

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

---

**FORM 8-K  
CURRENT REPORT**

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

Date of Report (Date of earliest event reported): July 26, 2018

PARKERVISION, INC.

(Exact Name of Registrant as Specified in Charter)

Florida  
(State or Other Jurisdiction of  
Incorporation)

000-22904  
(Commission File Number)

59-2971472  
(IRS Employer Identification No.)

7915 Baymeadows Way, Jacksonville, Florida  
(Address of Principal Executive Offices)

32256  
(Zip Code)

(904) 732-6100  
(Registrant's Telephone Number, Including Area Code)

Not Applicable  
(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (*see* General Instruction A.2. below):

- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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.

### **Item 1.01 Entry into a Material Definitive Agreement**

On July 26, 2018, ParkerVision, Inc. (the “Company”) entered into a Securities Purchase Agreement (the “Agreement”) with Aspire Capital Fund, LLC (“Aspire Capital”) whereby the Company agreed to sell to Aspire Capital up to \$2.0 million of shares of the Company’s common stock (or pre-funded warrants in lieu thereof) and warrants, in two tranches.

On July 26, 2018, the Company sold to Aspire Capital (i) a pre-funded warrant to purchase up to 2,500,000 shares of the Company’s common stock with an exercise price of \$.01 per share (“Pre-Funded Warrant”) and (ii) a warrant to purchase up to 2,500,000 shares of the Company’s common stock with an exercise price of \$.74 per share (a “Warrant”), for a purchase price of \$975,000. In addition, the Agreement provides that on the day following the effectiveness of the registration statement described below, provided that the closing price of the Company’s common stock on such date is equal to or greater than \$.50 per share, a second purchase shall occur whereby the Company will sell to Aspire Capital (i) an additional 2,500,000 shares of common stock (or a Pre-Funded Warrant in lieu thereof to the extent Aspire Capital elects or to the extent such purchase would result in Aspire Capital owning over 14.99% of the Company’s then outstanding common stock) and (ii) a Warrant to purchase an additional 2,500,000 shares of common stock, for a purchase price of \$1.0 million (or at least \$975,000 if Aspire Capital purchases a Pre-Funded Warrant in lieu of common stock). The Company intends to use the proceeds from the sales for general corporate purposes.

The Warrants and Pre-Funded Warrants expire five years after their issuance 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 Warrants and Pre-Funded Warrants are subject to adjustment in the event of certain stock dividends and distributions, stock splits, stock combinations, reclassifications or similar events affecting the Company’s common stock and also upon any distributions of assets to the Company’s stockholders. The Warrants and Pre-Funded Warrants contain provisions that prohibit exercise if the holder, together with its affiliates, would beneficially own in excess of 4.99% of the number of shares of the Company’s common stock outstanding immediately after giving effect to such exercise. The holder of the Warrants and Pre-Funded Warrants may increase (up to 14.99%) or decrease this percentage by providing at least 61 days’ prior notice to the Company. In the event of certain corporate transactions, the holder of the Warrants and Pre-Funded Warrants will be entitled to receive, upon exercise of such Warrants and Pre-Funded Warrants, the kind and amount of securities, cash or other property that the holders would have received had they exercised the Warrants and Pre-Funded Warrants immediately prior to such transaction. The Warrants and Pre-Funded warrants do not contain voting rights or any of the other rights or privileges as a holder of the Company’s common stock. Upon the holder’s notice of exercise of the Warrant or Pre-Funded Warrant, the Company has the option, but not the obligation, to deliver to the holder in lieu of shares of common stock to which holder is entitled, a cash payment equal to the market value of the shares of common stock based on the preceding trading day’s closing sales price.

The Company has agreed to file a registration statement as permissible and necessary to register under the Securities Act of 1933, as amended, the resale by Aspire Capital of the shares of the Company’s common stock and the shares of the Company’s common stock underlying the Warrants and Pre-Funded Warrants which have been or which may be issued under the Agreement.

The Agreement contains customary representations and warranties, covenants, conditions to closing and indemnification provisions that the parties made to, and solely for the benefit of, each other in the context of all of the terms and conditions of such agreement and in the context of the specific relationship between the parties. The provisions of the Agreement, including the representations and warranties contained therein, are not for the benefit of any party other than the parties to such agreement or parties expressly permitted to rely on such provisions and are not intended for investors and the public to obtain factual information about the current state of affairs of the parties thereto. Rather, investors and the public should look to other disclosures contained in the Company's filings with the Securities and Exchange Commission ("SEC").

The offer and sale of common stock, Warrants and Pre-Funded Warrants are made to an accredited investor on a private placement basis under Section 4(a)(2) of the Securities Act of 1933, as amended, and Rule 506 promulgated thereunder.

The foregoing description of the terms and conditions of the Agreement, the Warrants and the Pre-Funded Warrants are not complete and are qualified in their entirety by the full text of the Agreement and form of warrant, which are filed herewith as Exhibits 10.1 and 4.1, respectively, and incorporated into this Item 1.01 by reference.

### **Item 3.02 Unregistered Sales of Equity Securities**

The disclosure under Item 1.01 is incorporated herein by reference to the extent required.

### **Item 9.01 Financial Statements and Exhibits**

#### **(d) Exhibits**

##### **Exhibit**

<b>Number</b>	<b>Description</b>
4.1	<a href="#">Form of Warrant</a>
10.1	<a href="#">Securities Purchase Agreement, dated July 26, 2018, between the Company and Aspire Capital Fund, LLC</a>

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Dated: July 30, 2018

PARKERVISION, INC.

By /s/ Cynthia Poehlman

\_\_\_\_\_  
Cynthia Poehlman

Chief Financial Officer

THIS WARRANT HAS BEEN ACQUIRED AS AN INVESTMENT. NEITHER THIS SECURITY NOR THE SECURITIES FOR WHICH THIS SECURITY IS EXERCISABLE HAVE 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, SOLD, PLEDGED OR OTHERWISE TRANSFERRED 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.

## ParkerVision, Inc.

### WARRANT TO PURCHASE COMMON STOCK

Warrant No. \_\_\_\_\_ Number of Shares: \_\_\_\_\_ (subject to adjustment)  
Original Issue Date: \_\_\_\_\_

ParkerVision, Inc., a Florida corporation (the "*Company*"), hereby certifies that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, \_\_\_\_\_, or its permitted registered assigns (the "*Holder*"), is entitled, subject to the terms set forth below, to purchase from the Company up to a total of \_\_\_\_\_ shares of common stock, \$0.01 par value per share (the "*Common Stock*"), of the Company (each such share, a "*Warrant Share*" and all such shares, the "*Warrant Shares*") at an exercise price per share equal to \$\_\_\_\_\_ per share (as adjusted from time to time as provided in Section 9 herein, the "*Exercise Price*"), upon surrender of this warrant to purchase Common Stock (including any warrants to purchase Common Stock issued in exchange, transfer or replacement hereof, the "*Warrant*") at any time and from time to time on or [after the date that is six (6) months (the "*Initial Exercisable Date*") after the date hereof (the "*Original Issue Date*") and through and including 5:30 P.M., New York City time, on the date that is five (5) years following the Original Issue Date (the "*Expiration Date*"), and subject to the following terms and conditions:

1. Definitions. For purposes of this Warrant, the following terms shall have the following meanings:

(a) "*Affiliate*" of any Person means any other Person directly or indirectly controlling, controlled by or under common control with such Person.

(b) "*Commission*" means the United States Securities and Exchange Commission and any successor entity thereto.

---

(c) “*Closing Sale Price*” means, for any security as of any date, the last trade price for such security on the Principal Trading Market for such security, as reported by Bloomberg Financial Markets, or, if such Principal Trading Market begins to operate on an extended hours basis and does not designate the last trade price, then the last trade price of such security immediately prior to 4:00 P.M., New York City time, as reported by Bloomberg Financial Markets, or if the foregoing do not apply, the last trade price of such security in the over-the-counter market on the electronic bulletin board for such security as reported by Bloomberg Financial Markets, or, if no last trade price is reported for such security by Bloomberg Financial Markets, the average of the last bid and ask prices of any market makers for such security as reported on OTC Pink (also known as the “pink sheets”) by the OTC Markets, Inc. If the Closing Sale Price cannot be calculated for a security on a particular date on any of the foregoing bases, the Closing Sale Price of such security on such date shall be the fair market value as mutually determined by the Company and the Holder. If the Company and the Holder are unable to agree upon the fair market value of such security, then the Board of Directors of the Company shall use its good faith judgment to determine the fair market value of such security on such date. The Board of Directors’ determination shall be binding upon all parties absent demonstrable error. All such determinations shall be appropriately adjusted for any stock dividend, stock split, stock combination or other similar transaction during the applicable calculation period.

(d) “*Person*” means any natural person, corporation, firm, joint venture, partnership, limited liability company, association, enterprise, trust or other entity or organization, or any government or political subdivision or any agency, department or instrumentality thereof.

(e) “*Principal Trading Market*” means the trading market on which the Common Stock is primarily listed on and quoted for trading, and which, as of the Original Issue Date shall be the Nasdaq Stock Market.

(f) “*Securities Act*” means the Securities Act of 1933, as amended.

(g) “*Trading Day*” means a day on which the Principal Trading Market is open for trading.

(h) “*Transfer Agent*” means American Stock Transfer & Trust Company, the Company’s transfer agent for the Common Stock, and the Company or its designee, with respect to the Warrants.

2 . Registration of Warrants. The Company shall, or shall cause its Transfer Agent to, register this Warrant, upon records to be maintained by the Company or Transfer Agent for that purpose (the “*Warrant Register*”), in the name of the record Holder (which shall include the initial Holder or, as the case may be, any registered assignee to which this Warrant is permissibly assigned hereunder) from time to time. The Company may deem and treat the registered Holder of this Warrant as the absolute owner hereof for the purpose of any exercise hereof or any distribution to the Holder, and for all other purposes, absent actual notice to the contrary.

---

3 . Registration of Transfers. Subject to compliance with all applicable securities laws, the Company shall, or shall cause its Transfer Agent to, register the transfer of all or any portion of this Warrant in the Warrant Register, upon surrender of this Warrant, and payment of all applicable transfer taxes. Upon any such registration of transfer, a new warrant to purchase Common Stock in substantially the form of this Warrant (any such new warrant, a “New Warrant”) evidencing the portion of this Warrant so transferred shall be issued to the transferee, and a New Warrant evidencing the remaining portion of this Warrant not so transferred, if any, shall be issued to the transferring Holder. The acceptance of the New Warrant by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations in respect of the New Warrant that the Holder had in respect of this Warrant. The Company shall, or shall cause its Transfer Agent to, prepare, issue and deliver at the Company’s own expense any New Warrant under this Section 3. Until due presentment for registration of transfer, the Company may treat the registered Holder hereof as the owner and holder of this Warrant for all purposes, and the Company shall not be affected by any notice to the contrary.

