

SECURITIES & EXCHANGE COMMISSION EDGAR FILING

BIO KEY INTERNATIONAL INC

Form: 10-Q

Date Filed: 2019-08-14

Corporate Issuer CIK: 1019034

U.S. SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

QUARTERLY REPORT UNDER SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 2019

or

TRANSITION REPORT UNDER SECTION 13 OR 15(D) OF THE EXCHANGE ACT

For the Transition Period from _____ to _____

Commission file number 1-13463

BIO-KEY INTERNATIONAL, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE

(State or Other Jurisdiction of Incorporation of Organization)

41-1741861

(IRS Employer Identification Number)

3349 HIGHWAY 138, BUILDING A, SUITE E, WALL, NJ 07719

(Address of Principal Executive Offices)

(732) 359-1100

(Registrant's telephone number, including area code)

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

Title of each class

Trading Symbol

Name of each exchange on which registered

Common Stock, par value \$0.0001 per share

BKYI

Nasdaq Stock market

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

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

Large accelerated filer

Accelerated filer

Smaller Reporting Company

Non-accelerated filer

Emerging growth company

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

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

Number of shares of Common Stock, \$.0001 par value per share, outstanding as of August 12, 2019 is 14,397,015.

BIO-KEY INTERNATIONAL, INC. AND SUBSIDIARY

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PART I -- FINANCIAL INFORMATION

BIO-KEY INTERNATIONAL, INC. AND SUBSIDIARY
CONDENSED CONSOLIDATED BALANCE SHEETS

	June 30, 2019	December 31, 2018
	(Unaudited)	
ASSETS		
Cash and cash equivalents	\$ 687,023	\$ 323,943
Accounts receivable, net	689,900	1,574,032
Due from factor	138,568	56,682
Inventory	1,011,703	998,829
Resalable software license rights	1,125,000	1,125,000
Prepaid expenses and other	161,997	150,811
Total current assets	<u>3,814,191</u>	<u>4,229,297</u>
Resalable software license rights, net of current portion	6,193,417	6,790,610
Equipment and leasehold improvements, net	137,458	148,608
Capitalized contract costs, net	278,286	319,199
Deposits and other assets	8,712	8,712
Operating lease right-of-use assets	532,757	-
Intangible assets, net	191,014	195,906
Total non-current assets	<u>7,341,644</u>	<u>7,463,035</u>
TOTAL ASSETS	<u>\$ 11,155,835</u>	<u>\$ 11,692,332</u>
LIABILITIES		
Accounts payable	\$ 864,879	\$ 481,269
Accounts payable – related party	142,623	-
Accrued liabilities	714,250	548,232
Convertible notes payable, net of debt discount and debt issuance costs	541,667	-
Deferred revenue	294,261	196,609
Operating lease liabilities, current portion	141,068	-
Total current liabilities	<u>2,698,748</u>	<u>1,226,110</u>
Operating lease liabilities, net of current portion	383,028	-
Total non-current liabilities	<u>383,028</u>	<u>-</u>
TOTAL LIABILITIES	<u>3,081,776</u>	<u>1,226,110</u>
Commitments		
STOCKHOLDERS' EQUITY		
Common stock — authorized, 170,000,000 shares; issued and outstanding; 14,295,923 and 13,977,868 of \$.0001 par value at June 30, 2019 and December 31, 2018, respectively	1,429	1,398
Additional paid-in capital	86,436,197	85,599,140
Accumulated deficit	(78,363,567)	(75,134,316)
TOTAL STOCKHOLDERS' EQUITY	<u>8,074,059</u>	<u>10,466,222</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$ 11,155,835</u>	<u>\$ 11,692,332</u>

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

BIO-KEY INTERNATIONAL, INC. AND SUBSIDIARY
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2019	2018	2019	2018
Revenues				
Services	\$ 231,993	\$ 249,121	\$ 473,603	\$ 551,570
License fees	60,300	154,251	143,508	256,970
Hardware	436,090	344,769	662,895	781,056
Total revenues	728,383	748,141	1,280,006	1,589,596
Costs and other expenses				
Cost of services	58,421	120,841	149,250	275,573
Cost of license fees	372,327	766,637	749,543	1,540,102
Cost of hardware	248,678	142,325	384,683	393,573
Total costs and other expenses	679,426	1,029,803	1,283,476	2,209,248
Gross profit (loss)	48,957	(281,662)	(3,470)	(619,652)
Operating Expenses				
Selling, general and administrative	1,058,671	1,076,184	2,435,704	2,538,038
Research, development and engineering	301,217	297,633	675,335	689,787
Total Operating Expenses	1,359,888	1,373,817	3,111,039	3,227,825
Operating loss	(1,310,931)	(1,655,479)	(3,114,509)	(3,847,477)
Other income (expense)				
Interest income	54	14	124	21
Interest expense	(114,866)	-	(114,866)	-
Total other income (expense), net	(114,812)	14	(114,742)	21
Net loss	(1,425,743)	(1,655,465)	(3,229,251)	(3,847,456)
Convertible preferred stock dividends	-	(41,870)	-	(198,033)
Net loss available to common stockholders	\$ (1,425,743)	\$ (1,697,335)	\$ (3,229,251)	\$ (4,045,489)
Basic and diluted loss per common share attributable to common stockholders	\$ (0.10)	\$ (0.15)	\$ (0.23)	\$ (0.42)
Weighted Average Common Shares Outstanding:				
Basic and diluted	14,117,062	11,375,320	14,048,570	9,623,151

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

BIO-key International, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Series A-1 Preferred Stock		Series B-1 Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	-	\$ -	-	\$ -	13,977,868	\$ 1,398	\$ 85,599,140	\$ (75,134,316)	\$ 10,466,222
Issuance of common stock for directors' fees	-	-	-	-	13,820	1	16,505	-	16,506
Share-based compensation	-	-	-	-	-	-	509,528	-	509,528
Net loss	-	-	-	-	-	-	-	(1,803,508)	(1,803,508)
Balance as of March 31, 2019	-	\$ -	-	\$ -	13,991,688	\$ 1,399	\$ 86,125,173	\$ (76,937,824)	\$ 9,188,748
Issuance of common stock for directors' fees	-	-	-	-	4,235	-	5,505	-	5,505
Issuance of common stock for commitment fees	-	-	-	-	300,000	30	449,970	-	450,000
Commitment fee adjustment	-	-	-	-	-	-	(270,000)	-	(270,000)
Share-based compensation	-	-	-	-	-	-	125,549	-	125,549
Net loss	-	-	-	-	-	-	-	(1,425,743)	(1,425,743)
Balance as of June 30, 2019	-	\$ -	-	\$ -	14,295,923	\$ 1,429	\$ 86,436,197	\$ (78,363,567)	\$ 8,074,059

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

BIO-key International, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Series A-1 Preferred Stock		Series B-1 Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2017	62,596	\$ 6	105,000	\$ 11	7,691,324	\$ 769	\$80,829,001	\$ (67,076,492)	\$13,753,295
Adoption of ASC 606	-	-	-	-	-	-	-	240,017	240,017
Issuance of common stock for directors' fees	-	-	-	-	8,421	1	16,512	-	16,513
Dividends declared on preferred stock	-	-	-	-	-	-	(156,162)	-	(156,162)
Conversion of B-1 preferred stock to common stock	-	-	(60,420)	(6)	1,678,334	168	(162)	-	-
Conversion of dividends payable on B-1 preferred stock	-	-	-	-	115,857	11	417,072	-	417,083
Share-based compensation	-	-	-	-	-	-	533,421	-	533,421
Net loss	-	-	-	-	-	-	-	(2,191,992)	(2,191,992)
Balance as of March 31, 2018	62,596	\$ 6	44,580	\$ 5	9,493,936	\$ 949	\$81,639,682	\$ (69,028,467)	\$12,612,175
Issuance of common stock for directors' fees	-	-	-	-	2,683	1	6,508	-	6,509
Dividends declared on preferred stock	-	-	-	-	-	-	(41,871)	-	(41,871)
Conversion of A-1 preferred stock to common stock	(62,596)	(6)	-	-	1,738,778	174	(168)	-	-
Conversion of dividends payable on A-1 preferred stock	-	-	-	-	98,893	10	356,005	-	356,015
Conversion of B-1 preferred stock to common stock	-	-	(44,580)	(5)	1,238,334	123	(118)	-	-
Conversion of dividends payable on B-1 preferred stock	-	-	-	-	15,373	2	55,339	-	55,341
Legal fees	-	-	-	-	-	-	(15,212)	-	(15,212)
Share-based compensation	-	-	-	-	-	-	143,034	-	143,034
Net loss	-	-	-	-	-	-	-	(1,655,465)	(1,655,465)
Rounding	-	-	-	-	-	-	-	1	1
Balance as of June 30, 2018	-	\$ -	-	\$ -	12,587,997	\$ 1,259	\$82,143,199	\$ (70,683,931)	\$11,460,527

