchaser shall be entitled pursuant to this Section 4.2(b) are referred to herein as "Public Information Failure Payments."

Public Information Failure Payments shall be paid on the earlier of (i) the last day of the calendar month during which such Public Information Failure Payments are incurred and (ii) the third (3<sup>rd</sup>) Business Day after the event or failure giving rise to the Public Information Failure Payments is cured. In the event the Company fails to make Public Information Failure Payments in a timely manner, such Public Information Failure Payments shall bear interest at the rate of 1.5% per month (prorated for partial months) until paid in full. Nothing herein shall limit such Purchaser's right to pursue actual damages for the Public Information Failure, and such Purchaser shall have the right to pursue all remedies available to it at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief.

#### 4.4 Intentionally Omitted.

4.5 Securities Laws Disclosure; Publicity. The Company shall no later than 9:30 a.m. (New York City time) on the 4<sup>th</sup> Trading Day immediately after the Closing Date, issue a Current Report on Form 8-K, disclosing the material terms of the transactions contemplated hereby. From and after the issuance of such Current Report on Form 8-K to be filed in accordance with clause (i) of the preceding sentence, the Company represents to the Purchasers that it shall have publicly disclosed all material, non-public information delivered to any of the Purchasers by the Company or any of its respective officers, directors, employees or agents in connection with the transactions contemplated by the Transaction Documents. The Company and each Purchaser shall consult with each other in issuing any other press releases with respect to the transactions contemplated hereby, and neither the Company nor any Purchaser shall issue any such press release nor otherwise make any such public statement without the prior consent of the Company, with respect to any press release of any Purchaser, or without the prior consent of each Purchaser, with respect to any press release of the Company, which consent shall not unreasonably be withheld or delayed, except if such disclosure is required by law, in which case the disclosing party shall promptly provide the other party with prior notice of such public statement or communication. Notwithstanding the foregoing, the Company shall not publicly disclose the name of any Purchaser or its investment advisor, or include the name of any Purchaser or its investment advisor in any filing with the Commission or any regulatory agency or Trading Market, without the prior written consent of such Purchaser, except: (a) as required by federal securities law in connection with (i) any registration statement contemplated by the Registration Rights Agreement and (ii) the filing of final Transaction Documents with the Commission and (b) to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Purchasers with prior notice of such disclosure permitted under this clause (b).

4.6 Shareholder Rights Plan. No claim will be made or enforced by the Company or, with the consent of the Company, any other Person, that any Purchaser is an "acquiring person" under any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or similar anti-takeover plan or arrangement in effect or hereafter adopted by the Company, or that any Purchaser could be deemed to trigger the provisions of any such plan or arrangement, by virtue of receiving Securities under the Transaction Documents.

4.7 Non-Public Information. Except with respect to the material terms and conditions of the transactions contemplated by the Transaction Documents, which shall be disclosed pursuant to Section 4.4, the Company covenants and agrees that neither it, nor any other Person acting on its behalf will provide any Purchaser or its agents or counsel with any information that constitutes, or the Company reasonably believes constitutes, material non-public information, unless prior thereto such Purchaser shall have consented to the receipt of such information and agreed with the Company to keep such information confidential. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company. To the extent that the Company delivers any material, non-public information to a Purchaser without such Purchaser's consent, the Company hereby covenants and agrees that such Purchaser shall not have any duty of confidentiality to Company or any of its officers, directors, agents, employees or Affiliates, or a duty to the Company or any of its officers, directors, agents, employees or Affiliates not to trade on the basis of, such material, non-public information, provided that the Purchaser shall remain subject to applicable law. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains, material, non-public information regarding the Company, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K. The Company understands and confirms that each Purchaser shall be relying on the foregoing covenant in effecting transactions in securities of the Company.

4.8 Use of Proceeds. The Company shall use the net proceeds from the sale of the Securities hereunder for working capital purposes and shall not use such proceeds for: (a) the redemption of any Common Stock or Common Stock Equivalents or (b) the settlement of any outstanding litigation.

4.9 Indemnification of Purchasers. Subject to the provisions of this Section 4.8, the Company will indemnify and hold each Purchaser and its directors, officers, shareholders, members, partners, employees and agents (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title), each Person who controls such Purchaser (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, shareholders, agents, members, partners or employees (and any other Persons with a functionally equivalent role of a Person holding such titles notwithstanding a lack of such title or any other title) of such controlling persons (each, a "Purchaser Party") harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation that any such Purchaser Party may suffer or incur as a result of or relating to (a) any breach of any of the representations, warranties, covenants or agreements made by the Company in this Agreement or in the other Transaction Documents or (b) any action instituted against the Purchaser Parties in any capacity, or any of them or their respective Affiliates, by any stockholder of the Company who is not an Affiliate of such Purchaser Parties, with respect to any of the transactions contemplated by the Transaction Documents (unless such action is based upon a breach of such Purchaser Party's representations, warranties or covenants under the Transaction Documents or any agreements or understandings such Purchaser Parties may have with any such stockholder or any violations by such Purchaser Parties of state or federal securities laws or any conduct by

such Purchaser Parties which constitutes fraud, gross negligence, willful misconduct or malfeasance). If any action shall be brought against any Purchaser Party in respect of which indemnity may be sought pursuant to this Agreement, such Purchaser Party shall promptly notify the Company in writing, and the Company shall have the right to assume the defense thereof with counsel of its own choosing reasonably acceptable to the Purchaser Party. Any Purchaser Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Purchaser Party except to the extent that (i) the employment thereof has been specifically authorized by the Company in writing, (ii) the Company has failed after a reasonable period of time to assume such defense and to employ counsel or (iii) in such action there is, in the reasonable opinion of such separate counsel, a material conflict on any material issue between the position of the Company and the position of such Purchaser Party, in which case the Company shall be responsible for the reasonable fees and expenses of no more than one such separate counsel. The Company will not be liable to any Purchaser Party under this Agreement (y) for any settlement by a Purchaser Party effected without the Company's prior written consent, which shall not be unreasonably withheld or delayed; or (z) to the extent, but only to the extent that a loss, claim, damage or liability is attributable to any Purchaser Party's breach of any of the representations, warranties, covenants or agreements made by such Purchaser Party in this Agreement or in the other Transaction Documents.

4.10 Reservation of Common Stock. As of the date hereof, the Company has reserved and the Company shall continue to reserve and keep available at all times, free of preemptive rights, a sufficient number of shares of Common Stock for the purpose of enabling the Company to issue Shares pursuant to this Agreement

4.11 Listing of Common Stock. The Company hereby agrees to use best efforts to maintain the listing or quotation of the Common Stock on the Trading Market on which it is currently listed, and concurrently with the Closing, if required, the Company shall apply to list or quote all of the Shares on such Trading Market. The Company further agrees, if the Company applies to have the Common Stock traded on any other Trading Market, it will then include in such application all of the Shares, and will take such other action as is necessary to cause all of the Shares to be listed on such other Trading Market as promptly as possible. The Company will then take all action reasonably necessary to continue the listing or quotation and trading of its Common Stock on a Trading Market and will comply in all respects with the Company's reporting, filing and other obligations under the bylaws or rules of the Trading Market. The Company agrees to maintain the eligibility of the Common Stock for electronic transfer through the Depository Trust Company or another established clearing corporation, including, without limitation, by timely payment of fees to the Depository Trust Company or such other established clearing corporation in connection with such electronic transfer.

4.12 Equal Treatment of Purchasers. No consideration (including any modification of any Transaction Document) shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of any of the Transaction Documents unless the same consideration is also offered to all of the parties to the Transaction Documents. For clarification purposes, this provision constitutes a separate right granted to each Purchaser by the Company

and negotiated separately by each Purchaser, and is intended for the Company to treat the Purchasers as a class and shall not in any way be construed as the Purchasers acting in concert or as a group with respect to the purchase, disposition or voting of Securities or otherwise.