4. Exercise and Duration of Warrants.

(a) All or any part of this Warrant shall be exercisable by the registered Holder in any manner permitted by this Warrant at any time and from time to time on or after the [Initial Exercisable Date] [Original Issue Date] and through and including 5:30 P.M. New York City time, on the Expiration Date. At 5:30 P.M., New York City time, on the Expiration Date, the portion of this Warrant not exercised prior thereto shall be void and of no value and this Warrant shall terminate and no longer be outstanding.

(b) The Holder may exercise this Warrant by delivering to the Company (i) an exercise notice, in the form attached as Schedule 1 hereto (the “Exercise Notice”), completed and duly signed, and (ii) payment of the Exercise Price for the number of Warrant Shares as to which this Warrant is being exercised (which may take the form of a “net share exercise” if so indicated in the Exercise Notice pursuant to Section 10 below), and the date on which the last of such items is delivered to the Company (as determined in accordance with the notice provisions hereof) is an “Exercise Date.” The Holder shall not be required to deliver the original Warrant in order to effect an exercise hereunder. Execution and delivery of the Exercise Notice shall have the same effect as cancellation of the original Warrant and issuance of a New Warrant to the Holder evidencing its right to purchase the remaining number of Warrant Shares. For the avoidance of doubt, the Company may not substitute, and the Holder may not request, a cash payment in satisfaction of the Company’s obligation to issue and deliver Warrant Shares pursuant to an Exercise Notice, other than as specified in Sections 5(a), 9(c) or 12 of this Warrant.

---

5. Delivery of Warrant Shares.

(a) Upon exercise of this Warrant, the Company shall promptly (but in no event later than two (2) Trading Days after the Exercise Date), upon the request of the Holder, credit such aggregate number of shares of Common Stock to which the Holder is entitled pursuant to such exercise to the Holder's or its designee's balance account with The Depository Trust Company ("DTC") through its Deposit Withdrawal Agent Commission system, or if the Transfer Agent is not participating in the Fast Automated Securities Transfer Program (the "FAST Program") or if the certificates are required to bear a legend regarding restriction on transferability, issue and dispatch by overnight courier to the address as specified in the Exercise Notice, a certificate, registered in the Company's share register in the name of the Holder or its designee, for the number of shares of Common Stock to which the Holder is entitled pursuant to such exercise. The Holder, or any Person permissibly so designated by the Holder to receive Warrant Shares, shall be deemed to have become the holder of record of such Warrant Shares as of the Exercise Date, irrespective of the date such Warrant Shares are credited to the Holder's DTC account or the date of delivery of the certificates evidencing such Warrant Shares, as the case may be. Notwithstanding the foregoing in this Section 5(a), upon exercise of this Warrant, in lieu of delivering to the Holder the Common Stock to which the Holder is entitled pursuant to such exercise ("Exercise Shares"), the Company may elect to deliver to the Holder a cash payment equal to the result of multiplying (a) the number of the Exercise Shares times (b) the Closing Sales Price of the shares of Common Stock on the Trading Day immediately preceding the date of such exercise.

(b) To the extent permitted by law, the Company's obligations to issue and deliver Warrant Shares in accordance with and subject to the terms hereof (including the limitations set forth in Section 11 below) are absolute and unconditional, irrespective of any action or inaction by the Holder to enforce the same, any waiver or consent with respect to any provision hereof, the recovery of any judgment against any Person or any action to enforce the same, or any setoff, counterclaim, recoupment, limitation or termination, or any breach or alleged breach by the Holder or any other Person of any obligation to the Company or any violation or alleged violation of law by the Holder or any other Person, and irrespective of any other circumstance that might otherwise limit such obligation of the Company to the Holder in connection with the issuance of Warrant Shares. Nothing herein shall limit the Holder's right to pursue any other remedies available to it hereunder, at law or in equity including, without limitation, a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver certificates representing shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

6. Charges, Taxes and Expenses. Issuance and delivery of certificates for shares of Common Stock upon exercise of this Warrant shall be made without charge to the Holder for any issue or transfer tax, transfer agent fee or other incidental tax or expense in respect of the issuance of such certificates, all of which taxes and expenses shall be paid by the Company; provided, however, that the Company shall not be required to pay any tax that may be payable in respect of any transfer involved in the registration of any certificates for Warrant Shares or the Warrants in a name other than that of the Holder or an Affiliate thereof. The Holder shall be responsible for all other tax liability that may arise as a result of holding or transferring this Warrant or receiving Warrant Shares upon exercise hereof.

---



7. Replacement of Warrant. If this Warrant is mutilated, lost, stolen or destroyed, the Company shall issue or cause to be issued in exchange and substitution for and upon cancellation hereof, or in lieu of and substitution for this Warrant, a New Warrant, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction (in such case) and, in each case, a customary and reasonable indemnity and surety bond, if requested by the Company. Applicants for a New Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable third-party costs as the Company may prescribe. If a New Warrant is requested as a result of a mutilation of this Warrant, then the Holder shall deliver such mutilated Warrant to the Company as a condition precedent to the Company's obligation to issue the New Warrant.

8. Reservation of Warrant Shares. The Company covenants that it will at all times while this Warrant is outstanding reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of this Warrant as herein provided, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of this entire Warrant (less the number of Warrant Shares so issued and delivered), free from preemptive rights or any other contingent purchase rights of persons other than the Holder (taking into account the adjustments and restrictions of Section 9). The Company covenants that all Warrant Shares so issuable and deliverable shall, upon issuance and the payment of the applicable Exercise Price in accordance with the terms hereof, be duly and validly authorized and issued, and fully paid and nonassessable. The Company will take all such action as may be reasonably necessary to assure that such shares of Common Stock may be issued as provided herein without violation of any applicable law or regulation, or of any requirements of any securities exchange or automated quotation system upon which the Common Stock may be listed.

9. Certain Adjustments. The Exercise Price and number of Warrant Shares issuable upon exercise of this Warrant are subject to adjustment from time to time as set forth in this Section 9.

(a) Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding, (i) pays a stock dividend on its Common Stock or otherwise makes a distribution on any class of capital stock that is payable in shares of Common Stock, (ii) subdivides its outstanding shares of Common Stock into a larger number of shares of Common Stock, (iii) combines its outstanding shares of Common Stock into a smaller number of shares of Common Stock or (iv) issues by reclassification of shares of capital stock any additional shares of Common Stock of the Company, then in each such case the Exercise Price shall be multiplied by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately before such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately after such event. Any adjustment made pursuant to clause (i) of this paragraph shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution; provided, however, that if such record date shall have been fixed and such dividend is not fully paid on the date fixed therefor, the Exercise Price shall be recomputed accordingly as of the close of business on such record date and thereafter

---

the Exercise Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends. Any adjustment pursuant to clause (ii) or (iii) of this paragraph shall become effective immediately after the effective date of such subdivision or combination.

(b) Pro Rata Distributions. If the Company, at any time while this Warrant is outstanding, distributes to all holders of Common Stock for no consideration (i) evidences of its indebtedness, (ii) any security (other than a distribution of Common Stock covered by the preceding paragraph) or (iii) rights or warrants to subscribe for or purchase any security, or (iv) any other asset (in each case, “*Distributed Property*”), then, upon any exercise of this Warrant that occurs after the record date fixed for determination of stockholders entitled to receive such distribution, the Holder shall be entitled to receive, in addition to the Warrant Shares otherwise issuable upon such exercise (if applicable), the Distributed Property that such Holder would have been entitled to receive in respect of such number of Warrant Shares had the Holder been the record holder of such Warrant Shares immediately prior to such record date without regard to any limitation on exercise contained therein.

(c) Fundamental Transactions. If, at any time while this Warrant is outstanding (i) the Company effects any merger or consolidation of the Company with or into another Person, in which the Company is not the surviving entity or the stockholders of the Company immediately prior to such merger or consolidation do not own, directly or indirectly, at least 50% of the voting power of the surviving entity immediately after such merger or consolidation, (ii) the Company effects any sale to another Person of all or substantially all of its assets in one or a series of related transactions, (iii) pursuant to any tender offer or exchange offer (whether by the Company or another Person), holders of capital stock tender shares representing more than 50% of the voting power of the capital stock of the Company and the Company or such other Person, as applicable, accepts such tender for payment, (iv) the Company consummates a stock purchase agreement or other business combination (including, without limitation, a reorganization, recapitalization, spin-off or scheme of arrangement) with another Person whereby such other Person acquires more than the 50% of the voting power of the capital stock of the Company or (v) the Company effects any reclassification of the Common Stock or any compulsory share exchange pursuant to which the Common Stock is effectively converted into or exchanged for other securities, cash or property (other than as a result of a subdivision or combination of shares of Common Stock covered by Section 9(a) above) (in any such case, a “*Fundamental Transaction*”), then following such Fundamental Transaction the Holder shall have the right to receive, upon exercise of this Warrant, the same amount and kind of securities, cash or property as it would have been entitled to receive upon the occurrence of such Fundamental Transaction if it had been, immediately prior to such Fundamental Transaction, the holder of the number of Warrant Shares then issuable upon exercise in full of this Warrant without regard to any limitations on exercise contained herein (the “*Alternate Consideration*”). The Company shall not effect any Fundamental Transaction in which the Company is not the surviving entity or the Alternate Consideration includes securities of another Person unless prior to or simultaneously with the consummation thereof, any successor to the Company, surviving entity or other Person (including any purchaser of assets of the Company) shall assume the obligation to deliver to the Holder, such Alternate Consideration as, in accordance with the foregoing provisions, the Holder may be entitled to receive, and the other obligations under this Warrant.

---

( d ) Number of Warrant Shares. Simultaneously with any adjustment to the Exercise Price pursuant to paragraph (a) of this Section 9, the number of Warrant Shares that may be purchased upon exercise of this Warrant shall be increased or decreased proportionately, so that after such adjustment the aggregate Exercise Price payable hereunder for the increased or decreased number of Warrant Shares shall be the same as the aggregate Exercise Price in effect immediately prior to such adjustment.

(e) Calculations. All calculations under this Section 9 shall be made to the nearest cent or the nearest share, as applicable.