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

BIO-KEY INTERNATIONAL, INC. AND SUBSIDIARY
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Six Months Ended June 30,	
	2019	2018
CASH FLOW FROM OPERATING ACTIVITIES:		
Net loss	\$ (3,229,251)	\$ (3,847,456)
Adjustments to reconcile net loss to net cash provided by (used for) operating activities:		
Depreciation	39,903	44,596
Amortization of intangible assets	6,628	8,966
Amortization of resalable software license rights	562,150	1,318,559
Amortization of debt discount	15,467	-
Amortization of capitalized contract costs	67,774	59,044
Amortization of debt issuance costs	56,200	-
Share and warrant-based compensation for employees and consultants	635,077	676,454
Stock based directors' fees	22,011	23,021
Change in assets and liabilities:		
Accounts receivable	884,132	2,424,295
Due from factor	(81,886)	82,202
Operating leases right-of-use assets	70,180	-
Capitalized contract costs	(26,861)	(160,649)
Inventory	(12,874)	16,369
Resalable software license rights	35,043	9,543
Prepaid expenses and other	(23,781)	(4,041)
Accounts payable	526,233	(168,799)
Accrued liabilities	166,018	(203,445)
Deferred revenue	97,652	(179,683)
Operating lease liabilities	(66,246)	-
Net cash provided by (used for) operating activities	<u>(256,431)</u>	<u>98,976</u>
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchase of intangible assets	(1,736)	-
Capital expenditures	(28,753)	(68,479)
Net cash used for investing activities	<u>(30,489)</u>	<u>(68,479)</u>
CASH FLOW FROM FINANCING ACTIVITIES:		
Issuance of convertible notes	667,000	-
Costs to issue notes, preferred and common stock	(17,000)	(15,212)
Net cash provided by (used for) financing activities	<u>650,000</u>	<u>(15,212)</u>
NET INCREASE IN CASH AND CASH EQUIVALENTS	363,080	15,285
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	323,943	288,721
CASH AND CASH EQUIVALENTS, END OF PERIOD	\$ 687,023	\$ 304,006

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

BIO-KEY International, Inc. and Subsidiary
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

SUPPLEMENTARY DISCLOSURES OF CASH FLOW INFORMATION

	Six Months Ended June 30,	
	2019	2018
Cash paid for:		
Interest	\$ —	\$ —
Income taxes	\$ —	\$ —
Noncash investing and financing activities		
Accrual of unpaid dividends on preferred stock	\$ —	\$ 198,033
Conversion of A-1 preferred dividends payable to common stock	\$ —	\$ 356,015
Conversion of A-1 preferred stock to common stock	\$ —	\$ 6,259,600
Conversion of B-1 preferred dividends payable to common stock	\$ —	\$ 472,426
Conversion of B-1 preferred stock to common stock	\$ —	\$ 10,500,000
Right-of-use asset addition under ASC 842	\$ 602,937	\$ —
Operating lease liabilities under ASC 842	\$ 590,342	\$ —
Share based commitment fees	\$ 180,000	\$ —
Debt discount issued with convertible note	\$ 40,000	\$ —

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

BIO-KEY INTERNATIONAL, INC. AND SUBSIDIARY
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
June 30, 2019 (Unaudited)

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Nature of Business

The Company, founded in 1993, develops and markets proprietary fingerprint identification biometric technology and software solutions. The Company was a pioneer in developing automated, finger identification technology that supplements or complements other methods of identification and verification, such as personal inspection identification, passwords, tokens, smart cards, ID cards, PKI, credit card, passports, driver's licenses, OTP or other form of possession or knowledge-based credentialing. Additionally, advanced BIO-key® technology has been, and is, used to improve both the accuracy and speed of competing finger-based biometrics.

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements include the accounts of BIO-key International, Inc. and its wholly-owned subsidiary (collectively, the "Company" or "BIO-key") and are stated in conformity with accounting principles generally accepted in the United States of America, pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). The operating results for interim periods are not necessarily indicative of results that may be expected for any other interim period or for the full year. Pursuant to such rules and regulations, certain financial information and note disclosures normally included in the financial statements have been condensed or omitted. Significant intercompany accounts and transactions have been eliminated in consolidation.

In the opinion of management, the accompanying unaudited interim consolidated financial statements contain all necessary adjustments, consisting only of those of a recurring nature, and disclosures to present fairly the Company's financial position and the results of its operations and cash flows for the periods presented. The balance sheet at June 30, 2019 was derived from the audited financial statements, but does not include all of the disclosures required by accounting principles generally accepted in the United States of America. These unaudited interim condensed consolidated financial statements should be read in conjunction with the financial statements and the related notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on April 1, 2019.

Updated Significant Accounting Policies

Leases

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02, "Leases" (Topic 842), as amended (ASC 842). The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months and classify as either operating or finance leases. We adopted this standard effective January 1, 2019 using the modified retrospective approach for all leases entered into before the effective date. Adoption of the ASC 842 had a significant effect on our balance sheet resulting in increased non-current assets and increased current and non-current liabilities. There was no impact to retained earnings upon adoption of the new standard. We did not have any finance leases (formerly referred to as capital leases prior to the adoption of ASC 842), therefore there was no change in accounting treatment required. For comparability purposes, the Company will continue to comply with the previous disclosure requirements in accordance with the existing lease guidance and prior periods are not restated.

The Company elected the package of practical expedients as permitted under the transition guidance, which allowed us: (1) to carry forward the historical lease classification; (2) not to reassess whether expired or existing contracts are or contain leases; and, (3) not to reassess the treatment of initial direct costs for existing leases.

In accordance with ASC 842, at the inception of an arrangement, the Company determines whether the arrangement is or contains a lease based on the unique facts and circumstances present and the classification of the lease including whether the contract involves the use of a distinct identified asset, whether we obtain the right to substantially all the economic benefit from the use of the asset, and whether we have the right to direct the use of the asset. Leases with a term greater than one year are recognized on the balance sheet as right-of-use (ROU) assets, lease liabilities and, if applicable, long-term lease liabilities. The Company has elected not to recognize on the balance sheet leases with terms of one year or less under practical expedient in paragraph ASC 842-20-25-2. For contracts with lease and non-lease components, the Company has elected not to allocate the contract consideration and to account for the lease and non-lease components as a single lease component.

Lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The implicit rate within our operating leases are generally not determinable and, therefore, the Company uses the incremental borrowing rate at the lease commencement date to determine the present value of lease payments. The determination of the Company's incremental borrowing rate requires judgment. The Company determines the incremental borrowing rate for each lease using our estimated borrowing rate, adjusted for various factors including level of collateralization, term and currency to align with the terms of the lease. The operating lease ROU asset also includes any lease prepayments, offset by lease incentives.

An option to extend the lease is considered in connection with determining the ROU asset and lease liability when it is reasonably certain we will exercise that option. An option to terminate is considered unless it is reasonably certain we will not exercise the option.

For periods prior to the adoption of ASC 842, the Company recorded rent expense based on the term of the related lease. The expense recognition for operating leases under ASC 842 is substantially consistent with prior guidance. As a result, there are no significant differences in our results of operations presented.