4.13 Certain Transactions and Confidentiality. Each Purchaser, severally and not jointly with the other Purchasers, covenants that neither it, nor any Affiliate acting on its behalf or pursuant to any understanding with it will execute any purchases or sales, including Short Sales, of any of the Company's securities during the period commencing with the Discussion Time and ending at such time the transactions contemplated by this Agreement are first publicly announced as described in Section 4.4.

Each Purchaser, severally and not jointly with the other Purchasers, covenants that until such time as the transactions contemplated by this Agreement are publicly disclosed by the Company as described in Section 4.4, such Purchaser will maintain the confidentiality of the existence and terms of this transaction and the information included in the Transaction Documents and the Disclosure Schedules. Notwithstanding the foregoing, and notwithstanding anything contained in this Agreement to the contrary, the Company expressly acknowledges and agrees that (i) no Purchaser makes any representation, warranty or covenant hereby that it will not engage in effecting transactions in any securities of the Company after the time that the transactions contemplated by this Agreement are first publicly announced pursuant to Section 4.4, (ii) no Purchaser shall be restricted or prohibited from effecting any transactions in any securities of the Company in accordance with applicable securities laws from and after the time that the transactions contemplated by this Agreement are first publicly announced as described in Section 4.4 and (iii) no Purchaser shall have any duty of confidentiality to the Company or its subsidiaries with respect to the transactions contemplated by this Agreement after the issuance of the Current Report on Form 8-K as described in clause (i) of the first sentence of Section 4.4. Notwithstanding the foregoing, in the case of a Purchaser that is a multi-managed investment vehicle whereby separate portfolio managers manage separate portions of such Purchaser's assets and the portfolio managers have no direct knowledge of the investment decisions made by the portfolio managers managing other portions of such Purchaser's assets, the covenant set forth above shall only apply with respect to the portion of assets managed by the portfolio manager that made the investment decision to purchase the Securities covered by this Agreement.

4.14 Form D; Blue Sky Filings. The Company agrees to timely file a Form D with respect to the Securities as required under Regulation D and to provide a copy thereof, promptly upon request of any Purchaser. The Company shall take such action as the Company shall reasonably determine is necessary in order to obtain an exemption for, or to qualify the Securities for, sale to the Purchasers at the Closing under applicable securities or "Blue Sky" laws of the states of the United States, and shall provide evidence of such actions promptly upon request of any Purchaser.

4.15 Delivery of Securities After Closing. The Company shall deliver, or cause to be delivered, the respective Securities purchased by each Purchaser to such Purchaser within two (2) Trading Days of the Closing Date.

**ARTICLE V.  
MISCELLANEOUS**

5.1 Termination. This Agreement may be terminated by any Purchaser, as to such Purchaser's obligations hereunder only and without any effect whatsoever on the obligations between the Company and the other Purchasers, by written notice to the other parties, if the Closing has not been consummated on or before the fifth (5<sup>th</sup>) Trading Day following the date hereof, provided, however, that such termination will not affect the right of any party to sue for any breach by the other party (or parties).

5.2 Fees and Expenses. Except as expressly set forth in the Transaction Documents to the contrary, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of this Agreement. The Company shall pay all Transfer Agent fees, stamp taxes and other taxes and duties levied in connection with the delivery of any Securities to the Purchasers.

5.3 Entire Agreement. The Transaction Documents, together with the exhibits and schedules thereto, contain the entire understanding of the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, oral or written, with respect to such matters, which the parties acknowledge have been merged into such documents, exhibits and schedules.

5.4 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of: (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment as set forth on the signature pages attached hereto at or prior to 5:30 p.m. (New York City time) on a Trading Day, (b) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number or email attachment as set forth on the signature pages attached hereto on a day that is not a Trading Day or later than 5:30 p.m. (New York City time) on any Trading Day, (c) the second (2<sup>nd</sup>) Trading Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as set forth on the signature pages attached hereto. To the extent that any notice provided pursuant to any Transaction Document constitutes, or contains material, non-public information regarding the Company, the Company shall simultaneously file such notice with the Commission pursuant to a Current Report on Form 8-K.

5.5 Amendments; Waivers. No provision of this Agreement may be waived, modified, supplemented or amended except in a written instrument signed, in the case of an amendment, by the Company and the Purchasers holding at least a majority in interest of the Shares then outstanding or, in the case of a waiver, by the party against whom enforcement of any such waived provision is sought. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or

requirement hereof, nor shall any delay or omission of any party to exercise any right hereunder in any manner impair the exercise of any such right.

5.6 Headings. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

5.7 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and permitted assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of each Purchaser (other than by merger). Any Purchaser may assign any or all of its rights under this Agreement to any Person to whom such Purchaser assigns or transfers any Securities, provided such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions of the Transaction Documents that apply to the "Purchasers."

5.8 No Third-Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective successors and permitted assigns and is not for the benefit of, nor may any provision hereof be enforced by, any other Person, except as otherwise set forth in Section 4.8.

5.9 Governing Law. All questions concerning the construction, validity, enforcement and interpretation of the Transaction Documents shall be governed by and construed and enforced in accordance with the internal laws of the State of New York, without regard to the principles of conflicts of law thereof. Each party agrees that all legal Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Agreement and any other Transaction Documents (whether brought against a party hereto or its respective affiliates, directors, officers, shareholders, partners, members, employees or agents) shall be commenced exclusively in the state and federal courts sitting in the City of New York. Each party hereby irrevocably submits to the exclusive jurisdiction of the state and federal courts sitting in the City of New York, Borough of Manhattan for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Action or Proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such Action or Proceeding is improper or is an inconvenient venue for such Proceeding. Each party hereby irrevocably waives personal service of process and consents to process being served in any such Action or Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any other manner permitted by law. If any party shall commence an Action or Proceeding to enforce any provisions of the Transaction Documents, then, in addition to the obligations of the Company under Section 4.10, the prevailing party in such Action or Proceeding shall be reimbursed by the non-prevailing party for its reasonable attorneys' fees and other costs and expenses incurred with the investigation, preparation and prosecution of such Action or Proceeding.

5.10 Survival. The representations and warranties contained herein shall survive the Closing and the delivery of the Securities for the applicable statute of limitations.

5.11 Execution. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

5.12 Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

5.13 Rescission and Withdrawal Right. Notwithstanding anything to the contrary contained in (and without limiting any similar provisions of) any of the other Transaction Documents, whenever any Purchaser exercises a right, election, demand or option under a Transaction Document and the Company does not timely perform its related obligations within the periods therein provided, then such Purchaser may rescind or withdraw, in its sole discretion from time to time upon written notice to the Company, any relevant notice, demand or election in whole or in part without prejudice to its future actions and rights.

5.14 Replacement of Securities. If any certificate or instrument evidencing any Securities is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation thereof (in the case of mutilation), or in lieu of and substitution therefor, a new certificate or instrument, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction. The applicant for a new certificate or instrument under such circumstances shall also pay any reasonable third-party costs (including customary indemnity) associated with the issuance of such replacement Securities.

5.15 Remedies. In addition to being entitled to exercise all rights provided herein or granted by law, including recovery of damages, each of the Purchasers and the Company will be entitled to specific performance under the Transaction Documents. The parties agree that monetary damages may not be adequate compensation for any loss incurred by reason of any breach of obligations contained in the Transaction Documents and hereby agrees to waive and not to assert in any action for specific performance of any such obligation the defense that a remedy at law would be adequate.