(f) Notice of Adjustments. Upon the occurrence of each adjustment pursuant to this Section 9, the Company at its expense will, at the written request of the Holder, promptly compute such adjustment, in good faith, in accordance with the terms of this Warrant and prepare a certificate setting forth such adjustment, including a statement of the adjusted Exercise Price and adjusted number or type of Warrant Shares or other securities issuable upon exercise of this Warrant (as applicable), describing the transactions giving rise to such adjustments and showing in detail the facts upon which such adjustment is based. Upon written request, the Company will promptly deliver a copy of each such certificate to the Holder and to the Company's transfer agent.

(g) Notice of Corporate Events. If, while this Warrant is outstanding, the Company (i) declares a dividend or any other distribution of cash, securities or other property in respect of its Common Stock, including, without limitation, any granting of rights or warrants to subscribe for or purchase any capital stock of the Company or any subsidiary, (ii) authorizes or approves, enters into any material definitive agreement contemplating or solicits stockholder approval for any Fundamental Transaction or (iii) authorizes the voluntary dissolution, liquidation or winding up of the affairs of the Company, then, except if such notice and the contents thereof shall be deemed to constitute material non-public information, the Company shall deliver to the Holder a notice of such transaction at least ten (10) days prior to the applicable record or effective date on which a Person would need to hold Common Stock in order to participate in or vote with respect to such transaction; *provided, however*, that the failure to deliver such notice or any defect therein shall not affect the validity of the corporate action required to be described in such notice. In addition, if while this Warrant is outstanding, if the Company enters into any material definitive agreement contemplating or solicits stockholder approval for any Fundamental Transaction contemplated by Section 9(c), other than a Fundamental Transaction under clause (iii) of Section 9(c), the Company shall deliver to the Holder a notice of such Fundamental Transaction at least fifteen (15) days prior to the date such Fundamental Transaction is consummated. To the extent that any notice provided hereunder constitutes, or contains, material, non-public information regarding the Company or any of its subsidiaries, the Holder shall keep such information confidential until the Company shall file such notice with the Commission pursuant to a Current Report on Form 8-K.

---

10. Payment of Exercise Price. Notwithstanding anything contained herein to the contrary, the Holder may, in its sole discretion, satisfy its obligation to pay the Exercise Price through a “net share exercise”, in which event the Company shall issue to the Holder the number of Warrant Shares determined as follows:

$$X = Y [(A-B)/A]$$

where:

“X” equals the number of Warrant Shares to be issued to the Holder;

“Y” equals the total number of Warrant Shares with respect to which this Warrant is then being exercised;

“A” the Closing Sale Prices of the shares of Common Stock on the date immediately preceding the Exercise Date; and

“B” equals the Exercise Price then in effect for the applicable Warrant Shares at the time of such exercise.

For purposes of Rule 144 promulgated under the Securities Act, it is intended, understood and acknowledged that the Warrant Shares issued in a “cashless exercise” transaction shall be deemed to have been acquired by the Holder, and the holding period for the Warrant Shares shall be deemed to have commenced, on the date this Warrant was originally issued (provided that the Commission continues to take the position that such treatment is proper at the time of such exercise).

Notwithstanding anything herein to the contrary, on the Expiration Date, any remaining part of this Warrant shall be automatically exercised via net share exercise pursuant to this Section 10 without any action being required on the part of the Holder. The Company shall promptly deliver to the Holder the calculation made pursuant to the preceding sentence, together with any Warrant Shares to which such Holder is entitled.

11. Limitations on Exercise.

(a) Notwithstanding anything to the contrary contained herein, the number of Warrant Shares that may be acquired by the Holder upon any exercise of this Warrant (or otherwise in respect hereof) shall be limited to the extent necessary to ensure that, following such exercise (or other issuance), the total number of shares of Common Stock then beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder’s for purposes of Section 13(d) of the Securities Exchange Act of 1934, as amended (the “*Exchange Act*”), does not exceed 4.99% of the total number of then issued and outstanding shares of Common Stock (including for such

---

purpose the shares of Common Stock issuable upon such exercise), it being acknowledged by the Holder that the Company is not representing to such Holder that such calculation is in compliance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder and such Holder is solely responsible for any schedules required to be filed in accordance therewith. To the extent that the limitation contained in this Section 11(a) applies, the determination of whether this Warrant is exercisable (in relation to other securities owned by such Holder and its Affiliates) and of which a portion of this Warrant is exercisable shall be in the sole discretion of a Holder, and the submission of a Notice of Exercise shall be deemed to be the Holder's determination of whether this Warrant is exercisable (in relation to other securities owned by such Holder and its Affiliates) and of which portion of this Warrant is exercisable, in each case subject to such aggregate percentage limitation, and the Company shall have no obligation to verify or confirm the accuracy of such determination. In addition, a determination under this Section 11(a) as to any group status shall be determined by the Holder in accordance with Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder. For purposes of this Section 11(a), in determining the number of outstanding shares of Common Stock, the Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent Form 10-Q or Form 10-K, as the case may be, (y) a more recent public announcement by the Company that contains such number of shares or (z) any other notice by the Company or the Transfer Agent setting forth the number of shares of Common Stock outstanding. Upon the written request of the Holder, the Company shall within three (3) Trading Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. By written notice to the Company, which will not be effective until the sixty-first (61st) day after such notice is delivered to the Company, the Holder may waive the provisions of this Section 11(a) (but such waiver will not affect any other holder) to change the beneficial ownership limitation to such percentage of the number of shares of the Common Stock outstanding immediately after giving effect to the issuance of shares of Common Stock upon exercise of this Warrant as the Holder shall determine, in its sole discretion, and the provisions of this Section 11(a) shall continue to apply. Upon such a change by a Holder of the beneficial ownership limitation from such 4.99% limitation to such other percentage limitation, the beneficial ownership limitation may not be further waived by such Holder without first providing the minimum notice required by this Section 11(a). Notwithstanding the foregoing, at any time following notice of a Fundamental Transaction under Section 9(g)(ii) with respect to a Section 9(c)(iii) Fundamental Transaction, the Holder may waive and/or change the beneficial ownership limitation effective immediately upon written notice to the Company and may reinstitute a beneficial ownership limitation at any time thereafter effective immediately upon written notice to the Company.

(b) Notwithstanding anything to the contrary contained herein, including Section 11(a), the Company shall not effect any exercise of this Warrant, and the Holder shall not be entitled to exercise this Warrant for a number of Warrant Shares in excess of that number of Warrant Shares which, upon giving effect to such exercise, would cause (i) the aggregate number of shares of Common Stock beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act, to exceed 14.99% of the total number

---

of issued and outstanding shares of Common Stock of the Company following such exercise, or (ii) the combined voting power of the securities of the Company beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act to exceed 14.99% of the combined voting power of all of the securities of the Company then outstanding following such exercise. For purposes of this Section 11(b), the aggregate number of shares of Common Stock or voting securities beneficially owned by the Holder and its Affiliates and any other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act shall include the shares of Common Stock issuable upon the exercise of this Warrant with respect to which such determination is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (x) exercise of the remaining unexercised and non-cancelled portion of this Warrant by the Holder and (y) exercise or conversion of the unexercised, non-converted or non-cancelled portion of any other securities of the Company that do not have voting power (including without limitation any securities of the Company which would entitle the holder thereof to acquire at any time Common Stock, including without limitation any debt, preferred stock, right, option, warrant 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), are subject to a limitation on conversion or exercise analogous to the limitation contained herein and are beneficially owned by the Holder or any of its Affiliates and other Persons whose beneficial ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act.

(c) This Section 11 shall not restrict the number of shares of Common Stock which a Holder may receive or beneficially own in order to determine the amount of securities or other consideration that such Holder may receive in the event of a Fundamental Transaction as contemplated in Section 9 of this Warrant.

12. No Fractional Shares. No fractional Warrant Shares will be issued in connection with any exercise of this Warrant. In lieu of any fractional shares that would otherwise be issuable, the number of Warrant Shares to be issued shall be rounded down to the next whole number and the Company shall pay the Holder in cash the fair market value (based on the Closing Sale Price) for any such fractional shares.

13. Notices. Any and all notices or other communications or deliveries hereunder (including, without limitation, any Exercise Notice) shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail at the facsimile number or e-mail address specified in the books and records of the Transfer Agent prior to 5:30 P.M., New York City time, on a Trading Day, (ii) the next Trading Day after the date of transmission, if such notice or communication is delivered via facsimile or confirmed e-mail at the facsimile number or e-mail address specified in the books and records of the Transfer Agent on a day that is not a Trading Day or later than 5:30 P.M., New York City time, on any Trading Day, (iii) the Trading Day following the date of mailing, if sent by nationally recognized overnight courier service specifying next business day delivery, or (iv) upon actual receipt by the Person to whom such notice is required to be given, if by hand delivery.

---

14. Warrant Agent. The Company shall initially serve as warrant agent under this Warrant. Upon thirty (30) days' notice to the Holder, the Company may appoint a new warrant agent. Any corporation into which the Company or any new warrant agent may be merged or any corporation resulting from any consolidation to which the Company or any new warrant agent shall be a party or any corporation to which the Company or any new warrant agent transfers substantially all of its corporate trust or shareholders services business shall be a successor warrant agent under this Warrant without any further act. Any such successor warrant agent shall promptly cause notice of its succession as warrant agent to be mailed (by first class mail, postage prepaid) to the Holder at the Holder's last address as shown on the Warrant Register.

15. Miscellaneous.

(a) No Rights as a Stockholder. The Holder, solely in such Person's capacity as a holder of this Warrant, shall not be entitled to vote or receive dividends or be deemed the holder of share capital of the Company for any purpose, nor shall anything contained in this Warrant be construed to confer upon the Holder, solely in such Person's capacity as the Holder of this Warrant, any of the rights of a stockholder of the Company or any right to vote, give or withhold consent to any corporate action (whether any reorganization, issue of stock, reclassification of stock, consolidation, merger, amalgamation, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Warrant Shares which such Person is then entitled to receive upon the due exercise of this Warrant. In addition, nothing contained in this Warrant shall be construed as imposing any liabilities on the Holder to purchase any securities (upon exercise of this Warrant or otherwise) or as a stockholder of the Company, whether such liabilities are asserted by the Company or by creditors of the Company.

(b) Authorized Shares.

(i) Except and to the extent as waived or consented to by the Holder, the Company shall not by any action, including, without limitation, amending its certificate of incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms of this Warrant, but will at all times in good faith assist in the carrying out of all such terms and in the taking of all such actions as may be necessary or appropriate to protect the rights of Holder as set forth in this Warrant against impairment. Without limiting the generality of the foregoing, the Company will (a) not increase the par value of any Warrant Shares above the amount payable therefor upon such exercise immediately prior to such increase in par value, (b) take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares upon the exercise of this Warrant, and (c) use commercially reasonable efforts to obtain all such authorizations, exemptions or consents from any public regulatory body having jurisdiction thereof as may be necessary to enable the Company to perform its obligations under this Warrant.