The impact of the adoption of ASC 842 on the balance sheet was:

	As reported December 31, 2018	Adoption of ASC 842 - increase (decrease)	Balance January 1, 2019
Operating lease right-of-assets	\$ -	\$ 602,937	\$ 602,937
Prepaid expenses and other	\$ 150,811	\$ (12,595)	\$ 138,216
Total assets	\$ 11,692,332	\$ 590,342	\$ 12,282,674
Operating lease liabilities, current portion	\$ -	\$ 135,519	\$ 135,519
Operating lease liabilities, net of current portion	\$ -	\$ 454,823	\$ 454,823
Total liabilities	\$ 1,226,110	\$ 590,342	\$ 1,816,452
Total liabilities and stockholders' equity	\$ 11,692,332	\$ 590,342	\$ 12,282,674

Recently Issued Accounting Pronouncements

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update to the standard is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Entities can choose to adopt the ASU 2018-15 prospectively or retrospectively. The Company is currently assessing the impact ASU 2018-15 will have on its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326), referred to herein as ASU 2016-13, which significantly changes how entities will account for credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. ASU 2016-13 replaces the existing incurred loss model with an expected credit loss model that requires entities to estimate an expected lifetime credit loss on most financial assets and certain other instruments. Under ASU 2016-13 credit impairment is recognized as an allowance for credit losses, rather than as a direct write-down of the amortized cost basis of a financial asset. The impairment allowance is a valuation account deducted from the amortized cost basis of financial assets to present the net amount expected to be collected on the financial asset. Once the new pronouncement is adopted by the Company, the allowance for credit losses must be adjusted for management's current estimate at each reporting date. The new guidance provides no threshold for recognition of impairment allowance. Therefore, entities must also measure expected credit losses on assets that have a low risk of loss. For instance, trade receivables that are either current or not yet due may not require an allowance reserve under currently generally accepted accounting principles, but under the new standard, the Company will have to estimate an allowance for expected credit losses on trade receivables under ASU 2016-13. ASU 2016-13 is effective for annual periods, including interim periods within those annual periods, beginning after December 15, 2019. Early adoption is permitted. The Company is currently assessing the impact ASU 2016-13 will have on its condensed consolidated financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standard if currently adopted would have a material effect on the accompanying consolidated financial statements.

Reclassification

Reclassifications occurred to certain prior year amounts in order to conform to the current year classifications including segregating the hardware revenues. The reclassifications have no effect on the reported net loss.

2. GOING CONCERN

The Company has incurred significant losses to date and at June 30, 2019 had an accumulated deficit of approximately \$78 million. In addition, broad commercial acceptance of the Company's technology is critical to the Company's success and ability to generate future revenues. At June 30, 2019, the Company's total cash and cash equivalents were approximately \$687,000, as compared to approximately \$324,000 at December 31, 2018.

The Company has financed operations in the past through access to the capital markets by issuing secured and convertible debt securities, convertible preferred stock, common stock, and through factoring receivables. The Company estimates that it currently requires approximately \$537,000 per month to conduct operations, a monthly amount that it has been unable to achieve consistently through revenue generation.

If the Company is unable to generate sufficient revenue to meet its goals, it will need to obtain additional third-party financing to (i) conduct the sales, marketing and technical support necessary to execute its plan to substantially grow operations, increase revenue, and serve a significant customer base; and (ii) provide working capital. No assurance can be given that any form of additional financing will be available on terms acceptable to the Company, that adequate financing will be obtained by the Company, in order to meet its needs, or that such financing would not be dilutive to existing shareholders.

The accompanying financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), which contemplate continuation of the Company as a going concern, and assumes continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The matters described in the preceding paragraphs raise substantial doubt about the Company's ability to continue as a going concern. Recoverability of a major portion of the recorded asset amounts shown in the accompanying balance sheet is dependent upon the Company's ability to meet its financing requirements on a continuing basis, and become profitable in its future operations. The accompanying consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue in existence.

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company adopted ASC 606 on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services. To achieve this core principle, the Company applies the following five steps:

- Identify the contract with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to performance obligations in the contract
- Recognize revenue when or as the Company satisfies a performance obligation

Disaggregation of Revenue

The following table summarizes revenue from contracts with customers for the three month periods ended June 30, 2019 and June 30, 2018:

	North America	South America	EMEA*	Asia	June 30, 2019
Support and Maintenance	\$ 197,613	\$ 5,291	\$ 22,589	\$ 3,500	\$ 228,993
Professional services	3,000	-	-	-	3,000
License fees	32,800	-	27,500	-	60,300
Hardware	124,416	12,236	294,627	4,811	436,090
Total Revenues	\$ 357,829	\$ 17,527	\$ 344,716	\$ 8,311	\$ 728,383

	North America	South America	EMEA*	Asia	June 30, 2018
Support and Maintenance	\$ 225,602	\$ 16	\$ 12,503	\$ 3,000	\$ 241,121
Professional services	6,000	-	2,000	-	8,000
License fees	69,151	30,000	55,100	-	154,251
Hardware	120,496	53,040	10,298	160,935	344,769
Total Revenues	\$ 421,249	\$ 83,056	\$ 79,901	\$ 163,935	\$ 748,141

The following table summarizes revenue from contracts with customers for the six month periods ended June 30, 2019 and June 30, 2018:

	North America	South America	EMEA*	Asia	June 30, 2019
Support and Maintenance	\$ 392,938	\$ 7,407	\$ 59,007	\$ 8,501	\$ 467,853
Professional services	3,750	-	-	2,000	5,750
License fees	47,008	-	27,500	69,000	143,508
Hardware	170,398	12,636	327,545	152,316	662,895
Total Revenues	\$ 614,094	\$ 20,043	\$ 414,052	\$ 231,817	\$ 1,280,006

	North America	South America	EMEA*	Asia	June 30, 2018
Support and Maintenance	\$ 403,518	\$ 16	\$ 21,216	\$ 16,970	\$ 441,720
Professional services	107,850	-	2,000	-	109,850
License fees	130,120	30,000	96,850	-	256,970
Hardware	220,086	53,040	225,074	282,856	781,056
Total Revenues	\$ 861,574	\$ 83,056	\$ 345,140	\$ 299,826	\$ 1,589,596

*EMEA – Europe, Middle East, Africa

All of the Company's performance obligations, and associated revenue, are generally transferred to customers at a point in time, with the exception of support and maintenance, and professional services, which are generally transferred to the customer over time.

Software licenses

Software license revenue consist of fees for perpetual software licenses for one or more of the Company's biometric fingerprint solutions. Revenue is recognized at a point in time once the software is available to the customer for download. Software license contracts are generally invoiced in full on execution of the arrangement.

Hardware

Hardware revenue consists of fees for associated equipment sold with or without a software license arrangement, such as servers, locks and fingerprint readers. Customers are not obligated to buy third party hardware from the Company, and may procure these items from a number of suppliers. Revenue is recognized at a point in time once the hardware is shipped to the customer. Hardware items are generally invoiced in full on execution of the arrangement.

Support and Maintenance

Support and Maintenance revenue consists of fees for unspecified upgrades, telephone assistance and bug fixes. The Company satisfies its Support and Maintenance performance obligation by providing "stand-ready" assistance as required over the contract period. The Company records deferred revenue (contract liability) at time of invoice until the contracts term occurs. Revenue is recognized over time on a ratable basis over the contract term. Support and Maintenance contracts are up to one year in length and are generally invoiced either annually or quarterly in advance.

Professional Services

Professional services revenues consist primarily of fees for deployment and optimization services, as well as training. The majority of the Company's consulting contracts are billed on a time and materials basis, and revenue is recognized based on the amount billable to the customer in accordance with practical expedient ASC 606-10-55-18. For other professional services contracts, the Company utilizes an input method and recognizes revenue based on labor hours expended to date relative to the total labor hours expected to be required to satisfy its performance obligation.

Contracts with Multiple Performance Obligations

Some contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The standalone selling prices are determined based on overall pricing objectives, taking into consideration market conditions and other factors, including the value of the contracts, the cloud applications sold, customer demographics, geographic locations, and the number and types of users within the contracts.

The Company considered several factors in determining that control transfers to the customer upon shipment of hardware and availability of download of software. These factors include that legal title transfers to the customer, the Company has a present right to payment, and the customer has assumed the risks and rewards of ownership.

Accounts receivable from customers are typically due within 30 days of invoicing. The Company does not record a reserve for product returns or warranties as amounts are deemed immaterial based on historical experience.

Costs to Obtain and Fulfill a Contract

Costs to obtain and fulfill a contract are predominantly sales commissions earned by the sales force and are considered incremental and recoverable costs of obtaining a contract with a customer. These costs are deferred and then amortized over a period of benefit determined to be four years. These costs are included as capitalized contract costs on the balance sheet. The period of benefit was determined by taking into consideration customer contracts, technology, and other factors based on historical evidence. Amortization expense is included in selling, general and administrative expenses in the accompanying condensed consolidated statements of operations.