5.16 Payment Set Aside. To the extent that the Company makes a payment or payments to any Purchaser pursuant to any Transaction Document or a Purchaser enforces or exercises its rights thereunder, and such payment or payments or the proceeds of such enforcement or exercise or any part thereof are subsequently invalidated, declared to be fraudulent or preferential, set aside, recovered from, disgorged by or are required to be refunded, repaid or otherwise restored to the Company, a trustee, receiver or any other person under any law (including, without limitation, any bankruptcy law, state or federal law, common law or equitable cause of action), then to the extent of any such restoration the obligation or part thereof originally intended to be satisfied shall be revived and continued in full force and effect as if such payment had not been made or such enforcement or setoff had not occurred.

5.17 Independent Nature of Purchasers' Obligations and Rights. The obligations of each Purchaser under any Transaction Document are several and not joint with the obligations of any other Purchaser, and no Purchaser shall be responsible in any way for the performance or non-performance of the obligations of any other Purchaser under any Transaction Document. Nothing contained herein or in any other Transaction Document, and no action taken by any Purchaser pursuant thereto, shall be deemed to constitute the Purchasers as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Purchasers are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated by the Transaction Documents. Each Purchaser shall be entitled to independently protect and enforce its rights, including, without limitation, the rights arising out of this Agreement or out of the other Transaction Documents, and it shall not be necessary for any other Purchaser to be joined as an additional party in any proceeding for such purpose. Each Purchaser has been represented by its own separate legal counsel in their review and negotiation of the Transaction Documents. The Company has elected to provide all Purchasers with the same terms and Transaction Documents for the convenience of the Company and not because it was required or requested to do so by the Purchasers.

5.18 Liquidated Damages. The Company's obligations to pay any partial liquidated damages or other amounts owing under the Transaction Documents is a continuing obligation of the Company and shall not terminate until all unpaid partial liquidated damages and other amounts have been paid notwithstanding the fact that the instrument or security pursuant to which such partial liquidated damages or other amounts are due and payable shall have been canceled.

5.19 Saturdays, Sundays, Holidays, etc. If the last or appointed day for the taking of any action or the expiration of any right required or granted herein shall not be a Business Day, then such action may be taken or such right may be exercised on the next succeeding Business Day.

5.20 Construction. The parties agree that each of them and/or their respective counsel has reviewed and had an opportunity to revise the Transaction Documents and, therefore, the normal rule of construction to the effect that any ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of the Transaction Documents or any amendments hereto. In addition, each and every reference to share prices and shares of Common

Stock in any Transaction Document shall be subject to adjustment for reverse and forward stock splits, stock dividends, stock combinations and other similar transactions of the Common Stock that occur after the date of this Agreement.

**5.21 WAIVER OF JURY TRIAL. IN ANY ACTION, SUIT, OR PROCEEDING IN ANY JURISDICTION BROUGHT BY ANY PARTY AGAINST ANY OTHER PARTY, THE PARTIES EACH KNOWINGLY AND INTENTIONALLY, TO THE GREATEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY ABSOLUTELY, UNCONDITIONALLY, IRREVOCABLY AND EXPRESSLY WAIVES FOREVER TRIAL BY JURY.**

*(Signature Pages Follow)*

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BOS 47927267v2

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IN WITNESS WHEREOF, the parties hereto have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

PARKERVISION, INC.

Address for Notice:

9446 Philips Highway

Suite 5A

Jacksonville, FL 32256

Fax: (904) 732-6100

By: \_\_\_\_\_

Name: Cynthia Poehlman

Title: Chief Financial Officer

With a copy to (which shall not constitute notice):

Graubard Miller

The Chrysler Building

405 Lexington Avenue, 11<sup>th</sup> Floor

New York, NY 10174

Attention: David Alan Miller, Esq.

Fax: (212) 818-8881

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

[PURCHASER SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the undersigned have caused this Securities Purchase Agreement to be duly executed by their respective authorized signatories as of the date first indicated above.

Name of Purchaser:

*Signature of Authorized Signatory of Purchaser:*

Name of Authorized Signatory:

Title of Authorized Signatory:

Email Address of Authorized Signatory:

Facsimile Number of Authorized Signatory:

Address for Notice of Purchaser:

Address for Delivery of Securities for Purchaser (if not same as address for notice):

Book entry at American Stock Transfer & Trust

Subscription Amount: \$ \_\_\_\_\_

Shares: \_\_\_\_\_

[PURCHASER SIGNATURE PAGES CONTINUE]

## REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "Agreement") is made and entered into as of March 13, 2020, between ParkerVision, Inc., a Florida corporation (the "Company"), and each of the several purchasers signatory hereto (each such purchaser, a "Purchaser" and, collectively, the "Purchasers").

This Agreement is made pursuant to the Securities Purchase Agreement, dated as of the date hereof, between the Company and each Purchaser (the "Purchase Agreement").

The Company and each Purchaser hereby agrees as follows:

1. Definitions.

**Capitalized terms used and not otherwise defined herein that are defined in the Purchase Agreement shall have the meanings given such terms in the Purchase Agreement.**

As used in this Agreement, the following terms shall have the following meanings:

"Advice" shall have the meaning set forth in Section 6(d).

"Effectiveness Date" means, with respect to the Initial Registration Statement required to be filed hereunder, the 120<sup>th</sup> calendar day following the date hereof (or, in the event of a "full review" by the Commission, the 180<sup>th</sup> calendar day following the date hereof) and with respect to any additional Registration Statements which may be required pursuant to Section 2(c) or Section 3(c), the 90<sup>th</sup> calendar day following the date on which an additional Registration Statement is required to be filed hereunder (or, in the event of a "full review" by the Commission, the 180<sup>th</sup> calendar day following the date such additional Registration Statement is required to be filed hereunder); provided, however, that in the event the Company is notified by the Commission that one or more of the above Registration Statements will not be reviewed or is no longer subject to further review and comments, the Effectiveness Date as to such Registration Statement shall be the fifth Trading Day following the date on which the Company is so notified if such date precedes the dates otherwise required above, provided, further, if such Effectiveness Date falls on a day that is not a Trading Day, then the Effectiveness Date shall be the next succeeding Trading Day.

"Effectiveness Period" shall have the meaning set forth in Section 2(a).

"Event" shall have the meaning set forth in Section 2(d).

"Event Date" shall have the meaning set forth in Section 2(d).

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“Filing Date” means, with respect to the Initial Registration Statement required hereunder, the 60<sup>th</sup> calendar day following the date hereof and, with respect to any additional Registration Statements which may be required pursuant to Section 2(c) or Section 3(c), the earliest practical date on which the Company is permitted by SEC Guidance to file such additional Registration Statement related to the Registrable Securities.

“Holder” or “Holders” means the holder or holders, as the case may be, from time to time of Registrable Securities.

“Indemnified Party” shall have the meaning set forth in Section 5(c).

“Indemnifying Party” shall have the meaning set forth in Section 5(c).

“Initial Registration Statement” means the initial Registration Statement filed pursuant to this Agreement.

“Losses” shall have the meaning set forth in Section 5(a).

“Plan of Distribution” shall have the meaning set forth in Section 2(a).

“Prospectus” means the prospectus included in a Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A promulgated by the Commission pursuant to the Securities Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by a Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

“Registrable Securities” means, as of any date of determination, (a) all Shares and (b) any securities issued or then issuable upon any stock split, dividend or other distribution, recapitalization or similar event with respect to the foregoing; provided, however, that any such Registrable Securities shall cease to be Registrable Securities (and the Company shall not be required to maintain the effectiveness of any, or file another, Registration Statement hereunder with respect thereto) if (a) a Registration Statement with respect to the sale of such Registrable Securities is declared effective by the Commission under the Securities Act and such Registrable Securities have been disposed of by the Holder in accordance with such effective Registration Statement, (b) such Registrable Securities have been previously sold in accordance with Rule 144, or (c) such securities become eligible for resale without volume or manner-of-sale restrictions and without current public information pursuant to Rule 144 as set forth in a written opinion letter to such effect, addressed, delivered and acceptable

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to the Transfer Agent and the affected Holders, as reasonably determined by the Company, upon the advice of counsel to the Company.