---

(ii) Before taking any action which would result in an adjustment in the number of Warrant Shares for which this Warrant is exercisable or in the Exercise Price, the Company shall obtain all such authorizations or exemptions thereof, or consents thereto, as may be necessary from any public regulatory body or bodies having jurisdiction thereof.

(c) Successors and Assigns. Subject to the restrictions on transfer set forth in this Warrant and compliance with applicable securities laws, this Warrant may be assigned by the Holder. This Warrant may not be assigned by the Company without the written consent of the Holder except to a successor in the event of a Fundamental Transaction. This Warrant shall be binding on and inure to the benefit of the Company and the Holder and their respective successors and assigns. Subject to the preceding sentence, nothing in this Warrant shall be construed to give to any Person other than the Company and the Holder any legal or equitable right, remedy or cause of action under this Warrant.

(d) Amendment and Waiver. Except as otherwise provided herein, the provisions of the Warrants may be amended and the Company may take any action herein prohibited, or omit to perform any act herein required to be performed by it, only if the Company has obtained the written consent of the Holders of Warrants representing no less than a majority of the Warrant Shares obtainable upon exercise of the Warrants then outstanding.

(e) Acceptance. Receipt of this Warrant by the Holder shall constitute acceptance of and agreement to all of the terms and conditions contained herein.

( f ) Governing Law; Jurisdiction. ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS WARRANT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE LAWS OF THE STATE OF FLORIDA WITHOUT REGARD TO THE PRINCIPLES OF CONFLICTS OF LAW THEREOF. EACH OF THE COMPANY AND THE HOLDER HEREBY IRREVOCABLY SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE STATE AND FEDERAL COURTS SITTING IN THE CITY OF CHICAGO 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 SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF ANY SUCH COURT. NOTHING CONTAINED HEREIN SHALL BE DEEMED TO LIMIT IN ANY WAY ANY RIGHT TO SERVE PROCESS IN ANY MANNER PERMITTED BY LAW. EACH OF THE COMPANY AND THE HOLDER HEREBY WAIVES ALL RIGHTS TO A TRIAL BY JURY.

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

---



(h) Severability. In case any one or more of the provisions of this Warrant shall be invalid or unenforceable in any respect, the validity and enforceability of the remaining terms and provisions of this Warrant shall not in any way be affected or impaired thereby, and the Company and the Holder will attempt in good faith to agree upon a valid and enforceable provision which shall be a commercially reasonable substitute therefor, and upon so agreeing, shall incorporate such substitute provision in this Warrant.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

---

IN WITNESS WHEREOF, the Company has caused this Warrant to be duly executed by its authorized officer as of the date first indicated above.

**PARKERVISION, INC.**

**By:** \_\_\_\_\_  
**Name:**  
**Title:**

---

## SECURITIES PURCHASE AGREEMENT

**SECURITIES PURCHASE AGREEMENT** (the “**Agreement**”), dated as of July 25, 2018, by and between **PARKERVISION, INC.**, a Florida corporation (the “**Company**”), and **ASPIRE CAPITAL FUND, LLC**, an Illinois limited liability company (the “**Buyer**”). Capitalized terms used herein and not otherwise defined herein are defined in Section 9 hereof.

**WHEREAS:**

Subject to the terms and conditions set forth in this Agreement, the Company wishes to sell to the Buyer, and the Buyer wishes to buy from the Company, (i) shares (the “**Purchase Shares**”) of the Company’s common stock, par value \$0.01 per share (the “**Common Stock**”), (ii) warrants, substantially in the form attached hereto as **Exhibit A**, to purchase shares of Common Stock (the “**Warrants**”) or, at the Buyer’s option, in lieu of the Purchase Shares in whole or in part, (iii) warrants, substantially in the form attached hereto as **Exhibit A** (the “**Pre-Funded Warrants**”), to purchase shares of Common Stock (collectively, the “**Warrant Shares**”). The Purchase Shares, Warrants, Pre-Funded Warrants and Warrant Shares are collectively referred to herein as the “**Securities**.”

**NOW THEREFORE**, the Company and the Buyer hereby agree as follows:

**1. PURCHASE OF SECURITIES.**

Subject to the terms and conditions set forth in this Agreement, the Company and the Buyer agree that:

(a) On or before July 26, 2018, the Company shall sell to the Buyer, and the Buyer shall purchase from the Company, (i) 2,500,000 Purchase Shares (the “**First Purchase Shares**”), and the Buyer shall pay to the Company as the purchase price therefor, via wire transfer, an aggregate of One Million Dollars (\$1,000,000) (the “**First Purchase Price**”), and (ii) 2,500,000 Warrants, at an exercise price equal to \$0.74. At the Buyer’s discretion, in lieu of purchasing the First Purchase Shares or any portion thereof, the Buyer may elect to purchase Pre-Funded Warrants. The price for each Pre-Funded Warrant purchased in lieu of the First Purchase Shares will be the result of multiplying (x) the number of Warrant Shares that the Buyer elects to purchase under such Pre-Funded Warrant by (y) a number equal to the First Purchase Price divided by the First Purchase Shares reduced by \$0.01. The exercise price for each Warrant Share will be \$0.01, and the First Purchase Price shall be reduced by the aggregate exercise price for the Pre-Funded Warrants purchased in lieu of First Purchase Shares; and

(b) On the day following the day that the Company’s Registration Statement (as defined below) covering the Securities under this Agreement is declared effective by the SEC (as defined below), and provided that the Closing Sale Price on such date was equal to or greater than \$0.50, the Company shall sell to the Buyer, and the Buyer shall purchase from the Company, an additional (i) 2,500,000 Purchase Shares (the “**Second Purchase Shares**”) and the Buyer shall pay to the Company as the purchase price therefor, via wire transfer, One Million Dollars (\$1,000,000) (the “**Second Purchase Price**”) and (ii) an additional 2,500,000 Warrants, at an exercise price equal to \$0.74. At the Buyer’s

---

discretion, in lieu of purchasing the Second Purchase Shares or any portion thereof, the Buyer may elect to purchase Pre-Funded Warrants. To the extent that the purchase of Second Purchase Shares would result in the Buyer's beneficial ownership (calculated in accordance with Section 13(d) of the Exchange Act) of Common Stock exceeding 14.99% of the total number of issued and outstanding shares of Common Stock following such purchase, Buyer shall instead purchase Pre-Funded Warrants in lieu of purchasing Second Purchase Shares. The price for each Pre-Funded Warrant purchased in lieu of Second Purchase Shares will be the result of multiplying (x) the number of Warrant Shares that the Buyer may purchase under such Pre-Funded Warrant by (y) a number equal to the Second Purchase Price divided by the Second Purchase Shares reduced by \$0.01. The exercise price for each Warrant Share will be \$0.01, and the Second Purchase Price shall be reduced by the aggregate exercise price for the Pre-Funded Warrants purchased in lieu of Second Purchase Shares.

The Purchase Shares, upon issuance and payment therefor as provided herein, shall be validly issued and fully paid and non-assessable; and the Warrant Shares, when issued and delivered upon exercise of the Warrants and Pre-Funded Warrants, if any, in accordance therewith, shall be validly issued and fully paid and non-assessable. The Company shall pay any and all transfer, stamp or similar taxes that may be payable with respect to the issuance and delivery of any Securities to the Buyer under this Agreement.

## **2. BUYER'S REPRESENTATIONS AND WARRANTIES.**

The Buyer represents and warrants to the Company that as of the date hereof and as of the date of the purchases of the Second Purchase Shares:

(a) Investment Purpose. The Buyer is entering into this Agreement and acquiring the Securities for its own account for investment; provided however, by making the representations herein, the Buyer does not agree to hold any of the Securities for any minimum or other specific term.

(b) Accredited Investor Status. The Buyer is an "accredited investor" as that term is defined in Rule 501(a)(3) of Regulation D of the 1933 Act.

(c) Reliance on Exemptions. The Buyer understands that the Securities are being offered and sold to it in reliance on specific exemptions from the registration requirements of United States federal and state securities laws and that the Company is relying in part upon the truth and accuracy of, and the Buyer's compliance with, the representations, warranties, agreements, acknowledgments and understandings of the Buyer set forth herein in order to determine the availability of such exemptions and the eligibility of the Buyer to acquire the Securities.

(d) Information. The Buyer has been furnished with all materials relating to the business, finances and operations of the Company and materials relating to the offer and sale of the Securities that have been reasonably requested by the Buyer, including, without limitation, the SEC Documents (as defined in Section 3(e) hereof). The Buyer understands that its investment in the Securities involves a high degree of risk. The Buyer (i) is able to bear the economic risk of an investment in the Securities including a total loss, (ii) has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the proposed investment in the Securities and (iii) has had an opportunity to ask questions of and receive answers from the officers of the Company concerning the financial condition and business of the Company and other matters related to an investment in the

---

Securities. Neither such inquiries nor any other due diligence investigations conducted by the Buyer or its representatives shall modify, amend or affect the Buyer's right to rely on the Company's representations and warranties contained in Section 3 below. The Buyer has sought such accounting, legal and tax advice as it has considered necessary to make an informed investment decision with respect to its acquisition of the Securities.

(e) No Governmental Review. The Buyer understands that no United States federal or state agency or any other government or governmental agency has passed on or made any recommendation or endorsement of the Securities or the fairness or suitability of the investment in the Securities nor have such authorities passed upon or endorsed the merits of the offering of the Securities.

(f) Transfer or Sale. The Buyer understands that: (i) the Securities have not been and are not being registered under the 1933 Act or any state securities laws, and may not be offered for sale, sold, assigned or transferred unless (A) subsequently registered thereunder or (B) an exemption exists permitting such Securities to be sold, assigned or transferred without such registration; (ii) any sale of the Securities made in reliance on Rule 144 may be made only in accordance with the terms of Rule 144 and further, if Rule 144 is not applicable, any resale of the Securities under circumstances in which the seller (or the person through whom the sale is made) may be deemed to be an underwriter (as that term is defined in the 1933 Act) may require compliance with some other exemption under the 1933 Act or the rules and regulations of the SEC thereunder; and (iii) neither the Company nor any other person is under any obligation to register the Securities under the 1933 Act or any state securities laws or to comply with the terms and conditions of any exemption thereunder.