Revenue recognized during the three and six months ended June 30, 2019 from amounts included in deferred revenue at the beginning of the period was approximately \$34,000 and \$111,000 respectively. The Company did not recognize any revenue from performance obligations satisfied in prior periods. Total deferred revenue (contract liability) was \$294,261 and \$196,609 at June 30, 2019 and December 31, 2018, respectively.

Transaction Price Allocated to the Remaining Performance Obligations

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as at June 30, 2019. The guidance provides certain practical expedients that limit this requirement, which the Company's contracts meet as follows:

- The performance obligation is part of a contract that has an original expected duration of one year or less, in accordance with ASC 606-10-50-14.

At June 30, 2019 deferred revenue represents our remaining performance obligations related to support and maintenance, all of which is expected to be recognized within one year.

4. ACCOUNTS RECEIVABLE

Accounts receivable are carried at original amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful receivables by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Accounts receivable are written off when deemed uncollectible. As a result of the payment delays for a large customer, the Company has reserved \$1,720,000 at June 30, 2019 and December 31, 2018, which represents 100% of the remaining balance owed under the contract, respectively. Recoveries of accounts receivable previously written off are recorded when received. Accounts receivable at June 30, 2019 and December 31, 2018 consisted of the following:

	<u>June 30,</u> <u>2019</u>	<u>December 31,</u> <u>2018</u>
Accounts receivable - current	\$ 703,685	\$ 1,587,817
Accounts receivable - non current	1,720,000	1,720,000
Total accounts receivable	2,423,685	3,307,817
Allowance for doubtful accounts - current	(13,785)	(13,785)
Allowance for doubtful accounts - non current	(1,720,000)	(1,720,000)
Total allowance for doubtful accounts	(1,733,785)	(1,733,785)
Accounts receivable, net of allowance for doubtful accounts	<u>\$ 689,900</u>	<u>\$ 1,574,032</u>

5. SHARE BASED COMPENSATION

The following table presents share-based compensation expenses included in the Company's unaudited condensed interim consolidated statements of operations:

	Three Months Ended June 30,	
	2019	2018
Selling, general and administrative	\$ 115,526	\$ 128,620
Research, development and engineering	15,528	20,922
	\$ 131,054	\$ 149,542

	Six Months Ended June 30,	
	2019	2018
Selling, general and administrative	\$ 568,613	\$ 599,766
Research, development and engineering	88,475	99,709
	\$ 657,088	\$ 699,475

6. FACTORING

Due from factor consisted of the following as of:

	June 30,	December 31,
	2019	2018
Original invoice value	\$ 555,075	\$ 221,120
Factored amount	(416,507)	(164,438)
Due from factor	\$ 138,568	\$ 56,682

The Company entered into an accounts receivable factoring arrangement with a financial institution (the "Factor") which has been extended to October 31, 2019. Pursuant to the terms of the arrangement, the Company, from time to time, sells to the Factor a minimum of \$150,000 per quarter of certain of its accounts receivable balances on a non-recourse basis for credit approved accounts. The Factor remits 35% of the foreign and 75% of the domestic accounts receivable balance to the Company (the "Advance Amount"), with the remaining balance, less fees to be forwarded to the Company once the Factor collects the full accounts receivable balance from the customer. In addition, the Company, from time to time, receives over advances from the factor. Factoring fees range from 2.75% to 15% of the face value of the invoice factored, and are determined by the number of days required for collection of the invoice. The cost of factoring is included in selling, general and administrative expenses. The cost of factoring was as follows:

	Three Months ended	
	June 30,	
	2019	2018
Factoring fees	\$ 39,543	\$ 12,691

	Six Months ended	
	June 30,	
	2019	2018
Factoring fees	\$ 92,340	\$ 104,214

7. INVENTORY

Inventory is stated at the lower of cost, determined on a first in, first out basis, or net realizable value, and consists primarily of fabricated assemblies and finished goods. Inventory is comprised of the following as of:

	<u>June 30,</u> <u>2019</u>	<u>December 31,</u> <u>2018</u>
Finished goods	\$ 499,426	\$ 496,358
Fabricated assemblies	512,277	502,471
Total inventory	<u>\$ 1,011,703</u>	<u>\$ 998,829</u>

8. RESALABLE SOFTWARE LICENSE RIGHTS

On November 11, 2015, the Company entered into a license agreement for the rights to all software and documentation regarding the technology currently known as or offered under the FingerQ name. The license agreement grants the Company the exclusive right to reproduce, create derivative works and distribute copies of the FingerQ software and documentation, create new FingerQ related products, and grant sub-licenses of the licensed technology to end users. The license rights have been granted to the Company in perpetuity, with a stated number of end-user resale sub-licenses allowed under the contract for a total of \$12,000,000. The cost of sub-license rights expected to be amortized in the following 12 months is \$1,125,000 and is classified as current, with remainder as non-current.

The Company originally determined the software license rights to be a finite lived intangible asset, and estimated that the software license rights shall be economically used over a 10 year period, with a weighting towards the beginning years of that time-frame. The license rights were acquired during the fourth quarter of 2015, but the usage of such rights in the Company's products was not generally available until January 2017. Accordingly, amortization began in the first quarter of 2017.

Through 2018, the remaining license rights were amortized over the greater of the following amounts: 1) an estimate of the economic use of such license rights, 2) the amount calculated by the straight line method over ten years or 3) the actual cost basis of sales usage of such rights. The Company believes that the economic use model was front-end focused as a majority of the expected up-take of the FingerQ technology was predicted to occur during the first 4-5 years of the 10-year life cycle of the product. Based on current sales trends, the Company now believes future transactions will be more evenly dispersed over the remaining life cycle of the product, indicating that the greater of the straight-line methodology or actual unit cost per license sold will more closely align the expense with the remaining useful life of the product. The change in amortization was effective beginning on January 1, 2019 based on the net remaining software license rights balance. The Company believes categorizing the amortization expense under Cost of Sales more closely reflects the nature of the license right arrangement and the use of the technology.

A total of \$281,250 and \$660,000 was charged to cost of sales during the three month periods ended June 30, 2019 and 2018, respectively, and of this amount \$174 and \$855, represent the cost basis of the actual sales, respectively. A total of \$562,500 and \$1,320,000 was expensed during the six month periods ended June 30, 2019 and 2018, respectively and of this amount \$350 and \$1,441 represent the cost basis of the actual sales, respectively. Since the license purchase, a cumulative amount of \$4,761,096 has been charged to cost of sales, with a carrying balance of \$7,238,904 as of June 30, 2019.

The Company's change in methodology was determined to be a change in accounting estimate that is effected by a change in accounting principle. Pursuant to ASC 250-10-45-17 guidance, this accounting change will not be accounted for as a cumulative effect adjustment on the statement of operations in the period of change and there will be no retroactive application or restatement of prior periods. Instead, the Company allocates the remaining unamortized balance over the remaining life of the assets using the newly adopted method.

The following compares line items on the statement of operations had the change in amortization methodology not been made:

	<u>As reported</u> <u>3 months ended</u> <u>June 30, 2019</u>	<u>Prior methodology</u> <u>3 months ended</u> <u>June 30, 2019</u>	<u>As reported</u> <u>6 months ended</u> <u>June 30, 2019</u>	<u>Prior methodology</u> <u>6 months ended</u> <u>June 30, 2019</u>
Amortization of software license rights	\$ 281,076	\$ 749,826	\$ 562,150	\$ 1,499,650
Total operating expenses	\$ 1,359,888	\$ 1,828,638	\$ 3,111,039	\$ 4,048,539
Operating loss	\$ (1,310,931)	\$ (1,779,681)	\$ (3,114,509)	\$ (4,052,009)
Net loss	\$ (1,425,743)	\$ (1,894,493)	\$ (3,229,251)	\$ (4,166,751)
Basic & diluted loss per share	\$ (0.10)	\$ (0.13)	\$ (0.23)	\$ (0.29)

On December 31, 2015, the Company purchased third-party software licenses in the amount of \$180,000 in anticipation of a large pending deployment that has yet to materialize. The Company is amortizing the total cost over the same methodology described above with the greatest of the two approaches being the actual unit cost per license sold. A total of \$8,739 and \$20,642 was expensed during the three month periods ended June 30, 2019 and 2018, respectively. A total of \$34,693 and \$8,102 (net of credits of \$14,400) was expensed during the six month periods ended June 30, 2019 and 2018, respectively. Since the license purchase, the actual per unit cost (actual usage) of such license rights in the cumulative amount of \$100,487 has been charged to cost of sales, with a carrying balance of \$79,513 as of June 30, 2019. The Company has classified the balance as non-current until a larger deployment occurs. Software license rights is comprised of the following as of:

	<u>June 30,</u> <u>2019</u>	<u>December 31,</u> <u>2018</u>
Current resalable software license rights	\$ 1,125,000	\$ 1,125,000
Non-current resalable software license rights	6,193,417	6,790,610
Total resalable software license rights	<u>\$ 7,318,417</u>	<u>\$ 7,915,610</u>

9. RELATED PARTY

During the six months ended June 30, 2019, the Company received a series of non-interest-bearing advances from an executive officer/director, the Company's principal stockholder, to pay current liabilities. The balance of the advance as at June 30, 2019 was \$142,623, and is payable upon demand.