“Registration Statement” means any registration statement required to be filed hereunder pursuant to Section 2(a) and any additional registration statements contemplated by Section 2(c) or Section 3(c), including (in each case) the Prospectus, amendments and supplements to any such registration statement or Prospectus, including pre- and post-effective amendments, all exhibits thereto, and all material incorporated by reference or deemed to be incorporated by reference in any such registration statement.

“Rule 415” means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Rule 424” means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended or interpreted from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same purpose and effect as such Rule.

“Selling Stockholder Questionnaire” shall have the meaning set forth in Section 3(a).

“SEC Guidance” means (i) any publicly-available written or oral guidance of the Commission staff, or any comments, requirements or requests of the Commission staff and (ii) the Securities Act and the rules and regulations promulgated thereunder.

2. Shelf Registration.

- (a) On or prior to each Filing Date, the Company shall prepare and file with the Commission a Registration Statement covering the resale of all of the Registrable Securities that are not then registered on an effective Registration Statement for an offering to be made on a continuous basis pursuant to Rule 415. Each Registration Statement filed hereunder shall be on Form S-1 and shall contain (unless otherwise directed by at least 85% in interest of the Holders) substantially the “Plan of Distribution” attached hereto as Annex A; provided, however, that no Holder shall be required to be named as an “underwriter” without such Holder’s express prior written consent; provided, further, that in the event the Commission requires that a Holder be named as an “underwriter” and such Holder does not so consent, the Company shall not be required to include such Holder’s Registrable Securities in a Registration Statement, notwithstanding any provision to the contrary contained herein. Subject to the terms of this Agreement, the Company shall use its best efforts to cause a Registration Statement filed under this Agreement (including, without limitation, under Section 3(c)) to be declared
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effective under the Securities Act as promptly as possible after the filing thereof, but in any event no later than the applicable Effectiveness Date, and shall use its best efforts to keep such Registration Statement continuously effective under the Securities Act until all Registrable Securities covered by such Registration Statement (i) have been sold, thereunder or pursuant to Rule 144, or (ii) may be sold without volume or manner-of-sale restrictions pursuant to Rule 144 and without the requirement for the Company to be in compliance with the current public information requirement under Rule 144, as determined by the counsel to the Company pursuant to a written opinion letter to such effect, addressed and acceptable to the Transfer Agent and the affected Holders (the "Effectiveness Period"). The Company shall request effectiveness of a Registration Statement as of 5:00 p.m. Eastern Time on a Trading Day. The Company shall immediately notify the Holders via facsimile or by e-mail of the effectiveness of a Registration Statement on the same Trading Day that the Company telephonically confirms effectiveness with the Commission, which shall be the date requested for effectiveness of such Registration Statement. The Company shall, by 9:30 a.m. Eastern Time on the Trading Day after the effective date of such Registration Statement, file a final Prospectus with the Commission as required by Rule 424. Failure to so notify the Holder within one (1) Trading Day of such notification of effectiveness or failure to file a final Prospectus as foresaid shall be deemed an Event under Section 2(d).

(b) Notwithstanding the registration obligations set forth in Section 2(a), if the Commission informs the Company that all of the Registrable Securities cannot, as a result of the application of Rule 415, be registered for resale as a secondary offering on a single registration statement, the Company agrees to promptly inform each of the Holders thereof and use its commercially reasonable efforts to file amendments to the Initial Registration Statement as required by the Commission, covering the maximum number of Registrable Securities permitted to be registered by the Commission, on Form S-1, subject to the provisions of Section 2(d) with respect to the payment of liquidated damages; provided, however, that prior to filing such amendment, the Company shall be obligated to use diligent efforts to advocate with the Commission for the registration of all of the Registrable Securities in accordance with the SEC Guidance, including without limitation, Compliance and Disclosure Interpretation 612.09.

(c) Notwithstanding any other provision of this Agreement and subject to the payment of liquidated damages pursuant to Section 2(d), if the Commission or any SEC Guidance sets forth a limitation on the number of Registrable Securities permitted to be registered on a particular Registration Statement as a secondary offering (and notwithstanding that the Company used diligent efforts to advocate with the Commission for the registration of all or a greater portion of Registrable Securities), unless otherwise directed in writing by a Holder as to its Registrable Securities, the number of Registrable Securities to be registered on such Registration Statement will be reduced as follows:

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- a. First, the Company shall reduce or eliminate any securities to be included by any Person other than a Holder;
- b. Second, the Company shall reduce Registrable Securities represented by Shares (applied, in the case that some Shares may be registered, to the Holders on a pro rata basis based on the total number of unregistered shares held by such Holders).

In the event of a cutback hereunder, the Company shall give the Holder at least five (5) Trading Days prior written notice along with the calculations as to such Holder's allotment. In the event the Company amends the Initial Registration Statement in accordance with the foregoing, the Company will use its best efforts to file with the Commission, as promptly as allowed by Commission or SEC Guidance provided to the Company or to registrants of securities in general, one or more registration statements on Form S-1 or such other form available to register for resale those Registrable Securities that were not registered for resale on the Initial Registration Statement, as amended.

(d) If: (i) the Initial Registration Statement is not filed on or prior to its Filing Date (if the Company files the Initial Registration Statement without affording the Holders the opportunity to review and comment on the same as required by Section 3(a) herein, the Company shall be deemed to have not satisfied this clause (i)), or (ii) the Company fails to file with the Commission a request for acceleration of a Registration Statement in accordance with Rule 461 promulgated by the Commission pursuant to the Securities Act, within five Trading Days of the date that the Company is notified (orally or in writing, whichever is earlier) by the Commission that such Registration Statement will not be "reviewed" or will not be subject to further review, or (iii) prior to the effective date of a Registration Statement, the Company fails to file a pre-effective amendment and otherwise respond in writing to comments made by the Commission in respect of such Registration Statement within ten (10) calendar days after the receipt of comments by or notice from the Commission that such amendment is required in order for such Registration Statement to be declared effective, or (iv) a Registration Statement registering for resale all of the Registrable Securities is not declared effective by the Commission by the Effectiveness Date of the Initial Registration Statement, or (v) after the effective date of a Registration Statement, such Registration Statement ceases for any reason to remain continuously effective as to all Registrable Securities included in such Registration Statement, or the Holders are otherwise not permitted to utilize the Prospectus therein to resell such Registrable Securities, for more than ten (10) consecutive calendar days or more than an aggregate of fifteen (15) calendar days (which need not be consecutive calendar days) during any 12-month period or (vi) any time during the period commencing from the six (6) month anniversary of the date hereof and ending at such time that all of the Registrable Securities may be sold without the requirement for the Company to be in compliance with

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Rule 144(c)(1) and otherwise without restriction or limitation pursuant to Rule 144, if the Company shall fail for any reason to satisfy the current public information requirement under Rule 144(c) (any such failure or breach being referred to as an “Event”, and for purposes of clauses (i), (iv) and (vi), the date on which such Event occurs, and for purpose of clause (ii) the date on which such five (5) Trading Day period is exceeded, and for purpose of clause (iii) the date which such ten (10) calendar day period is exceeded, and for purpose of clause (v) the date on which such ten (10) or fifteen (15) calendar day period, as applicable, is exceeded being referred to as “Event Date”), then except during any period of time in which the Holders may sell the Registrable Securities pursuant to Rule 144 without volume limitations, in addition to any other rights the Holders may have hereunder or under applicable law, on each such Event Date and on each monthly anniversary of each such Event Date (if the applicable Event shall not have been cured by such date) until the applicable Event is cured, the Company shall pay to each Holder an amount in cash, as liquidated damages and not as a penalty, equal to the product of 1.0% multiplied by the aggregate Subscription Amount paid by such Holder pursuant to the Purchase Agreement with respect to the Registrable Securities affected by such Event and held by such Holder on such Event Date and each monthly anniversary thereof, up to a maximum of 6.0% of the aggregate purchase price paid by such Holder pursuant to the Purchase Agreement for such Registrable Securities. If the Company fails to pay any liquidated damages pursuant to this Section in full within seven days after the date payable, the Company will pay interest thereon at a rate of 12% per annum (or such lesser maximum amount that is permitted to be paid by applicable law) to the Holder, accruing daily from the date such liquidated damages are due until such amounts, plus all such interest thereon, are paid in full. The liquidated damages pursuant to the terms hereof shall apply on a daily pro rata basis for any portion of a month prior to the cure of an Event.