(g) Organization. The Buyer is a limited liability company duly organized and validly existing in good standing under the laws of the jurisdiction in which it is organized, and has the requisite organizational power and authority to own its properties and to carry on its business as now being conducted.

(h) Validity; Enforcement. This Agreement has been duly and validly authorized, executed and delivered on behalf of the Buyer and is a valid and binding agreement of the Buyer enforceable against the Buyer in accordance with its terms, subject as to enforceability to (i) general principles of equity and to applicable bankruptcy, insolvency, reorganization, moratorium, liquidation and other similar laws relating to, or affecting generally, the enforcement of applicable creditors' rights and remedies and (ii) public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation) with regards to indemnification, contribution or exculpation. The execution and delivery of the this Agreement by the Buyer and the consummation by it of the transaction contemplated hereby do not conflict with the Buyer's certificate of organization or operating agreement or similar documents, and do not require further consent or authorization by the Buyer, its managers or its members.

(i) Residency. The Buyer is a resident of the State of Illinois.

### **3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.**

The Company represents and warrants to the Buyer that as of the date hereof and as of the date of purchase of the Second Purchase Shares and Warrants:

---

( a ) Organization and Qualification. The Company and its “Subsidiaries” (which for purposes of this Agreement means any entity in which the Company, directly or indirectly, owns more than 50% of the voting stock or capital stock or other similar equity interests) are corporations or limited liability companies duly organized and validly existing in good standing under the laws of the jurisdiction in which they are incorporated or organized, and have the requisite corporate or organizational power and authority to own their properties and to carry on their business as now being conducted. Each of the Company and its Subsidiaries is duly qualified as a foreign corporation or limited liability company to do business and is in good standing in every jurisdiction in which its ownership of property or the nature of the business conducted by it makes such qualification necessary, except to the extent that the failure to be so qualified or be in good standing could not reasonably be expected to have a Material Adverse Effect. As used in this Agreement, “**Material Adverse Effect**” means any material adverse effect on any of: (i) the business, properties, assets, operations, results of operations or financial condition of the Company and its Subsidiaries, if any, taken as a whole, or (ii) the authority or ability of the Company to perform its obligations under the this Agreement.

(b) Authorization; Enforcement; Validity. (i) The Company has the requisite corporate power and authority to enter into and perform its obligations under this Agreement, the Warrants and the Pre-Funded Warrants and to issue the Securities in accordance with the terms hereof, (ii) the execution and delivery of this Agreement, the Warrants and the Pre-Funded Warrants by the Company and the consummation by it of the transaction contemplated hereby, including without limitation, the issuance of the Securities under this Agreement, have been duly authorized by the Company’s Board of Directors or duly authorized committee thereof, do not conflict with the Company’s Certificate of Incorporation or Bylaws (as defined below), and do not require further consent or authorization by the Company, its Board of Directors, except as set forth in this Agreement, or its stockholders, (iii) this Agreement has been duly executed and delivered by the Company and (iv) this Agreement constitutes the valid and binding obligation of the Company enforceable against the Company in accordance with its terms, except as such enforceability may be limited by (y) general principles of equity or applicable bankruptcy, insolvency, reorganization, moratorium, liquidation or similar laws relating to, or affecting generally, the enforcement of creditors’ rights and remedies and (z) public policy underlying any law, rule or regulation (including any federal or state securities law, rule or regulation) with regards to indemnification, contribution or exculpation. The Board of Directors of the Company or duly authorized committee thereof has approved the resolutions (the “**Signing Resolutions**”) substantially in the form as delivered to the Buyer to authorize this Agreement and the transaction contemplated hereby. The Signing Resolutions are valid, in full force and effect and have not been modified or supplemented in any material respect other than by the resolutions substantially in the form as delivered to the Buyer regarding the Registration Statement referred to in Section 4 hereof. The Company has delivered to the Buyer a true and correct copy of the Signing Resolutions as approved by the Board of Directors of the Company or an appropriate Board committee.

(c) Authorization of the Securities. The Purchase Shares have been duly authorized and, upon issuance in accordance with the terms hereof, the Purchase Shares shall be (i) validly issued, fully paid and non-assessable and (ii) free from all taxes, liens and charges with respect to the issuance thereof, with the holders being entitled to all rights accorded to a holder of Common Stock. The Warrants have been duly authorized by the Company and, when executed and delivered by the Company, will be valid and binding agreements of the Company, enforceable against the Company in accordance with their terms, except as the enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles. The Pre-Funded Warrants have been duly

---

authorized by the Company and, when executed and delivered by the Company, will be valid and binding agreements of the Company, enforceable against the Company in accordance with their terms, except as the enforcement thereof may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights and remedies of creditors or by general equitable principles. The Warrant Shares have been duly authorized and validly reserved for issuance upon exercise of the Warrants and the Pre-Funded Warrants in a number sufficient to meet the current exercise requirements. The Warrant Shares, when issued and delivered upon exercise of the Warrants and the Pre-Funded Warrants in accordance therewith, shall be (i) validly issued, fully paid and non-assessable and (ii) free from all taxes, liens and charges with respect to the issuance thereof, with the holders being entitled to all rights accorded to a holder of Common Stock.

(d) No Conflicts. The execution, delivery and performance of this Agreement, the Warrants and the Pre-Funded Warrants by the Company and the consummation by the Company of the transactions contemplated hereby (including, without limitation, the reservation for issuance and issuance of the Securities), does and will not (i) result in a violation of the Certificate of Incorporation, any Certificate of Designations, Preferences and Rights of any outstanding series of preferred stock of the Company or the Bylaws or (ii) conflict with, or constitute a default (or an event which with notice or lapse of time or both would become a default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any agreement, indenture or instrument to which the Company or any of its Subsidiaries is a party, or result, to the Company's knowledge, in a violation of any law, rule, regulation, order, judgment or decree (including federal and state securities laws and regulations and the rules and regulations of the Principal Market applicable to the Company or any of its Subsidiaries) or by which any property or asset of the Company or any of its Subsidiaries is bound or affected, except in the case of conflicts, defaults, terminations, amendments, accelerations, cancellations and violations under clause (ii), which could not reasonably be expected to result in a Material Adverse Effect. Neither the Company nor its Subsidiaries is in violation of any term of or in default under its Certificate of Incorporation, including any Certificate of Designation, Preferences and Rights of any outstanding series of preferred stock of the Company, or Bylaws or their organizational charter or bylaws, respectively. Neither the Company nor any of its Subsidiaries is in violation of any term of or is in default under any material contract, agreement, mortgage, indebtedness, indenture, instrument, judgment, decree or order or any statute, rule or regulation applicable to the Company or its Subsidiaries, except for possible violations, defaults, terminations or amendments that could not reasonably be expected to have a Material Adverse Effect. The business of the Company and its Subsidiaries is not being conducted, and shall not be conducted, in violation of any law, ordinance, or regulation of any governmental entity, except for possible violations, the sanctions for which either individually or in the aggregate could not reasonably be expected to have a Material Adverse Effect. Except as specifically contemplated by this Agreement, reporting obligations under the 1934 Act or as required under the 1933 Act or applicable state securities laws or the filing of a Listing of Additional Shares Notification Form with the Principal Market, the Company is not required to obtain any consent, authorization or order of, or make any filing or registration with, any court or governmental agency or any regulatory or self-regulatory agency in order for it to execute, deliver or perform any of its obligations under or contemplated by the this Agreement in accordance with the terms hereof. Except for the reporting obligations under the 1934 Act, all consents, authorizations, orders, filings and registrations which the Company is required to obtain pursuant to the preceding sentence shall be obtained or effected on or prior to the date hereof. Other than as disclosed in the SEC Documents (defined below) the Company is not subject to any notices or actions from or to the Principal Market, other than routine matters incident to listing on the Principal Market and not involving a violation of the rules of the Principal Market. Other than as disclosed in the SEC Documents, to the Company's knowledge, the Principal Market has not commenced any delisting proceedings against the Company.

---

(e) SEC Documents; Financial Statements. Since March 31, 2017, the Company has filed all reports, schedules, forms, statements and other documents required to be filed by it with the SEC pursuant to the reporting requirements of the 1934 Act (all of the foregoing filed prior to the date hereof and all exhibits included therein and financial statements and schedules thereto and documents incorporated by reference therein being hereinafter referred to as the “**SEC Documents**”). As of their respective dates (except as they have been correctly amended), the SEC Documents complied in all material respects with the requirements of the 1934 Act and the rules and regulations of the SEC promulgated thereunder applicable to the SEC Documents, and none of the SEC Documents, at the time they were filed with the SEC (except as they may have been properly amended), 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 light of the circumstances under which they were made, not misleading. As of their respective dates (except as they have been properly amended), the financial statements of the Company included in the SEC Documents complied as to form in all material respects with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto. Such financial statements have been prepared in accordance with generally accepted accounting principles, consistently applied, during the periods involved (except (i) as may be otherwise indicated in such financial statements or the notes thereto or (ii) in the case of unaudited interim statements, to the extent they may exclude footnotes or may be condensed or summary statements) and fairly present in all material respects the financial position of the Company as of the dates thereof and the results of its operations and cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). Except for routine correspondence, such as comment letters and notices of effectiveness in connection with previously filed registration statements or periodic reports publicly available on EDGAR, to the Company’s knowledge, the Company or any of its Subsidiaries are not on the date hereof the subject of any inquiry, investigation or action by the SEC.

(f) Absence of Certain Changes. Since March 31, 2018, there has been no material adverse change in the business, properties, operations, financial condition or results of operations of the Company or its Subsidiaries taken as a whole. For purposes of this Agreement, neither a decrease in cash or cash equivalents or in the market price of the Common Stock nor losses incurred in the ordinary course of the Company’s business shall be deemed or considered a material adverse change. The Company has not taken any steps, and does not currently expect to take any steps, to seek protection pursuant to any Bankruptcy Law nor does the Company or any of its Subsidiaries have any knowledge or reason to believe that its creditors intend to initiate involuntary bankruptcy or insolvency proceedings. The Company is financially solvent and is generally able to pay its debts as they become due.

(g) Absence of Litigation. Other than as disclosed in the SEC Documents, to the Company’s knowledge, there is no action, suit, proceeding, inquiry or investigation before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the Company or any of its Subsidiaries, threatened against the Company, the Common Stock or any of the Company’s Subsidiaries or any of the Company’s or the Company’s Subsidiaries’ officers or directors in their capacities as such, which could reasonably be expected to have a Material Adverse Effect (each, an “**Action**”).