10. CONVERTIBLE NOTES PAYABLE

On April 4, 2019, the Company issued a \$550,000 secured convertible debenture which matures November 15, 2019 and is convertible into common stock at a conversion price of \$1.50 per share. The note may be redeemed at any time by payment of a premium to the principal balance starting at 5% and increasing to 25%. The note was issued at approximately 7% (\$40,000) original issue discount. Subject to the mutual agreement of the Company and the investor, the Company may purchase two additional \$550,000 principal amount note on the same terms after 45 day intervals from the prior issuance, for an additional potential net proceeds of \$1,020,000. The convertible note contains anti-dilution protections if the Company issues shares of common stock for less than the conversion price. The convertible note was secured substantially by all the assets of the Company. At the closing, the Company issued 80,000 shares of common stock in payment of a \$120,000 commitment fee and is obligated to issue 10,000 shares of common stock monthly in payment of a monthly commitment fee of \$15,000 until the earlier of November 1, 2019 or the repayment or conversion of the note.

On June 14, 2019, the Company issued a \$157,000 secured 10% convertible redeemable note which matures November 14, 2019 and is convertible into common stock at a conversion price of \$1.50 per share. The convertible redeemable note contains anti-dilution protections if the Company offers a conversion discount or other more favorable conversion terms while the note is in effect. The note may be redeemed within the first five months by payment of a premium to the principal balance starting at 10% and increasing to 30% of principal plus interest. At the closing, the Company issued 200,000 shares of common stock in lieu of payment of a \$30,000 commitment fee. If the note is repaid prior to the maturity date, 180,000 of the shares shall be returned to the Company.

Both notes were repaid on July 10, 2019.

For the two notes issued during the second quarter of 2019, the Company issued a total of 300,000 shares of common stock, amounting to \$450,000 in commitment fees. Of these amounts, \$180,000 was recorded as an offset to notes payable – debt issuance costs and is amortized over the life of the loan. The return of commitment fee in amount of \$270,000 (180,000 shares) was recorded as a reduction in additional paid in capital and shares were returned to the Company on July 10, 2019. The Company also incurred \$17,000 of legal fees withheld from proceeds which was also recorded as an offset to notes payable – debt issuance costs and amortized over the life of the loan. Amortization of the debt issuance costs and debt discount are included in interest expense on the statement of operations.

Convertible notes payable, net of unamortized debt discount and debt issuance costs at June 30, 2019 consist of:

Principal amount	\$ 707,000
Less unamortized debt discount	(24,533)
Less unamortized debt issuance costs	(140,800)
Notes payable, net of unamortized debt discount and debt issuance costs	<u>\$ 541,667</u>

11. LEASES

The Company's leases office space in New Jersey, Hong Kong and Minnesota with lease termination dates of 2023, 2020, and 2019, respectively. The Minnesota lease is under 12 months, thus classified as short-term and not reported on the balance sheet under ASC 842. The Hong Kong and the New Jersey leases include non-lease components with variable payments. The following tables present the components of lease expense and supplemental balance sheet information related to the operating leases, were:

	3 Months ended June 30, 2019	6 Months ended June 30, 2019
Lease cost		
Operating lease cost	\$ 42,981	\$ 85,962
Short-term lease cost	15,094	31,390
Sublease income	-	-
Total lease cost	\$ 58,075	\$ 117,352
Balance sheet information		
Operating ROU assets		\$ 532,757
Operating lease liabilities, current portion		\$ 141,068
Operating lease liabilities, non-current portion		383,028
Total operating lease liabilities		\$ 524,096
Weighted average remaining lease term (in years) – operating leases		3.90
Weighted average discount rate – operating leases		5.50%

Supplemental cash flow information related to leases were as follows, for the six months ended June 30, 2019:

Cash paid for amounts included in the measurement of operating lease liabilities	\$ 84,231
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Maturities of operating lease liabilities were as follows:

2019 (remaining six months)	\$ 83,217
2020	155,682
2021	127,425
2022	131,249
2023	89,226
Total future lease payments	\$ 586,799
Less: imputed interest	(62,703)
Total	\$ 524,096

In June 2019, the Company entered into a lease agreement with respect to 5,544 square feet at 1301 Corporate Center Drive, Suite 1160, Eagan, Minnesota. The term of the lease is 36 months and will commence in September 2019. Future lease payments are approximately \$129,000. On commencement of the lease the Company will record an operating ROU asset and corresponding lease liability.

12. EARNINGS (LOSS) PER SHARE - COMMON STOCK ("EPS")

The Company's basic EPS is calculated using net loss available to common shareholders and the weighted-average number of shares outstanding during the reporting period. Diluted EPS includes the effect from potential issuance of common stock, such as stock issuable pursuant to the exercise of stock options and warrants and the assumed conversion of convertible preferred stock.

The reconciliation of the numerator of the basic and diluted EPS calculations was as follows for both of the following three and six month periods ended June 30, 2019 and 2018:

	Three Months ended June 30,		Six Months ended June 30,	
	2019	2018	2019	2018
Basic Numerator:				
Net loss	\$ (1,425,743)	\$ (1,655,465)	\$ (3,229,251)	\$ (3,847,456)
Convertible preferred stock dividends	-	(41,870)	-	(198,033)
Net loss available to common stockholders	\$ (1,425,743)	\$ (1,697,335)	\$ (3,229,251)	\$ (4,045,489)

Items excluded from the diluted per share calculation because the exercise price was greater than the average market price of the common shares:

	Three Months ended June 30,		Six Months ended June 30,	
	2019	2018	2019	2018
Stock options	1,551,349	1,366,467	1,784,183	1,445,891
Preferred stock	-	1,200,767	-	2,853,513
Warrants	3,780,976	1,398,969	3,780,976	1,398,969
Convertible notes	368,952	-	278,243	-
Total	5,701,277	3,966,203	5,843,402	5,698,373

The following table summarizes the weighted average securities that were excluded from the diluted per share calculation because the effect of including these potential shares was antidilutive due to the net losses for the three and six months ended June 30, 2019 and 2018:

	Three Months ended June 30,		Six Months ended June 30,	
	2019	2018	2019	2018
Stock options	4,071	37,015	-	19,863
Total	4,071	37,015	-	19,863

13. STOCKHOLDERS' EQUITY

Preferred Stock

Within the limits and restrictions provided in the Company's Certificate of Incorporation, the Board of Directors has the authority, without further action by the shareholders, to issue up to 5,000,000 shares of preferred stock, \$.0001 par value per share, in one or more series, and to fix, as to any such series, any dividend rate, redemption price, preference on liquidation or dissolution, sinking fund terms, conversion rights, voting rights, and any other preference or special rights and qualifications. As of June 30, 2019, 100,000 shares of preferred stock have been designated as Series A-1 Convertible Preferred Stock, of which 90,000 were issued in 2015 and 0 remain outstanding, and 105,000 shares of preferred stock have been designated as Series B-1 Convertible Preferred Stock, of which 105,000 were issued in 2015 and 0 remain outstanding.

Series A-1 Convertible Preferred Stock

On October 22 and 29, 2015, the Company issued 84,500 shares of Series A-1 Convertible Preferred Stock at a purchase price of \$100.00 per share, for aggregate gross proceeds of \$8,450,000. On November 11, 2015, 5,500 additional shares of Series A-1 Convertible Preferred Stock were issued at a purchase price of \$100.00 per share, for gross cash proceeds of \$550,000.