(e) Notwithstanding anything to the contrary contained herein, in no event shall the Company be permitted to name any Holder or affiliate of a Holder as any underwriter without the prior written consent of such Holder; provided, however, that in the event the Commission requires that a Holder be named as an “underwriter” and such Holder does not so consent, the Company shall not be required to include such Holder’s Registrable Securities in a Registration Statement, notwithstanding any provision to the contrary contained herein.

3. Registration Procedures.

In connection with the Company’s registration obligations hereunder, the Company shall:

(a) Not less than two (2) Trading Days prior to the filing of each Registration Statement and not less than one (1) Trading Day prior to the filing of any related Prospectus or any amendment or supplement thereto (including any document that would be incorporated or deemed to be incorporated therein by

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reference), the Company shall (i) furnish to each Holder copies of all such documents proposed to be filed, which documents (other than those incorporated or deemed to be incorporated by reference) will be subject to the review of such Holders, and (ii) cause its officers and directors, counsel and independent registered public accountants to respond to such inquiries as shall be necessary, in the reasonable opinion of respective counsel to each Holder, to conduct a reasonable investigation within the meaning of the Securities Act. Notwithstanding the above, the Company shall not be obligated to provide the Holders advance copies of any universal shelf registration statement registering securities in addition to those required hereunder, or any Prospectus prepared thereto. The Company shall not file a Registration Statement or any such Prospectus or any amendments or supplements thereto to which the Holders of a majority of the Registrable Securities shall reasonably object in good faith, provided that, the Company is notified of such objection in writing no later than two (2) Trading Days after the Holders have been so furnished copies of a Registration Statement or one (1) Trading Day after the Holders have been so furnished copies of any related Prospectus or amendments or supplements thereto. Each Holder agrees to furnish to the Company a completed questionnaire in the form attached to this Agreement as Annex B (a "Selling Stockholder Questionnaire") on a date that is not less than two (2) Trading Days prior to the Filing Date or by the end of the fourth (4<sup>th</sup>) Trading Day following the date on which such Holder receives draft materials in accordance with this Section, whichever occurs first

(b) (i) Prepare and file with the Commission such amendments, including post-effective amendments, to a Registration Statement and the Prospectus used in connection therewith as may be necessary to keep a Registration Statement continuously effective as to the applicable Registrable Securities for the Effectiveness Period and prepare and file with the Commission such additional Registration Statements in order to register for resale under the Securities Act all of the Registrable Securities, (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement (subject to the terms of this Agreement), and, as so supplemented or amended, to be filed pursuant to Rule 424, (iii) respond as promptly as reasonably possible to any comments received from the Commission with respect to a Registration Statement or any amendment thereto and provide as promptly as reasonably possible to the Holders true and complete copies of all correspondence from and to the Commission relating to a Registration Statement (provided that, the Company shall excise any information contained therein which would constitute material non-public information regarding the Company or any of its Subsidiaries), and (iv) comply in all material respects with the applicable provisions of the Securities Act and the Exchange Act with respect to the disposition of all Registrable Securities covered by a Registration Statement during the applicable period in accordance (subject to the terms of this Agreement) with the intended methods of disposition by the Holders thereof set forth in such Registration Statement as so amended or in such Prospectus as so supplemented.

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(c) If during the Effectiveness Period, the number of Registrable Securities at any time exceeds 100% of the number of shares of Common Stock then registered in a Registration Statement, then the Company shall file as soon as reasonably practicable, but in any case prior to the applicable Filing Date, an additional Registration Statement covering the resale by the Holders of not less than the number of such Registrable Securities.

(d) Notify the Holders of Registrable Securities to be sold (which notice shall, pursuant to clauses (iii) through (vi) hereof, be accompanied by an instruction to suspend the use of the Prospectus until the requisite changes have been made) as promptly as reasonably possible (and, in the case of (i)(A) below, not less than one (1) Trading Day prior to such filing) and (if requested by any such Person) confirm such notice in writing no later than one (1) Trading Day following the day (i)(A) when a Prospectus or any Prospectus supplement or post-effective amendment to a Registration Statement is proposed to be filed, (B) when the Commission notifies the Company whether there will be a "review" of such Registration Statement and whenever the Commission comments in writing on such Registration Statement, and (C) with respect to a Registration Statement or any post-effective amendment, when the same has become effective, (ii) of any request by the Commission or any other federal or state governmental authority for amendments or supplements to a Registration Statement or Prospectus or for additional information, (iii) of the issuance by the Commission or any other federal or state governmental authority of any stop order suspending the effectiveness of a Registration Statement covering any or all of the Registrable Securities or the initiation of any Proceedings for that purpose, (iv) of the receipt by the Company of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose, (v) of the occurrence of any event or passage of time that makes the financial statements included in a Registration Statement ineligible for inclusion therein or any statement made in a Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to a Registration Statement, Prospectus or other documents so that, in the case of a Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, and (vi) of the occurrence or existence of any pending corporate development with respect to the Company that the Company believes may be material and that, in the determination of the Company, makes it not in the best interest of the Company to allow continued availability of a Registration Statement or Prospectus, provided, however, in no event shall any such notice contain any information which would constitute material, non-public information regarding the Company or any of its Subsidiaries.

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(e) Use its best efforts to avoid the issuance of, or, if issued, obtain the withdrawal of (i) any order stopping or suspending the effectiveness of a Registration Statement, or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any jurisdiction, at the earliest practicable moment.

(f) Furnish to each Holder, without charge, at least one conformed copy of each such Registration Statement and each amendment thereto, including financial statements and schedules, all documents incorporated or deemed to be incorporated therein by reference to the extent requested by such Person, and all exhibits to the extent requested by such Person (including those previously furnished or incorporated by reference) promptly after the filing of such documents with the Commission; provided, that any such item which is available on the EDGAR system (or successor thereto) need not be furnished in physical form.

(g) Subject to the terms of this Agreement, the Company hereby consents to the use of such Prospectus and each amendment or supplement thereto by each of the selling Holders in connection with the offering and sale of the Registrable Securities covered by such Prospectus and any amendment or supplement thereto, except after the giving of any notice pursuant to Section 3(d).

(h) The Company shall cooperate with any broker-dealer through which a Holder proposes to resell its Registrable Securities in effecting a filing with the FINRA Corporate Financing Department pursuant to FINRA Rule 5110, as requested by any such Holder, and the Company shall pay the filing fee required by such filing within two (2) Business Days of request therefor.

(i) Prior to any resale of Registrable Securities by a Holder, use its commercially reasonable efforts to register or qualify or cooperate with the selling Holders in connection with the registration or qualification (or exemption from the Registration or qualification) of such Registrable Securities for the resale by the Holder under the securities or Blue Sky laws of such jurisdictions within the United States as any Holder reasonably requests in writing, to keep each registration or qualification (or exemption therefrom) effective during the Effectiveness Period and to do any and all other acts or things reasonably necessary to enable the disposition in such jurisdictions of the Registrable Securities covered by each Registration Statement; provided, that, the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified, subject the Company to any material tax in any such jurisdiction where it is not then so subject or file a general consent to service of process in any such jurisdiction.