---



(h) Acknowledgment Regarding Buyer's Status. The Company acknowledges and agrees that the Buyer is acting solely in the capacity of arm's length purchaser with respect to this Agreement and the transaction contemplated hereby. The Company further acknowledges that the Buyer is not acting as a financial advisor or fiduciary of the Company (or in any similar capacity) with respect to this Agreement and the transactions contemplated hereby and any advice given by the Buyer or any of its representatives or agents in connection with this Agreement and the transaction contemplated hereby is merely incidental to the Buyer's purchase of the Securities. The Company further represents to the Buyer that the Company's decision to enter into this Agreement has been based solely on the independent evaluation by the Company and its representatives and advisors.

(i) Intellectual Property Rights. To the Company's knowledge, the Company and its Subsidiaries own or possess adequate rights or licenses to use all material trademarks, trade names, service marks, service mark registrations, service names, patents, patent rights, copyrights, inventions, licenses, approvals, governmental authorizations, trade secrets and other intellectual property rights (collectively, "**Intellectual Property**") necessary to conduct their respective businesses as now conducted, except to the extent that the failure to own, possess, license or otherwise hold adequate rights to use Intellectual Property would not, individually or in the aggregate, have a Material Adverse Effect. To the Company's knowledge, none of the Company's active and registered Intellectual Property have expired or terminated, or, by the terms and conditions thereof, will expire or terminate within two years from the date of this Agreement, except as would not reasonably be expected to have a Material Adverse Effect. The Company and its Subsidiaries do not have any knowledge of any infringement by the Company or its Subsidiaries of any Intellectual Property of others and there is no claim, action or proceeding being made or brought against, or to the Company's knowledge, being threatened against, the Company or its Subsidiaries regarding Intellectual Property, which could reasonably be expected to have a Material Adverse Effect.

(j) Environmental Laws. To the Company's knowledge, the Company and its Subsidiaries (i) are in material compliance with any and all applicable foreign, federal, state and local laws and regulations relating to the protection of human health and safety or the environment and with respect to hazardous or toxic substances or wastes, pollutants or contaminants ("**Environmental Laws**"), (ii) have received all material permits, licenses or other approvals required of them under applicable Environmental Laws to conduct their respective businesses and (iii) are in material compliance with all terms and conditions of any such permit, license or approval, except where, in each of the three foregoing clauses, the failure to so comply or receive such approvals could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

(k) Title. The Company and its Subsidiaries have good and marketable title to all personal property owned by them that is material to the business of the Company and its Subsidiaries, in each case free and clear of all liens, encumbrances and defects except such as do not materially affect the value of such property and do not interfere with the use made and proposed to be made of such property by the Company and any of its Subsidiaries or could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect. Any real property and facilities held under lease by the Company and any of its Subsidiaries, to the Company's knowledge, are held by them under valid, subsisting and enforceable leases with such exceptions as are not material and do not interfere with the use made and proposed to be made of such property and buildings by the Company and its Subsidiaries.

---

(l) Insurance. The Company and each of its Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company believes to be reasonable and customary in the businesses in which the Company and its Subsidiaries are engaged. To the Company's knowledge, since January 1, 2016, neither the Company nor any such Subsidiary has been refused any insurance coverage sought or applied for and neither the Company nor any such Subsidiary, to the Company's knowledge, will be unable 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 at a cost that would not reasonably be expected to have a Material Adverse Effect.

(m) Regulatory Permits. The Company and its Subsidiaries possess all material certificates, authorizations and permits issued by the appropriate federal, state or foreign regulatory authorities necessary to conduct their respective businesses as currently conducted, except when the failure to so possess such certificates, authorizations or permits could not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect, and neither the Company nor any such Subsidiary has received any written notice of proceedings relating to the revocation or modification of any such material certificate, authorization or permit.

(n) Tax Status. The Company and each of its Subsidiaries has made or filed all federal and state income and all other material tax returns, reports and declarations required by any jurisdiction to which it is subject (unless and only to the extent that the Company and each of its Subsidiaries has set aside on its books reserves reasonably adequate for the payment of all unpaid and unreported taxes or filed valid extensions) and 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, except those being contested in good faith and has set aside on its books reserves reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. To the Company's knowledge, there are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction.

(o) Transactions With Affiliates. Other than the grant or exercise of stock options or any other equity securities offered pursuant to duly adopted stock or incentive compensation plans, none of the officers, directors or employees of the Company is on the date hereof a party to any transaction with the Company or any of its Subsidiaries (other than for services as employees, officers and directors and reimbursement for expenses incurred on behalf of the Company), 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 corporation, partnership, trust or other entity in which any officer, director, or any such employee has a material interest or is an officer, director, trustee or general partner.

(p) Application of Takeover Protections. The Company and its board of directors have taken or will take prior to the date hereof all necessary action, if any, in order to render inapplicable any control share acquisition, business combination, poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation or the laws of the state of its incorporation which is or could become applicable to the Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and the Buyer's ownership of the Securities.

---

#### 4. COVENANTS.

(a) Filing of Form 8-K and Registration Statement. The Company agrees that it shall, within the time required under the 1934 Act, file a Current Report on Form 8-K disclosing this Agreement and the transaction contemplated hereby. The Company shall also file within ten (10) Business Days from the date hereof a new registration statement covering the resale of the Securities by the Buyer (the “**Registration Statement**”). The Company agrees that it shall use its best efforts to keep the Registration Statement (or a subsequent registration statement as may be necessary) effective and available to the Buyer for the resale of the Purchase Shares and the Warrant Shares so long as the Buyer holds any Securities.

(b) Blue Sky. The Company shall take such action, if any, as is reasonably necessary in order to obtain an exemption for or to qualify (i) the initial issuance of the Securities to the Buyer under this Agreement and (ii) any subsequent sale of the Securities by the Buyer, in each case, under applicable securities or “Blue Sky” laws of the states of the United States in such states as is reasonably requested by the Buyer from time to time, and shall provide evidence of any such action so taken to the Buyer at its written request; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation or as a dealer in securities in any jurisdiction in which it is not so qualified or to subject itself to taxation in respect of doing business in any jurisdiction in which it is not otherwise so subject.

(c) Listing. The Company shall promptly secure the listing of all of the Purchase Shares and Warrant Shares upon each national securities exchange and automated quotation system that requires an application by the Company for listing, if any, upon which shares of Common Stock are then listed (subject to official notice of issuance) and shall maintain such listing, so long as any other shares of Common Stock shall be so listed. The Company shall use its reasonable best efforts to maintain the Common Stock’s listing on the Principal Market. Neither the Company nor any of its Subsidiaries shall take any action that would be reasonably expected to result in the delisting or suspension of the Common Stock on the Principal Market, unless the Common Stock is immediately thereafter traded on the New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market, or the OTCQB marketplace or OTCQX marketplace of the OTC Markets Group. The Company shall pay all fees and expenses in connection with satisfying its obligations under this Section.

(d) Warrant Shares Reserved. The Company shall, at all times while any Warrants and/or Pre-Funded Warrants are outstanding, reserve and keep available out of the aggregate of its authorized but unissued and otherwise unreserved Common Stock, solely for the purpose of enabling it to issue Warrant Shares upon exercise of such Warrants and/or Pre-Funded Warrants, the number of Warrant Shares that are initially issuable and deliverable upon the exercise of the then-outstanding Warrants and Pre-Funded Warrants.

(e) Restriction on Sales of Capital Stock. The Company, on behalf of itself and any successor entity, agrees that it will not, for a period of 180 days after the date of this Agreement (the “**Lock-Up Period**”), (i) offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend, or otherwise transfer or dispose of, directly or indirectly, any shares of capital stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company; (ii) file or cause to be filed any registration statement with the Commission relating to the offering of any shares of capital

---

stock of the Company or any securities convertible into or exercisable or exchangeable for shares of capital stock of the Company, other than the filing of a Registration Statement on Form S-8 or a registration statement registering the resale of securities outstanding as of the date hereof and disclosed as outstanding in the SEC Documents; (iii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of capital stock of the Company, whether any such transaction described in clause (i), (ii) or (iii) above is to be settled by delivery of shares of capital stock of the Company or such other securities, in cash or otherwise; or (iv) publicly announce an intention to effect any transaction specified in clause (i), (ii) or (iii). The restrictions contained in this Section 4(g) shall not apply to (w) the Securities to be sold hereunder, (x) the issuance by the Company of shares of Common Stock upon the exercise of a stock option or warrant or the conversion of a security outstanding on the date hereof and disclosed as outstanding in the SEC Documents, (y) the grant by the Company of stock options or other stock-based awards, or the issuance of shares of capital stock of the Company under any equity compensation plan of the Company as such plans are in existence on the date hereof and described in the SEC Documents or (z) the issuance of equity securities upon conversion of any debt instruments outstanding as of the date hereof.

(f) Issuance of Purchase Shares and Warrant Shares. Immediately upon the execution of this Agreement, the Company shall issue to the Buyer the First Purchase Shares, 2,500,000 Warrants, and Pre-Funded Warrants pursuant to Section 1 of this Agreement. The First Purchase Shares shall be issued in certificated or restricted book-entry form and (subject to Section 5 hereof) shall bear a restrictive legend substantially similar to the following:

**THE SECURITIES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS. THE SECURITIES HAVE BEEN ACQUIRED FOR INVESTMENT AND MAY NOT BE OFFERED FOR SALE, SOLD, TRANSFERRED OR ASSIGNED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT FOR THE SECURITIES UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR APPLICABLE STATE SECURITIES LAWS, UNLESS SOLD PURSUANT TO: (1) RULE 144 UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR (2) AN OPINION OF HOLDER'S COUNSEL, IN A CUSTOMARY FORM, THAT REGISTRATION IS NOT REQUIRED UNDER SAID ACT OR APPLICABLE STATE SECURITIES LAWS.**

(g) Disposition of Securities. The Buyer shall not sell any Securities except as provided in this Agreement and the "Plan of Distribution" section of the prospectus included in the Registration Statement to be filed by the Company pursuant to Section 4(a) hereof. The Buyer shall not transfer any Securities except pursuant to sales described in the "Plan of Distribution" section of the prospectus included in the Registration Statement or pursuant to Rule 144 under the 1933 Act. In the event of any sales of Securities pursuant to the Registration Statement, the Buyer will (i) effect such sales pursuant to the "Plan of Distribution" section of the prospectus included in the Registration Statement, and (ii) will comply with all applicable prospectus delivery requirements.