Between September 22, 2017 and May 31, 2018, the holder of the Series A-1 Stock converted all shares of Series A-1 Stock into an aggregate of 2,500,000 shares of common stock and purchased an aggregate of 248,893 shares of common stock in consideration of the conversion of \$896,015 of accrued dividends payable on the Series A-1 Stock.

As a result of the forgoing conversions, as of June 30, 2019 there are no longer any issued and outstanding shares of Series A-1 Stock.

Overall balances and conversion of Series A-1 shares and accrued dividends into common stock has been as follows:

	Series A-1	Accrued Dividends
Balance – January 1, 2017	90,000	\$ 270,000
Accrual of dividends – Q1 2017	-	135,000
Accrual of dividends – Q2 2017	-	135,000
Accrual of dividends – Q3 2017	-	135,000
Conversion into common stock – September 2017	-	(540,000)
Conversion into common stock – October 2017	(27,404)	-
Accrual of dividends – Q4 2017	-	101,658
Balance – December 31, 2017	62,596	\$ 236,658
Accrual of dividends – Q1 2018	-	93,894
Conversion into common stock – April 2018	(39,088)	(330,552)
Accrual of dividends – Q2 2018 (until final conversion)	-	25,463
Conversion into common stock – May 2018	(23,508)	(25,463)
Balance – December 31, 2018	-	\$ -

Series B-1 Convertible Preferred Stock

On November 11, 2015, the Company issued 105,000 shares of Series B-1 Convertible Preferred Stock at a purchase price of \$100.00 per share, for gross proceeds of \$10,500,000.

Between March 23, 2018 and May 23, 2018, holders of shares of Series B-1 Stock converted all shares of Series B-1 Stock into an aggregate of 2,916,668 shares of common stock and purchased an aggregate of 131,229 shares of common stock in consideration of the conversion of \$472,426 of accrued dividends payable on the Series B-1 Stock.

As a result of the forgoing conversions, as of June 30, 2019 there are no longer any issued and outstanding shares of Series B-1 Stock.

Overall balances and conversion of Series B-1 shares and accrued dividends into common stock has been as follows:

	<u>Series B-1</u>	<u>Accrued Dividends</u>
Balance – January 1, 2017	105,000	\$ 131,250
Accrual of dividends – Q1 2017	-	65,625
Accrual of dividends – Q2 2017	-	65,625
Accrual of dividends – Q3 2017	-	65,625
Accrual of dividends – Q4 2017	-	65,625
Balance – December 31, 2017	105,000	393,750
Conversion into common stock – March 2018	(60,420)	(417,084)
Accrual of dividends – Q1 2018	-	62,268
Accrual of dividends – Q2 2018 (until final conversion)	-	16,408
Conversion into common stock – May 2018	(44,580)	(55,342)
Balance – December 31, 2018	-	\$ -

Common Stock

On March 21 and 28, 2019, the Company issued 13,820 shares of common stock to its directors in payment of board and board committee fees valued at \$16,506.

On May 14, 2019, the Company issued 4,235 shares of common stock to its directors in payment of committee and board fees, valued at \$5,505.

See Note 10 for common stock issued as commitment fees for notes payable in the quarter.

Securities Purchase Agreement dated November 13, 2014

Pursuant to a Securities Purchase Agreement, dated November 13, 2014, by and between the Company and a number of private and institutional investors, the Company issued to certain private investors 664,584 shares of common stock and warrants to purchase an additional 996,877 shares of common stock for aggregate gross proceeds of \$1,595,000.

The warrants have a term of five years and an initial exercise price of \$3.60 per share, and have been fully exercisable since February 2015. The warrants have customary anti-dilution protections including a “full ratchet” anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than \$3.60 per share. The anti-dilution adjustment provision is not triggered by certain “exempt issuances” which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

On August 24, 2018 the Company issued Common Stock and Warrants to investors at a purchase price of \$1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants was increased from 996,877 to 2,392,502, and the exercise price was reduced from \$3.60 to \$1.50 per share. The Company recognized a non-cash deemed dividend of \$1,288,139 in 2018 in connection with these adjustments.

Securities Purchase Agreement dated September 23, 2015

On September 23, 2015, the Company issued a warrant to purchase 69,445 shares of common stock in connection with the issuance of a promissory note. The warrants are immediately exercisable at an initial exercise price of \$3.60 per share and have a term of five years.

The warrants have customary anti-dilution protections including a "full ratchet" anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than \$3.60 per share. The anti-dilution adjustment provision is not triggered by certain "exempt issuances" which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

On August 24, 2018 the Company issued Common Stock and Warrants to the investors at a purchase price of \$1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants was increased from 69,445 to 166,668, and the exercise price was reduced from \$3.60 to \$1.50 per share. The Company recognized a non-cash deemed dividend of \$140,827 in 2018 in connection with these adjustments.

Issuances of Stock Options

No options were granted during the quarter ended June 30, 2019. During the six months ending June 30, 2019, the Company issued options to purchase 235,334 shares of common stock to certain officers, employees, and contractors. The options have a three year vesting period, seven year term, and exercise price of \$1.18. The fair value of the options at date of issuance was estimated on the date of grant at \$243,643 using the Black-Scholes option-pricing model with the following assumptions: risk free interest rate: 2.35%, expected life of options in years: 4.5, expected dividends: 0, volatility of stock price: 143%.

14. SEGMENT INFORMATION

The Company has determined that its continuing operations are one discrete segment consisting of biometric products. Geographically, North American sales accounted for approximately 49% and 56% of the Company's total sales for the three months ended June 30, 2019 and 2018, respectively, and were approximately 48% and 54% of the Company's total sales for the six months ended June 30, 2019 and 2018, respectively.

15. FAIR VALUES OF FINANCIAL INSTRUMENTS

Cash and cash equivalents, accounts receivable, accounts payable, accrued liabilities, and due from factor, are carried at, or approximate, fair value because of their short-term nature.

16. MAJOR CUSTOMERS AND ACCOUNTS RECEIVABLE

For the three months ended June 30, 2019 and 2018, two customers accounted for 59% and 34% of revenue, respectively. For the six months ended June 30, 2019 and 2018, three customers accounted for 58% and two customers accounted for 37% of revenue, respectively.

Two customers accounted for 90% of current accounts receivable as of June 30, 2019. At December 31, 2018, one customer accounted for 70% of current accounts receivable. One customer accounted for 100% of non-current accounts receivable as of June 30, 2019 and December 31, 2018, the full amount of which has been reserved for.

17. SUBSEQUENT EVENTS

On August 8, 2019, the Company issued 4,425 shares of common stock to its directors in payment of board fees.

On July 1, 2019, 10,000 shares of common stock were issued in connection with the monthly commitment fee for the April 4, 2019 convertible debenture.

Securities Purchase Agreement dated July 10, 2019

On July 10, 2019, the Company issued a \$3,060,000 principal amount senior secured convertible note (the "Note"). At closing, a total of \$2,550,000 was funded. The principal amount due of the Note is due and payable as follows: \$918,000 is due 180 days after funding, \$1,071,000 is due 270 days after funding, and the remaining balance is due 12 months after the date of funding. Upon the occurrence of standard and customary events of default and expiration of any applicable cure periods, repayment of the outstanding principal amount due under the Note is subject to acceleration in the discretion of the Investor in which event, interest will accrue at the higher of 18% per annum or the maximum amount permitted by applicable law and the Company will become obligated to pay an amount equal to 20% of the then outstanding principal amount due under the Note.

The Note is secured by a lien on substantially all of our assets and properties and is convertible at the option of the Investor into shares of our common stock at a fixed conversion price of \$1.50 per share. The Company has the right to prepay the Note in full at any time without penalty in which event, the Investor will have the option of converting 25% of the outstanding principal amount of the Note into shares of our common stock. .

In connection with the closing, the Company issued a five year warrant to the Investor to purchase 2,000,000 shares of common stock at a fixed exercise price of \$1.50 per share and paid a \$50,000 commitment fee, and issued 266,667 shares of common stock in payment of a \$400,000 due diligence fee.