(j) If requested by a Holder, cooperate with such Holder to facilitate the timely preparation and delivery of certificates representing Registrable

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Securities to be delivered to a transferee pursuant to a Registration Statement, which certificates shall be free, to the extent permitted by the Purchase Agreement, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Holder may request.

(k) Upon the occurrence of any event contemplated by Section 3(d), as promptly as reasonably possible under the circumstances taking into account the Company's good faith assessment of any adverse consequences to the Company and its stockholders of the premature disclosure of such event, prepare a supplement or amendment, including a post-effective amendment, to a Registration Statement or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, neither a Registration Statement nor such Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. If the Company notifies the Holders in accordance with clauses (iii) through (vi) of Section 3(d) above to suspend the use of any Prospectus until the requisite changes to such Prospectus have been made, then the Holders shall suspend use of such Prospectus. The Company will use its best efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable. The Company shall be entitled to exercise its right under this Section 3(k) to suspend the availability of a Registration Statement and Prospectus, subject to the payment of liquidated damages otherwise required pursuant to Section 2(d), for a period not to exceed 60 calendar days (which need not be consecutive days) in any 12-month period.

(l) Comply with all applicable rules and regulations of the Commission.

(m) The Company shall use its best efforts to maintain eligibility for use of Form S1 (or any successor form thereto) for the registration of the resale of Registrable Securities.

(n) The Company may require each selling Holder to furnish to the Company a certified statement as to the number of shares of Common Stock beneficially owned by such Holder and, if required by the Commission, the natural persons thereof that have voting and dispositive control over the shares. During any periods that the Company is unable to meet its obligations hereunder with respect to the registration of the Registrable Securities solely because any Holder fails to furnish such information within three Trading Days of the Company's request, any liquidated damages that are accruing at such time as to such Holder only shall be tolled and any Event that may otherwise occur solely because of such delay shall be suspended as to such Holder only, until such information is delivered to the Company.

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4. Registration Expenses. All fees and expenses incident to the performance of or compliance with, this Agreement by the Company shall be borne by the Company whether or not any Registrable Securities are sold pursuant to a Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses of the Company's counsel and independent registered public accountants) (A) with respect to filings made with the Commission, (B) with respect to filings required to be made with any Trading Market on which the Common Stock is then listed for trading, (C) in compliance with applicable state securities or Blue Sky laws reasonably agreed to by the Company in writing (including, without limitation, fees and disbursements of counsel for the Company in connection with Blue Sky qualifications or exemptions of the Registrable Securities) and (D) if not previously paid by the Company in connection with an issuer filing under FINRA Rule 5110, with respect to any filing that may be required to be made by any broker through which a Holder intends to make sales of Registrable Securities with FINRA pursuant to FINRA Rule 5110, so long as the broker is receiving no more than a customary brokerage commission in connection with such sale, (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities), (iii) messenger, telephone and delivery expenses, (iv) fees and disbursements of counsel for the Company, (v) Securities Act liability insurance, if the Company so desires such insurance, and (vi) fees and expenses of all other Persons retained by the Company in connection with the consummation of the transactions contemplated by this Agreement. In addition, the Company shall be responsible for all of its internal expenses incurred in connection with the consummation of the transactions contemplated by this Agreement (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit and the fees and expenses incurred in connection with the listing of the Registrable Securities on any securities exchange as required hereunder. In no event shall the Company be responsible for any broker or similar commissions of any Holder or, except to the extent provided for in the Transaction Documents, any legal fees or other costs of the Holders.

5. Indemnification.

(a) Indemnification by the Company. The Company shall, notwithstanding any termination of this Agreement, indemnify and hold harmless each Holder, the officers, directors, members, partners, agents, brokers (including brokers who offer and sell Registrable Securities as principal as a result of a pledge or any failure to perform under a margin call of Common Stock), investment advisors and employees (and any other Persons with a functionally equivalent role of a Person holding such titles, notwithstanding a lack of such title or any other title) of each of them, each Person who controls any such Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, members, stockholders, partners, agents and employees (and any other Persons with a functionally equivalent role of a Person holding such titles, notwithstanding a lack of such title or any other title)

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of each such controlling Person, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable attorneys' fees) and expenses (collectively, "Losses"), as incurred, arising out of or relating to (1) any untrue or alleged untrue statement of a material fact contained in a Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading or (2) any violation or alleged violation by the Company of the Securities Act, the Exchange Act or any state securities law, or any rule or regulation thereunder, in connection with the performance of its obligations under this Agreement, except to the extent, but only to the extent, that (i) such untrue statements or omissions are based solely upon information regarding such Holder furnished in writing to the Company by such Holder expressly for use therein, or to the extent that such information relates to such Holder or such Holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such Holder expressly for use in a Registration Statement, such Prospectus or in any amendment or supplement thereto (it being understood that the Holder has approved Annex A hereto for this purpose) or (ii) in the case of an occurrence of an event of the type specified in Section 3(d)(iii)-(vi), the use by such Holder of an outdated, defective or otherwise unavailable Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated, defective or otherwise unavailable for use by such Holder and prior to the receipt by such Holder of the Advice contemplated in Section 6(d). The Company shall notify the Holders promptly of the institution, threat or assertion of any Proceeding arising from or in connection with the transactions contemplated by this Agreement of which the Company is aware. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of such indemnified person and shall survive the transfer of any Registrable Securities by any of the Holders in accordance with Section 6(h).

(b) Indemnification by Holders. Each Holder shall, severally and not jointly, indemnify and hold harmless the Company, its directors, officers, agents and employees, each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, to the extent arising out of or based solely upon: (x) such Holder's failure to comply with any applicable prospectus delivery requirements of the Securities Act through no fault of the Company or (y) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus, or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any

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Prospectus or supplement thereto, in light of the circumstances under which they were made) not misleading (i) to the extent, but only to the extent, that such untrue statement or omission is contained in any information so furnished in writing by such Holder to the Company expressly for inclusion in such Registration Statement or such Prospectus or (ii) to the extent, but only to the extent, that such information relates to such Holder's proposed method of distribution of Registrable Securities and was reviewed and expressly approved in writing by such Holder expressly for use in a Registration Statement (it being understood that the Holder has approved Annex A hereto for this purpose), such Prospectus or in any amendment or supplement thereto or (iii) in the case of an occurrence of an event of the type specified in Section 3(d)(iii)-(vi), to the extent, but only to the extent, related to the use by such Holder of an outdated, defective or otherwise unavailable Prospectus after the Company has notified such Holder in writing that the Prospectus is outdated, defective or otherwise unavailable for use by such Holder and prior to the receipt by such Holder of the Advice contemplated in Section 6(d). In no event shall the liability of any selling Holder under this Section 5(b) be greater in amount than the dollar amount of the net proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

(c) Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an "Indemnified Party"), such Indemnified Party shall promptly notify the Person from whom indemnity is sought (the "Indemnifying Party") in writing, and the Indemnifying Party shall have the right to assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all fees and expenses incurred in connection with defense thereof; provided, that, the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have materially and adversely prejudiced the Indemnifying Party.

An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses, (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding, or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and counsel to the Indemnified Party shall reasonably believe that a material conflict of interest is likely to exist if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, if such Indemnified Party notifies the Indemnifying Party in writing

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that it elects to employ separate counsel at the expense of the Indemnifying Party, the Indemnifying Party shall not have the right to assume the defense thereof and the reasonable fees and expenses of no more than one separate counsel shall be at the expense of the Indemnifying Party). The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent, which consent shall not be unreasonably withheld or delayed. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding.