---

## 5. TRANSFER AGENT INSTRUCTIONS.

Immediately upon the execution of this Agreement, the Company shall deliver to the Transfer Agent a letter in the form as set forth as **Exhibit D** attached hereto with respect to the issuance of the First Purchase Shares. On the date the Registration Statement is declared effective by the SEC, the Company shall cause any restrictive legend on the Purchase Shares, if any, to be removed upon surrender of the originally issued certificate(s) for such shares. All of the Second Purchase Shares, if any, to be issued under this Agreement shall be issued without any restrictive legend. The Company shall issue irrevocable instructions to the Transfer Agent, and any subsequent transfer agent, to issue Common Stock in the name of the Buyer for the Purchase Shares and Warrant Shares (the “**Irrevocable Transfer Agent Instructions**”). The Company warrants to the Buyer that, so long as any sales by the Buyer would be in compliance with its obligations in Section 4(g), no instruction other than the Irrevocable Transfer Agent Instructions referred to in this Section 5, will be given by the Company to the Transfer Agent with respect to the Purchase Shares and Warrant Shares, and the Purchase Shares, Warrant Shares shall otherwise be freely transferable on the books and records of the Company as and to the extent provided in this Agreement. Notwithstanding anything herein to the contrary, the Purchase Shares and the Warrant Shares shall not be required to contain any legend if such shares are eligible for sale under Rule 144 of the Securities Act, or if such legend is not required under other applicable requirements of the Securities Act (including judicial interpretations and pronouncements issued by the United States Securities & Exchange Commission). The Company shall cause its counsel to issue a legal opinion to the Company’s transfer agent or the Purchaser if required by the Company’s transfer agent to effect the removal of the legend hereunder, or if requested by the Purchaser, respectively, provided that such legend is not required pursuant to the foregoing provisions of this paragraph. The Company agrees that at such time as such legend is no longer required under this section (including, without limitation, following the effective date of the Registration Statement), it will, no later than the earlier of (i) two (2) Business Days and (ii) the number of Business Days comprising the Standard Settlement Period (as defined below) following the delivery by the Purchaser to the Company or the Company’s transfer agent of a certificate representing Purchase Shares or Warrant Shares, as the case may be, issued with a restrictive legend (such date, the “Legend Removal Date”), deliver or cause to be delivered to the Purchaser such shares that are free from all restrictive and other legends in such manner as directed by the Purchaser. The Company may not make any notation on its records or give instructions to the Company’s transfer agent that enlarge the restrictions on transfer set forth in this section. The Company shall pay all reasonable fees and expenses (including the reasonable fees and expenses of legal counsel) relating to the removal of the restrictive legends. As used herein, “Standard Settlement Period” means the standard settlement period, expressed in a number of Business Days, on the Company’s primary trading market with respect to the Common Stock as in effect on the date of delivery of a certificate representing Purchase Shares or Warrant Shares, as the case may be, issued with a restrictive legend.

## 6. CONDITIONS TO THE BUYER’S OBLIGATION TO PURCHASE SECURITIES.

The obligation of the Buyer to buy any Securities under Section (1) of this Agreement is subject to the satisfaction of each of the following conditions:

(a) The Company shall have executed this Agreement and the associated Warrants and delivered the same to the Buyer;

(b) The Common Stock shall be authorized for quotation on the Principal Market, trading in the Common Stock shall not have been within the last 365 days suspended by the SEC or the Principal Market, other than a general halt in trading in the Common Stock by the Principal Market under halt codes indicating pending or released material news, and the Securities shall be approved for listing upon the Principal Market;

---

(c) The Buyer shall have received the opinion of the Company's legal counsel dated as of the date hereof in customary form and substance;

(d) The representations and warranties of the Company shall be true and correct in all material respects (except to the extent that any of such representations and warranties is already qualified as to materiality in Section 3 above, in which case, such representations and warranties shall be true and correct without further qualification) as of the date of this Agreement and as of the date of purchase of the Second Purchase Shares and Warrants as though made at that time (except for representations and warranties that speak as of a specific date, which shall be true and correct in all material respects as of such specific date) and the Company shall have performed, satisfied and complied in all material respects with the covenants, agreements and conditions required by this Agreement to be performed, satisfied or complied with by the Company at or prior to the date hereof. The Buyer shall have received a certificate, executed by the CEO, President or CFO of the Company, dated as of the date hereof, to the foregoing effect in the form attached hereto as **Exhibit B**;

(e) The Board of Directors of the Company or a duly authorized committee thereof shall have adopted resolutions substantially in the form delivered to Buyer, which shall be in full force and effect without any amendment or supplement thereto as of the date hereof;

(f) The Irrevocable Transfer Agent Instructions, in form acceptable to the Buyer, shall have been signed by the Company and the Buyer and shall have been delivered to the Transfer Agent;

(g) The Company shall have delivered to the Buyer a secretary's certificate executed by the Secretary of the Company, dated as of the date hereof, in the form attached hereto as **Exhibit C**;

(h) Only in the case of the Second Purchase Shares and associated additional 2,500,000 Warrants to be purchased under Section (1)(b) hereof, a registration statement covering the sale of all of the Securities under this Agreement shall have been declared effective under the 1933 Act by the SEC and no stop order with respect thereto shall be pending or threatened by the SEC. The Company shall have prepared and delivered to the Buyer a final and complete form of prospectus, dated and current as of the effective date of the Registration Statement, to be used by the Buyer in connection with any sales of any Purchase Shares or Warrant Shares. The Company shall have made all filings under all applicable federal and state securities laws necessary to consummate the issuance of the Securities pursuant to this Agreement in compliance with such laws;

(i) No Event of Default has occurred and is continuing, or any event which, after notice and/or lapse of time, would become an Event of Default has occurred;

(j) On or prior to the date hereof, the Company shall take all necessary action, if any, and such actions as reasonably requested by the Buyer, in order to render inapplicable any control share acquisition, business combination, stockholder rights plan or poison pill (including any distribution under a rights agreement) or other similar anti-takeover provision under the Certificate of Incorporation or the laws of the state of its incorporation, that is or could become applicable to the Buyer as a result of the transactions contemplated by this Agreement, including, without limitation, the Company's issuance of the Securities and the Buyer's ownership of the Securities; and

---

## 7. INDEMNIFICATION.

In consideration of the Buyer's execution and delivery of this Agreement and acquiring the Securities hereunder and in addition to all of the Company's other obligations under this Agreement, the Company shall defend, protect, indemnify and hold harmless the Buyer and all of its affiliates, members, officers, directors, and employees, and any of the foregoing person's agents or other representatives (including, without limitation, those retained in connection with the transactions contemplated by this Agreement) (collectively, the "**Indemnitees**") from and against any and all third party actions, causes of action, suits, claims, losses, costs, penalties, fees, liabilities and damages, and expenses in connection therewith (irrespective of whether any such Indemnitee is a party to the action for which indemnification hereunder is sought), and including reasonable attorneys' fees and disbursements (the "**Indemnified Liabilities**"), incurred by any Indemnitee as a result of, or arising out of, or relating to (a) any misrepresentation or breach of any representation or warranty made by the Company in this Agreement or any other certificate, instrument or document contemplated hereby or thereby, (b) any breach of any covenant, agreement or obligation of the Company contained in this Agreement or any other certificate, instrument or document contemplated hereby or thereby, or (c) any cause of action, suit or claim brought or made against such Indemnitee and arising out of or resulting from the execution, delivery, performance or enforcement of this Agreement or any other certificate, instrument or document contemplated hereby or thereby, other than with respect to Indemnified Liabilities which directly and primarily result from (A) a breach of any of the Buyer's representations and warranties, covenants or agreements contained in this Agreement, or (B) the gross negligence, bad faith or willful misconduct of the Buyer or any other Indemnitee. To the extent that the foregoing undertaking by the Company may be unenforceable for any reason, the Company shall make the maximum contribution to the payment and satisfaction of each of the Indemnified Liabilities which is permissible under applicable law.

## 8. EVENTS OF DEFAULT.

An "**Event of Default**" shall be deemed to have occurred at any time as any of the following events occurs:

(a) during any period in which the effectiveness of any registration statement is required to be maintained pursuant to this Agreement, the effectiveness of such registration statement lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable to the Buyer for the sale of all of the Securities, and such lapse or unavailability continues for a period of ten (10) consecutive Business Days or for more than an aggregate of thirty (30) Business Days in any 365-day period, which is not in connection with certain permitted delays, post-effective amendment to any such registration statement or the filing of a new registration statement; provided, however, that in connection with any post-effective amendment to such registration statement or filing of a new registration statement that is required to be declared effective by the SEC, such lapse or unavailability may continue for a period of no more than thirty (30) consecutive Business Days, which such period shall be extended for an additional thirty (30) Business Days if the Company receives a comment letter from the SEC in connection therewith;

(b) the suspension from trading on a Principal Market for a period of three (3) consecutive Business Days;

---

(c) the delisting of the Common Stock from the Principal Market, and the Common Stock is not immediately thereafter trading on the New York Stock Exchange, the NYSE American, the Nasdaq Global Select Market, the Nasdaq Global Market, the Nasdaq Capital Market, or the OTCQB marketplace or OTCQX marketplace of the OTC Markets Group;

(d) the failure for any reason by the Transfer Agent to issue Purchase Shares to the Buyer within five (5) Business Days after the date of purchase of the First Purchase Shares and the Second Purchase Shares that the Buyer is entitled to receive;

(e) the Company's breach of any representation or warranty (as of the dates made), covenant or other term or condition under this Agreement if such breach could reasonably be expected to have a Material Adverse Effect and except, in the case of a breach of a covenant which is reasonably curable, only if such breach continues uncured for a period of at least five (5) Business Days;

(f) if any Person commences a proceeding against the Company pursuant to or within the meaning of any Bankruptcy Law;

(g) if the Company pursuant to or within the meaning of any Bankruptcy Law; (A) commences a voluntary case, (B) consents to the entry of an order for relief against it in an involuntary case, (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, (D) makes a general assignment for the benefit of its creditors or (E) becomes insolvent; or

(h) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that (A) is for relief against the Company in an involuntary case, (B) appoints a Custodian of the Company or for all or substantially all of its property, or (C) orders the liquidation of the Company or any Subsidiary.

So long as an Event of Default has occurred and is continuing, or if any event which, after notice and/or lapse of time, would become an Event of Default, has occurred and is continuing, the Buyer shall not be obligated to purchase any Securities under this Agreement. If pursuant to or within the meaning of any Bankruptcy Law, the Company commences a voluntary case or any Person commences a proceeding against the Company, a Custodian is appointed for the Company or for all or substantially all of its property, or the Company makes a general assignment for the benefit of its creditors, (any of which would be an Event of Default as described in Sections 8(f), 8(g) and 8(h) hereof) this Agreement shall automatically terminate without any liability or payment to the Company without further action or notice by any Person.