Until the second anniversary of the closing, the Investor has the right to purchase up to 20% of the securities we issue in any future private placement, subject to certain exceptions for, among other things, strategic investments.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

All statements other than statements of historical facts contained in this Report on Form 10-Q, including statements regarding our future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words "anticipate," "believe," "estimate," "will," "may," "future," "plan," "intend" and "expect" and similar expressions generally identify forward-looking statements. These forward-looking statements are not guarantees and are subject to known and unknown risks, uncertainties and assumptions that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. Although we believe that our plans, intentions and expectations reflected in the forward-looking statements are reasonable, we cannot be sure that they will be achieved. Particular uncertainties that could cause our actual results to be materially different than those expressed in our forward-looking statements include: our history of losses and limited revenue; our ability to raise additional capital; our ability to protect our intellectual property; changes in business conditions; changes in our sales strategy and product development plans; changes in the marketplace; continued services of our executive management team; security breaches; competition between us and other companies in the biometric technology industry; market acceptance of biometric products generally and our products under development; our ability to expand into the Asian market; delays in the development of products and statements of assumption underlying any of the foregoing, as well as other factors set forth under the caption "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission. All subsequent written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the foregoing. Except as required by law, we undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

The following discussion and analysis summarizes the significant factors affecting the operating results, financial condition, liquidity and cash flows of our Company as of and for the periods presented below and should be read in conjunction with our unaudited condensed consolidated financial statements and related information contained herein and in our audited financial statements as of December 31, 2018.

OVERVIEW

BIO-key International, Inc. (the "Company", "we" or "us") develops and markets advanced fingerprint biometric identification and identity verification technologies, as well as related identity management and credentialing fingerprint biometric hardware and software solutions. We were pioneers in developing automated, finger identification technology that supplements or complements other methods of identification and verification, such as personal inspection identification, passwords, tokens, smart cards, ID cards, PKI, credit card, passports, driver's licenses, OTP or other form of possession or knowledge-based credentialing. Advanced BIO-key technology has been and is used to improve both the accuracy and speed of competing finger-based biometrics. Our solutions are used by many customers in every sector of our economy including government, retail, healthcare and financial services.

In partnerships with OEMs, integrators, and solution providers, we provide biometric software solutions to private and public sector customers. We provide the ability to positively identify and authenticate individuals before granting access to valuable corporate resources, web portals or applications in seconds. Powered by our patented Vector Segment Technology (VST™), or VST, WEB-key and BSP development kits are fingerprint biometric solutions that provide interoperability with all major reader manufacturers, enabling application developers and integrators to integrate fingerprint biometrics into their applications.

We also develop and distribute hardware components that are used in conjunction with our software, and sell third-party hardware components with our software in various configurations required by our customers. Our products are interoperable with all major fingerprint reader and hardware manufacturers and across Windows, Linux, and the Android mobile operating systems enabling application developers, value added resellers, and channel partners to integrate our fingerprint biometrics into their applications, while dramatically reducing maintenance, upgrade and life-cycle costs.

We support industry standards, such as FIDO, BioAPI, and have received National Institute of Standards and Technology independent laboratory certification of our ability to support Homeland Security Presidential Directive #12 (HSPD-12) and ANSI/INCITS-378 templates, as well as validation of our fingerprint match speed and accuracy in large database environments.

We have developed what we believe is the most discriminating and effective commercially available finger-based biometric technology. Our primary focus is in marketing and selling this technology into commercial logical and physical privilege entitlement & access control markets. Our primary market focus includes, among others, enterprise access, mobile payments & credentialing, online payments, and healthcare record and payment data security. Our secondary focus includes government, financial services and educational markets.

Products

In 2016, we began to sell through distribution and directly to consumers and commercial users our SideSwipe, SideTouch and EcoID products. SideSwipe, SideTouch and EcoID are stand-alone fingerprint readers that can be used on any laptop, tablet or other device with a USB port. In 2017, we expanded our consumer product line to include biometric and blue tooth enabled pad locks, TSA approved luggage locks, and bicycle locks. In 2018, we introduced OmniPass Consumer, a secure biometric-enabled application to manage multiple passwords for online apps, services or accounts.

In 2015, Microsoft announced native support for biometrics in the Windows 8.1 and Windows 10 Operating platforms as well as Office 2016. With Microsoft Hello, any user can replace their PIN or password to access their device without any special software downloads by using our finger scanners, SideSwipe, SideTouch and EcoID, which are plug and play compatible with the Microsoft platforms. We have been the preferred partner, in particular at the Microsoft "Ignite your Business" Windows 10 and Office 2016 launch events, which has generated a number opportunities for both our hardware and software offerings. In 2016, our finger scanners were tested and qualified by Microsoft, then introduced and are sold in the Microsoft stores nationwide, as well as through their on-line channel.

In 2018, we continued to invest and grow our relationship with Microsoft. The 2018 Ignite your Business event included Microsoft hosting an exclusive BIO-key demonstration kiosk within their event showcase.

STRATEGIC OUTLOOK AND RECENT DEVELOPMENTS

Historically, our largest market has been access control within highly regulated industries such as healthcare. However, we believe the mass adoption of advanced smart-phone and hand-held wireless devices have caused commercial demand for advanced user authentication to emerge as viable. The introduction of smart-phone capabilities, like mobile payments and credentialing, could effectively require biometric user authentication on mobile devices to reduce risks of identity theft, payment fraud and other forms of fraud in the mobile or cellular based world wide web. As more services and payment functionalities, such as mobile wallets and near field communication (NFC), migrate to smart-phones, the value and potential risk associated with such systems should grow and drive demand and adoption of advanced user authentication technologies, including fingerprint biometrics and BIO-key solutions.

As devices with onboard fingerprint sensors continue to deploy to consumers, we expect that third party application developers will demand the ability to authenticate users of their respective applications (app's) with the onboard fingerprint biometric. We further believe that authentication will occur on the device itself for potentially low-value, and therefore low-risk, use-transactions and that user authentication for high-value transactions will migrate to the application provider's authentication server, typically located within their supporting technology infrastructure, or Cloud. We have developed our technology to enable, on-device authentication as well as network or cloud-based authentication and believe we may be the only technology vendor capable of providing this flexibility and capability.

Our core technology works on over 40 commercially available fingerprint readers, across both Windows and Linux platforms, and Apple iOS and Android mobile operating systems. This interoperability, coupled with the ability to authentic users via the device or cloud, is unique in the industry, provides a key differentiator for us, and in our opinion, makes our technology more viable than competing technologies and expands the size of the overall market for our products.

We believe there is potential for significant market growth in the following key areas:

- Corporate network access control, corporate campuses, computer networks, and applications.
- Government funded initiatives, including with the state board of elections.
- International government use case applications as prospects see us as a global leader in the biometric technology space as witnessed by our agreement with the Israeli Defense Force, and the Singapore and Dubai Police departments.
- Consumer mobile credentialing, including mobile payments, credit and payment card programs, data and application access, and commercial loyalty programs.
- Demand for BIO-key hardware products from Windows 10 users and Fortune 500 companies.
- Government services and highly regulated industries including, Medicare, Medicaid, Social Security, Drivers Licenses, Campus and School ID, Passports/Visas.
- Growth in the Asia Pacific region.
- Biometric based consumer products.

In the near-term, we expect to grow our business within government services and highly-regulated industries such as healthcare and financial services industry. We believe that continued heightened security and privacy requirements in these industries will generate increased demand for security solutions, including biometrics. In addition, we expect that the integration of our technology into Windows 10, will accelerate the demand for our computer network log-on solutions and fingerprint readers. Finally, our entry into the Asian market has further expanded our business by opening new markets along with the new and innovative hardware offerings. We expect our SideSwipe, EcoID and SideTouch finger readers, and our biometric and Bluetooth enabled bicycle locks to continue to drive incremental revenue and growth.

We intend to expand our business into the cloud and mobile computing industries. The emergence of cloud computing and mobile computing are primary drivers of commercial and consumer adoption of advanced authentication applications, including biometric and BIO-key authentication capabilities. As the value of assets, services and transactions increases on such networks, we expect that security and user authentication demand should rise proportionately. Our integration partners include major web and network technology providers, who we believe will deliver our cloud-applicable solutions to interested service-providers. These service-providers could include, but are not limited to, financial institutions, web-service providers, consumer payment service providers, credit reporting services, consumer data service providers, healthcare providers and others. Additionally, our integration partners include major technology component providers and OEM manufacturers, who we believe will deliver our device-applicable solutions to interested hardware manufacturers. Such manufacturers could include cellular handset and smartphone manufacturers, tablet manufacturers, laptop and PC manufacturers, among other hardware manufacturers. Our recently introduced SAML and Open ID solutions will create new opportunities for us in 2019.