Subject to the terms of this Agreement, all reasonable fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section) shall be paid to the Indemnified Party, as incurred, within ten Trading Days of written notice thereof to the Indemnifying Party; provided, that, the Indemnified Party shall promptly reimburse the Indemnifying Party for that portion of such fees and expenses applicable to such actions for which such Indemnified Party is finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) not to be entitled to indemnification hereunder.

(d) Contribution. If the indemnification under Section 5(a) or 5(b) is unavailable to an Indemnified Party or insufficient to hold an Indemnified Party harmless for any Losses, then each Indemnifying Party shall contribute to the amount paid or payable by such Indemnified Party, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and Indemnified Party in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in this Agreement, any reasonable attorneys' or other fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section was available to such party in accordance with its terms.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 5(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable

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considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 5(d), no Holder shall be required to contribute pursuant to this Section 5(d), in the aggregate, any amount in excess of the amount by which the net proceeds actually received by such Holder from the sale of the Registrable Securities subject to the Proceeding exceeds the amount of any damages that such Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

The indemnity and contribution agreements contained in this Section are in addition to any liability that the Indemnifying Parties may have to the Indemnified Parties.

6. Miscellaneous.

(a) Remedies. In the event of a breach by the Company or by a Holder of any of their respective obligations under this Agreement, each Holder or the Company, as the case may be, in addition to being entitled to exercise all rights granted by law and under this Agreement, including recovery of damages, shall be entitled to specific performance of its rights under this Agreement. Each of the Company and each Holder agrees that monetary damages would not provide adequate compensation for any losses incurred by reason of a breach by it of any of the provisions of this Agreement and hereby further agrees that, in the event of any action for specific performance in respect of such breach, it shall not assert or shall waive the defense that a remedy at law would be adequate.

(b) No Piggyback on Registrations; Prohibition on Filing Other Registration Statements. Except as set forth on Schedule 6(b) attached hereto, neither the Company nor any of its security holders (other than the Holders in such capacity pursuant hereto) may include securities of the Company in any Registration Statements other than the Registrable Securities. The Company shall not file any other registration statements until all Registrable Securities are registered pursuant to a Registration Statement that is declared effective by the Commission, provided that this Section 6(b) (i) shall not prohibit the Company from filing amendments to registration statements filed prior to the date of this Agreement and (ii) shall not prohibit the Company from filing a shelf registration statement on Form S-3 for a primary offering by the Company, provided that the Company makes no offering of securities pursuant to such shelf registration statement prior to the effective date of the Registration Statement required hereunder that includes all of the Registrable Securities.

(c) Compliance. Each Holder covenants and agrees that it will comply with the prospectus delivery requirements of the Securities Act as applicable to it (unless an exemption therefrom is available) in connection with sales of Registrable Securities pursuant to a Registration Statement.

(d) Discontinued Disposition. By its acquisition of Registrable Securities, each Holder agrees that, upon receipt of a notice from the Company of the occurrence of any event of the kind described in Section 3(d)(iii) through (vi), such Holder will

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forthwith discontinue disposition of such Registrable Securities under a Registration Statement until it is advised in writing (the "Advice") by the Company that the use of the applicable Prospectus (as it may have been supplemented or amended) may be resumed. The Company will use its best efforts to ensure that the use of the Prospectus may be resumed as promptly as is practicable. The Company agrees and acknowledges that any periods during which the Holder is required to discontinue the disposition of the Registrable Securities hereunder shall be subject to the provisions of Section 2(d).

(e) Piggy-Back Registrations. If, at any time during the Effectiveness Period, there is not an effective Registration Statement covering all of the Registrable Securities and the Company shall determine to prepare and file with the Commission a registration statement relating to an offering for its own account or the account of others under the Securities Act of any of its equity securities, other than on Form S-4 or Form S-8 (each as promulgated under the Securities Act) or their then equivalents relating to equity securities to be issued solely in connection with any acquisition of any entity or business or equity securities issuable in connection with the Company's stock option or other employee benefit plans, then the Company shall deliver to each Holder a written notice of such determination and, if within fifteen days after the date of the delivery of such notice, any such Holder shall so request in writing, the Company shall include in such registration statement all or any part of such Registrable Securities such Holder requests to be registered; provided, however, that the Company shall not be required to register any Registrable Securities pursuant to this Section 6(e) that are eligible for resale pursuant to Rule 144 (without volume restrictions or current public information requirements) promulgated by the Commission pursuant to the Securities Act or that are the subject of a then effective Registration Statement.

(f) Amendments and Waivers. The provisions of this Agreement, including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given, unless the same shall be in writing and signed by the Company and the Holders of a majority of the then outstanding Registrable Securities. If a Registration Statement does not register all of the Registrable Securities pursuant to a waiver or amendment done in compliance with the previous sentence, then the number of Registrable Securities to be registered for each Holder shall be reduced pro rata among all Holders and each Holder shall have the right to designate which of its Registrable Securities shall be omitted from such Registration Statement. Notwithstanding the foregoing, a waiver or consent to depart from the provisions hereof with respect to a matter that relates exclusively to the rights of a Holder or some Holders and that does not directly or indirectly affect the rights of other Holders may be given only by such Holder or Holders of all of the Registrable Securities to which such waiver or consent relates; provided, however, that the provisions of this sentence may not be amended, modified, or supplemented except in accordance with the provisions of the first sentence of this Section 6(f). No consideration shall be offered or paid to any Person to amend or consent to a waiver or modification of any provision of this Agreement unless the same consideration also is offered to all of the parties to this Agreement.

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(g) Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be delivered as set forth in the Purchase Agreement.

(h) Successors and Assigns. This Agreement shall inure to the benefit of and be binding upon the successors and permitted assigns of each of the parties and shall inure to the benefit of each Holder. The Company may not assign (except by merger) its rights or obligations hereunder without the prior written consent of all of the Holders of the then outstanding Registrable Securities. Each Holder may assign their respective rights hereunder in the manner and to the Persons as permitted under Section 5.7 of the Purchase Agreement.

(i) No Inconsistent Agreements. Neither the Company nor any of its Subsidiaries has entered, as of the date hereof, nor shall the Company or any of its Subsidiaries, on or after the date of this Agreement, enter into any agreement with respect to its securities, that would have the effect of impairing the rights granted to the Holders in this Agreement or otherwise conflicts with the provisions hereof. Except as set forth on Schedule 6(i), neither the Company nor any of its Subsidiaries has previously entered into any agreement granting any registration rights with respect to any of its securities to any Person that have not been satisfied in full.

(j) Execution and Counterparts. This Agreement may be executed in two or more counterparts, all of which when taken together shall be considered one and the same agreement and shall become effective when counterparts have been signed by each party and delivered to the other party, it being understood that both parties need not sign the same counterpart. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a “.pdf” format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or “.pdf” signature page were an original thereof.

(k) Governing Law. All questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be determined in accordance with the provisions of the Purchase Agreement.

(l) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any other remedies provided by law.

(m) Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their commercially reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the

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remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

(n) Headings. The headings in this Agreement are for convenience only, do not constitute a part of the Agreement and shall not be deemed to limit or affect any of the provisions hereof.