## **9. CERTAIN DEFINED TERMS.**

For purposes of this Agreement, the following terms shall have the following meanings:

- (a) **"1933 Act"** means the Securities Act of 1933, as amended.
  - (b) **"Bankruptcy Law"** means Title 11, U.S. Code, or any similar federal or state law for the relief of debtors.
-



(c) **“Business Day”** means any day on which the Principal Market is open for trading during normal trading hours (i.e., 9:30 a.m. to 4:00 p.m. Eastern Time), including any day on which the Principal Market is open for trading for a period of time less than the customary time.

(d) **“Closing Sale Price”** means the last closing trade price for the Common Stock on the Principal Market as reported by the Principal Market.

(e) **“Confidential Information”** means any information disclosed by either party to the other party, either directly or indirectly, in writing, orally or by inspection of tangible objects (including, without limitation, documents, prototypes, samples, plant and equipment), which is designated as "Confidential," "Proprietary" or some similar designation. Information communicated orally shall be considered Confidential Information if such information is expressly identified as Confidential Information at the time of such initial disclosure and confirmed in writing as being Confidential Information within ten (10) Business Days after the initial disclosure. Confidential Information may also include information disclosed to a disclosing party by third parties. Confidential Information shall not, however, include any information which (i) was publicly known and made generally available in the public domain prior to the time of disclosure by the disclosing party; (ii) becomes publicly known and made generally available after disclosure by the disclosing party to the receiving party through no action or inaction of the receiving party; (iii) is already in the possession of the receiving party at the time of disclosure by the disclosing party as shown by the receiving party's files and records immediately prior to the time of disclosure; (iv) is obtained by the receiving party from a third party without a breach of such third party's obligations of confidentiality; or (v) is independently developed by the receiving party without use of or reference to the disclosing party's Confidential Information, as shown by documents and other competent evidence in the receiving party's possession.

(f) **“Custodian”** means any receiver, trustee, assignee, liquidator or similar official under any Bankruptcy Law.

(g) **“Person”** means an individual or entity including any limited liability company, a partnership, a joint venture, a corporation, a trust, an unincorporated organization and a government or any department or agency thereof.

(h) **“Principal Market”** means the Nasdaq Stock Market.

(i) **“SEC”** means the U.S. Securities and Exchange Commission.

(j) **“Transfer Agent”** means the transfer agent of the Company as set forth in Section 10(f) hereof or such other person who is then serving as the transfer agent for the Company in respect of the Common Stock.

## 10. MISCELLANEOUS.

(a) Governing Law; Jurisdiction; Jury Trial. The corporate laws of the State of Florida shall govern all issues concerning the relative rights of the Company and its stockholders. All other questions concerning the construction, validity, enforcement and interpretation of this Agreement shall be governed by the internal laws of the State of Illinois, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Illinois or any other jurisdictions) that would cause the application of the laws of any jurisdictions other than the State of Illinois. Each party hereby irrevocably

---

submits to the exclusive jurisdiction of the state and federal courts sitting in the City of Chicago, for the adjudication of any dispute hereunder or in connection herewith or therewith, or with any transaction contemplated hereby or discussed herein, and hereby irrevocably waives, and agrees not to assert in any suit, action or proceeding, any claim that it is not personally subject to the jurisdiction of any such court, that such suit, action or proceeding is brought in an inconvenient forum or that the venue of such suit, action or proceeding is improper. Each party hereby irrevocably waives personal service of process and consents to process being served in any such suit, action or proceeding by mailing a copy thereof to such party at the address for such 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 manner permitted by law. **EACH PARTY HEREBY IRREVOCABLY WAIVES ANY RIGHT IT MAY HAVE, AND AGREES NOT TO REQUEST, A JURY TRIAL FOR THE ADJUDICATION OF ANY DISPUTE HEREUNDER OR IN CONNECTION HEREWITH OR ARISING OUT OF THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED HEREBY.**

(b) Counterparts. This Agreement may be executed in two or more identical counterparts, all of which 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; provided that a facsimile or pdf (or other electronic reproduction) signature shall be considered due execution and shall be binding upon the signatory thereto with the same force and effect as if the signature were an original, not a facsimile or PDF (or other electronic reproduction) signature.

(c) Headings. The headings of this Agreement are for convenience of reference and shall not form part of, or affect the interpretation of, this Agreement.

(d) Severability. If any provision of this Agreement shall be invalid or unenforceable in any jurisdiction, such invalidity or unenforceability shall not affect the validity or enforceability of the remainder of this Agreement in that jurisdiction or the validity or enforceability of any provision of this Agreement in any other jurisdiction.

(e) Entire Agreement. This Agreement and the Registration Rights Agreement supersede all other prior oral or written agreements between the Buyer, the Company, their affiliates and persons acting on their behalf with respect to the matters discussed herein, and this Agreement and the instruments referenced herein contain the entire understanding of the parties with respect to the matters covered herein and therein and, except as specifically set forth herein or therein, neither the Company nor the Buyer makes any representation, warranty, covenant or undertaking with respect to such matters. Each of the Company and the Buyer acknowledges and agrees that it has not relied on, in any manner whatsoever, any representations or statements, written or oral, other than as expressly set forth in this Agreement.

(f) Notices. Any notices, consents or other communications required or permitted to be given under the terms of this Agreement must be in writing and will be deemed to have been delivered: (i) upon receipt, when delivered personally; (ii) upon receipt, when sent by facsimile (provided confirmation of transmission is mechanically or electronically generated and kept on file by the sending party); (iii) upon receipt, when sent by electronic message (provided the recipient responds to the message and confirmation of both electronic messages are kept on file by the sending party); or (iv) one (1) Business Day after timely deposit with a nationally recognized overnight delivery service, in each case properly addressed to the party to receive the same. The addresses and facsimile numbers for such communications shall be:

---

If to the Company:

ParkerVision, Inc.  
7915 Baymeadows Way, Suite 400  
Jacksonville, FL 32256  
Telephone:  
Facsimile:  
Attention:  
Email:

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

Graubard Miller  
The Chrysler Building  
405 Lexington Avenue, 11th Floor  
New York, New York 10174  
Telephone:  
Facsimile:  
Attention:  
Email:

If to the Buyer:

Aspire Capital Fund, LLC  
155 North Wacker Drive, Suite 1600  
Chicago, IL 60606  
Telephone:  
Facsimile:  
Attention:  
Email:

With a copy to (which shall not constitute delivery to the Buyer):

Morrison & Foerster LLP  
2000 Pennsylvania Avenue, NW, Suite 6000  
Washington, DC 20006  
Telephone:  
Facsimile:  
Attention:  
Email:

If to the Transfer Agent:

American Stock Transfer & Trust Company  
6201 15th Avenue  
Brooklyn, NY 11219  
Telephone:

---

Facsimile:  
Attention:  
Email:

or at such other address and/or facsimile number and/or to the attention of such other person as the recipient party has specified by written notice given to each other party at least one (1) Business Day prior to the effectiveness of such change. Written confirmation of receipt (A) given by the recipient of such notice, consent or other communication, (B) mechanically or electronically generated by the sender's facsimile machine containing the time, date, and recipient facsimile number, (C) electronically generated by the sender's electronic mail containing the time, date and recipient email address or (D) provided by a nationally recognized overnight delivery service, shall be rebuttable evidence of receipt in accordance with clause (i), (ii), (iii) or (iv) above, respectively.

(g) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns. The Company shall not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Buyer, including by merger or consolidation; provided, however, that any transaction, whether by merger, reorganization, restructuring, consolidation, financing or otherwise, whereby the Company remains the surviving entity immediately after such transaction shall not be deemed a succession or assignment. The Buyer may not assign its rights or obligations under this Agreement.

(h) No Third Party Beneficiaries. This Agreement is intended for the benefit of the parties hereto and their respective permitted successors and assigns, and is not for the benefit of, nor may any provision hereof be enforced by, any other person.

(i) Publicity. The Buyer shall have the right to approve before issuance any press release, SEC filing or any other public disclosure made by or on behalf of the Company whatsoever with respect to, in any manner, the Buyer, its purchases hereunder or any aspect of this Agreement or the transactions contemplated hereby; provided, however, that the Company shall be entitled, without the prior approval of the Buyer, to make any press release or other public disclosure (including any filings with the SEC) with respect to such transactions as is required by applicable law and regulations so long as the Company and its counsel consult with the Buyer in connection with any such press release or other public disclosure at least one (1) Business Day prior to its release; provided, however, that the Company's obligations pursuant to this Section 10(i) shall not apply if the material provisions of such press release, SEC filing, or other public disclosure previously has been publicly disclosed by the Company in accordance with this Section 10(i). The Buyer must be provided with a copy thereof at least one (1) Business Day prior to any release or use by the Company thereof.

(j) Further Assurances. Each party shall do and perform, or cause to be done and performed, all such further acts and things, and shall execute and deliver all such other agreements, certificates, instruments and documents, as the other party may reasonably request in order to carry out the intent and accomplish the purposes of this Agreement and the consummation of the transactions contemplated hereby.

(k) No Financial Advisor, Placement Agent, Broker or Finder. The Company represents and warrants to the Buyer that it has not engaged any financial advisor, placement agent, broker or finder in connection

---

with the transactions contemplated hereby. The Buyer represents and warrants to the Company that it has not engaged any financial advisor, placement agent, broker or finder in connection with the transactions contemplated hereby. Each party shall be responsible for the payment of any fees or commissions, if any, of any financial advisor, placement agent, broker or finder engaged by such party relating to or arising out of the transactions contemplated hereby. Each party shall pay, and hold the other party harmless against, any liability, loss or expense (including, without limitation, attorneys' fees and out of pocket expenses) arising in connection with any such claim.

(l) No Strict Construction. The language used in this Agreement will be deemed to be the language chosen by the parties to express their mutual intent, and no rules of strict construction will be applied against any party.

(m) Failure or Indulgence Not Waiver. No failure or delay in the exercise of any power, right or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other right, power or privilege.

\* \* \* \* \*

---

IN WITNESS WHEREOF, the Buyer and the Company have caused this Securities Purchase Agreement to be duly executed as of the date first written above.

**THE COMPANY:**

**PARKERVISION, INC.**

By: \_\_\_\_\_  
Name:  
Title:

**BUYER:**

**ASPIRE CAPITAL FUND, LLC**

**BY: ASPIRE CAPITAL PARTNERS, LLC**

By: \_\_\_\_\_  
Name:  
Title:

---