(o) Independent Nature of Holders' Obligations and Rights. The obligations of each Holder hereunder are several and not joint with the obligations of any other Holder hereunder, and no Holder shall be responsible in any way for the performance of the obligations of any other Holder hereunder. Nothing contained herein or in any other agreement or document delivered at any closing, and no action taken by any Holder pursuant hereto or thereto, shall be deemed to constitute the Holders as a partnership, an association, a joint venture or any other kind of group or entity, or create a presumption that the Holders are in any way acting in concert or as a group or entity with respect to such obligations or the transactions contemplated by this Agreement or any other matters, and the Company acknowledges that the Holders are not acting in concert or as a group, and the Company shall not assert any such claim, with respect to such obligations or transactions. Each Holder shall be entitled to protect and enforce its rights, including without limitation the rights arising out of this Agreement, and it shall not be necessary for any other Holder to be joined as an additional party in any proceeding for such purpose. The use of a single agreement with respect to the obligations of the Company contained was solely in the control of the Company, not the action or decision of any Holder, and was done solely for the convenience of the Company and not because it was required or requested to do so by any Holder. It is expressly understood and agreed that each provision contained in this Agreement is between the Company and a Holder, solely, and not between the Company and the Holders collectively and not between and among Holders.

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*(Signature Pages Follow)*

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IN WITNESS WHEREOF, the parties have executed this Registration Rights Agreement as of the date first written above.

**PARKERVISION, INC.**

By: \_\_\_\_\_

Name: Cynthia Poehlman

Title: Chief Financial Officer

[SIGNATURE PAGE OF HOLDERS FOLLOWS]

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Name of Holder: \_\_\_\_\_

*Signature of Authorized Signatory of Holder.* \_\_\_\_\_

Name of Authorized Signatory: \_\_\_\_\_

Title of Authorized Signatory: \_\_\_\_\_

[SIGNATURE PAGES CONTINUE]

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### Plan of Distribution

Each Selling Stockholder (the "Selling Stockholders") of the securities and any of their pledgees, assignees and successors-in-interest may, from time to time, sell any or all of their securities covered hereby on the principal Trading Market or any other stock exchange, market or trading facility on which the securities are traded or in private transactions. These sales may be at fixed or negotiated prices. A Selling Stockholder may use any one or more of the following methods when selling securities:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- settlement of short sales;
- in transactions through broker-dealers that agree with the Selling Stockholders to sell a specified number of such securities at a stipulated price per security;
- through the writing or settlement of options or other hedging transactions, whether through an options exchange or otherwise;
- a combination of any such methods of sale; or
- any other method permitted pursuant to applicable law.

The Selling Stockholders may also sell securities under Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"), if available, rather than under this prospectus.

Broker-dealers engaged by the Selling Stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the Selling Stockholders (or, if any broker-dealer acts as agent for the purchaser of securities, from the purchaser) in amounts to be negotiated, but, except as

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set forth in a supplement to this Prospectus, in the case of an agency transaction not in excess of a customary brokerage commission in compliance with FINRA Rule 2440; and in the case of a principal transaction a markup or markdown in compliance with FINRA IM-2440.

In connection with the sale of the securities or interests therein, the Selling Stockholders may enter into hedging transactions with broker-dealers or other financial institutions, which may in turn engage in short sales of the securities in the course of hedging the positions they assume. The Selling Stockholders may also sell securities short and deliver these securities to close out their short positions, or loan or pledge the securities to broker-dealers that in turn may sell these securities. The Selling Stockholders may also enter into option or other transactions with broker-dealers or other financial institutions or create one or more derivative securities which require the delivery to such broker-dealer or other financial institution of securities offered by this prospectus, which securities such broker-dealer or other financial institution may resell pursuant to this prospectus (as supplemented or amended to reflect such transaction).

The Selling Stockholders and any broker-dealers or agents that are involved in selling the securities may be deemed to be “underwriters” within the meaning of the Securities Act in connection with such sales. In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the securities purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act. Each Selling Stockholder has informed the Company that it does not have any written or oral agreement or understanding, directly or indirectly, with any person to distribute the securities.

The Company is required to pay certain fees and expenses incurred by the Company incident to the registration of the securities. The Company has agreed to indemnify the Selling Stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

Because Selling Stockholders may be deemed to be “underwriters” within the meaning of the Securities Act, they will be subject to the prospectus delivery requirements of the Securities Act including Rule 172 thereunder. In addition, any securities covered by this prospectus which qualify for sale pursuant to Rule 144 under the Securities Act may be sold under Rule 144 rather than under this prospectus. The Selling Stockholders have advised us that there is no underwriter or coordinating broker acting in connection with the proposed sale of the resale securities by the Selling Stockholders.

We agreed to keep this prospectus effective until the earlier of (i) the date on which the securities may be resold by the Selling Stockholders without registration and without regard to any volume or manner-of-sale limitations by reason of Rule 144, without the requirement for the Company to be in compliance with the current public information under Rule 144 under the Securities Act or any other rule of similar effect or (ii) all of the securities have been sold pursuant to this prospectus or Rule 144 under the Securities Act or any other rule of similar effect. The resale securities will be sold only

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through registered or licensed brokers or dealers if required under applicable state securities laws. In addition, in certain states, the resale securities covered hereby may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

Under applicable rules and regulations under the Exchange Act, any person engaged in the distribution of the resale securities may not simultaneously engage in market making activities with respect to the common stock for the applicable restricted period, as defined in Regulation M, prior to the commencement of the distribution. In addition, the Selling Stockholders will be subject to applicable provisions of the Exchange Act and the rules and regulations thereunder, including Regulation M, which may limit the timing of purchases and sales of securities of the common stock by the Selling Stockholders or any other person. We will make copies of this prospectus available to the Selling Stockholders and have informed them of the need to deliver a copy of this prospectus to each purchaser at or prior to the time of the sale (including by compliance with Rule 172 under the Securities Act).

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**List of Accredited Investors**

<u>Investor</u>	<u>Subscription Amount</u>	<u>Shares</u>
Harold Wrobel	\$350,000	1,000,000
Flavigny, LLC	\$250,000	714,286
Andrew Tobias	\$100,000	285,715
Joseph W. Kaempfer, Jr.	\$100,000	285,715
Lewis Titterton	\$50,000	142,858
Judson Longaker	\$50,000	142,858

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CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos. 333-197741, 333-178064, 333-214596 and 333-226784) of ParkerVision, Inc. of our report dated April 14, 2020 relating to the financial statements, which appears in this Form 10 -K.

/s/ MSL P.A.  
Fort Lauderdale, Florida  
April 14, 2020

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Consent of Independent Registered Public Accounting Firm

ParkerVision, Inc.  
Jacksonville, Florida

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (Nos.333-197741, 333-178064, 333-214596 and 333-226784) of ParkerVision, Inc. of our report dated April 1, 2019, relating to the consolidated financial statements, which appears in this Form 10-K.

/s/ BDO USA, LLP  
Certified Public Accountants  
Jacksonville, Florida  
April 14, 2020

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## SECTION 302 CERTIFICATION

I, Jeffrey L. Parker, certify that:

1. I have reviewed this Annual Report on Form 10-K of ParkerVision, Inc.;
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 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 the registrant's board of directors (or persons fulfilling the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 14, 2020

Name: /s/ Jeffrey L. Parker  
Title: Chief Executive Officer (Principal Executive Officer)

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## SECTION 302 CERTIFICATION

I, Cynthia L. Poehlman certify that:

1. I have reviewed this Annual Report on Form 10-K of ParkerVision, Inc.;
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 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 the registrant's board of directors (or persons fulfilling the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 14, 2020

Name: s/Cynthia L. Poehlman  
Title: Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)

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## SECTION 906 CERTIFICATION

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

In connection with the Annual Report of ParkerVision, Inc. (the "Company") on Form 10-K, for the period ended December 31, 2019 as filed with the Securities and Exchange Commission (the "Report"), each of the undersigned, in the capacities and on the dates indicated below, hereby certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

1. The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operation of the Company.

Dated: April 14, 2020

Name: /s/ Jeffrey L. Parker  
Title: Chief Executive Officer  
(Principal Executive Officer)

Dated: April 14, 2020

Name: /s/ Cynthia L. Poehlman  
Title: Chief Financial Officer  
(Principal Financial Officer and  
Principal Accounting Officer)

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