CRITICAL ACCOUNTING POLICIES

For detailed information regarding our critical accounting policies and estimates, see our financial statements and notes thereto included in this Report and in our Annual Report on Form 10-K for the year ended December 31, 2018. There have been no material changes to our critical accounting policies and estimates from those disclosed in our most recent Annual Report on Form 10-K, except for adoption of Leases (ASC 842) – refer Note 1.

RECENT ACCOUNTING PRONOUNCEMENTS

For detailed information regarding recent account pronouncements, see Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

RESULTS OF OPERATIONS

THREE MONTHS ENDED JUNE 30, 2019 AS COMPARED TO JUNE 30, 2018

Consolidated Results of Operations - Percent Trend

	Three Months Ended June 30,	
	2019	2018
Revenues		
Services	32%	33%
License fees	8%	21%
Hardware	60%	46%
Total Revenues	100%	100%
Costs and other expenses		
Cost of services	8%	16%
Cost of license fees	51%	102%
Cost of hardware	34%	19%
Total Cost of Goods Sold	93%	138%
Gross profit (loss)	7%	-38%
Operating expenses		
Selling, general and administrative	145%	144%
Research, development and engineering	41%	40%
Total Operating Expenses	187%	184%
Operating loss	-180%	-221%
Other income (expense)	-16%	0%
Net loss	-196%	-221%

Revenues and cost of goods sold

	Three months ended June 30,		\$ Change	% Change
	2019	2018		
Revenues				
Service	\$ 231,993	\$ 249,121	\$ (17,128)	-7%
License	60,300	154,251	(93,951)	-61%
Hardware	436,090	344,769	91,321	26%
Total Revenue	\$ 728,383	\$ 748,141	\$ (19,758)	-3%

	Three months ended June 30,		\$ Change	% Change
	2019	2018		
Cost of Goods Sold				
Service	\$ 58,421	\$ 120,841	\$ (62,420)	-52%
License	372,327	766,637	(394,310)	-51%
Hardware	248,678	142,325	106,353	75%
Total COGS	\$ 679,426	\$ 1,029,803	\$ (350,377)	-34%

Revenues

For the three months ended June 30, 2019 and 2018, service revenues included approximately \$229,000 and \$241,000, respectively, of recurring maintenance and support revenue, and approximately \$3,000 and \$8,000 respectively, of non-recurring custom services revenue. Recurring service revenue decreased 5% in 2019 as some of the current renewals are pending. Non-recurring custom services decreased \$5,000 or 63% for custom services due to fewer customized installations.

For the three months ended June 30, 2019, license revenue decreased 61% from the corresponding period in 2018. The lower revenue was the result of deploying more subscription based orders than perpetual license orders.

For the three months ended June 30, 2019, hardware sales increased by 26% as a result of large order from an existing customer in addition to several new customer deployments.

Costs of goods sold

For the three months ended June 30, 2019, cost of service decreased 52%, due to changes in support personnel for maintenance services.

License costs for the three months ended June 30, 2019 decreased approximately 51%, which was directly associated with the amortization of the software rights due to change in amortization methodology.

Hardware costs for the three months ended June 30, 2019 increased approximately 75%, due to the increase in hardware revenue and the product mix.

Selling, general and administrative

	Three months ended June 30,		\$ Change	% Change
	2019	2018		
Selling, general and administrative	\$ 1,058,671	\$ 1,076,184	\$ (17,513)	-2%

Selling, general and administrative costs for the three months ended June 30, 2019 decreased -2% from the corresponding period in 2018. The decrease is attributable to reduction in payroll and non-cash compensation offset by increased factoring fees.

Research, development and engineering

	Three months ended June 30,		\$ Change	% Change
	2019	2018		
Research, development and engineering	\$ 301,217	\$ 297,633	\$ 3,584	1%

For the three months ended June 30, 2019, research, development and engineering costs increased 1% as compared to the corresponding period in 2018, as a result of decreased expenses in the Hong Kong subsidiary, and non-cash compensation, offset by increased recruiting expenses.

SIX MONTHS ENDED JUNE 30, 2019 AS COMPARED TO JUNE 30, 2018**Consolidated Results of Operations - Percent Trend**

	Six Months Ended June 30,	
	2019	2018
Revenues		
Services	37%	35%
License fees	11%	16%
Hardware	52%	49%
Total Revenues	100%	100%
Costs and other expenses		
Cost of services	12%	17%
Cost of license fees	58%	97%
Cost of hardware	30%	25%
Total Cost of Goods Sold	100%	139%
Gross profit (loss)	-%	-39%
Operating expenses		
Selling, general and administrative	190%	160%
Research, development and engineering	53%	43%
Total Operating Expenses	243%	203%
Operating loss	-243%	-242%
Other income	-9%	0%
Net loss	-252%	-242%

Revenues and cost of goods sold

	Six months ended June 30,		\$ Change	% Change
	2019	2018		
Revenues				
Service	473,603	551,570	(77,967)	-14%
License	143,508	256,970	(113,462)	-44%
Hardware	662,895	781,056	(118,161)	-15%
Total Revenue	\$ 1,280,006	\$ 1,589,596	\$ (309,590)	-19%
Cost of Goods Sold				
Service	149,250	275,573	(126,323)	-46%
License	749,543	1,540,102	(790,559)	-51%
Hardware	384,683	393,573	(8,890)	-2%
Total COGS	\$ 1,283,476	\$ 2,209,248	\$ (925,772)	-42%

Revenues

For the six months ended June 30, 2019 and 2018, service revenues included approximately \$468,000 and \$442,000, respectively, of recurring maintenance and support revenue, and approximately \$6,000 and \$110,000, respectively, of non-recurring custom services revenue. Recurring service revenue increased 6% from 2018 as we continued to bundle maintenance agreements with our expanding customer license base and renewed existing maintenance agreements from our legacy customers. Non-recurring custom services decreased 95% for custom services due to the completion of a customized software project in 2018.

For the six months ended June 30, 2019, license revenue decreased as a result of deploying more subscription based orders than perpetual license orders.

For the six months ended June 30, 2019, hardware sales decreased by 15%, as a result of smaller new customer deployments and decreased lock orders.

Costs of goods sold

For the six months ended June 30, 2019, cost of service decreased 46%, as a result of no large custom services orders compared to the six months ended June 30, 2018 and the inclusion in cost of goods sold of outside contractor costs.

License costs for the six months ended June 30, 2019 decreased approximately 51%, which was directly associated with the amortization of the software rights due to change in amortization methodology.

Hardware costs for the six months ended June 30, 2019 decreased approximately 2%. The decrease was associated with the lower revenue to date as well as the product mix.

Selling, general and administrative

	Six months ended June 30,		\$ Change	% Change
	2019	2018		
Selling, general and administrative	<u>\$ 2,435,704</u>	<u>\$ 2,538,038</u>	<u>\$ (102,334)</u>	<u>-4%</u>

Selling, general and administrative costs for the six months ended June 30, 2019 decreased 4% from the corresponding period in 2018. The decrease was attributable to decreased payroll, non-cash compensation costs and legal fees, offset by increased trade show expenses and shareholder relations expense.

Research, development and engineering

	Six months ended June 30,		\$ Change	% Change
	2019	2018		
Research, development and engineering	<u>\$ 675,335</u>	<u>\$ 689,787</u>	<u>\$ (14,452)</u>	<u>-2%</u>

For the six months ended June 30, 2019, research, development and engineering costs decreased 2% from the corresponding period in 2018, as a result of decreased personnel and related costs and non-cash compensation costs which amounts were offset by an increase in recruiting expenses.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

Net cash used by operations during the six months ended June 30, 2019 was approximately \$256,000. The cash used by operating activities was attributable primarily to the following items:

- Net positive cash flows related to adjustments for non-cash expenses for depreciation, amortization, share-based compensation, and issuance of common stock to our non-employee directors, of approximately \$1,405,000, and a decrease in accounts receivable, combined with increases in accounts payable, accruals and deferred revenue of approximately \$1,674,000.
- Net negative cash flows related to reductions due from factor and operating lease liabilities of approximately \$148,000.

Approximately \$30,000 was used for investing activities during the six months ended June 30, 2019 related to capital expenditures.

Approximately \$650,000 was provided by financing activities during the six months ended June 30, 2019 relating to approximately \$667,000 of proceeds from the issuance of debentures, offset by approximately \$17,000 in legal costs.

At June 30, 2019, we had net working capital of approximately \$1,100,000 as compared to net working capital of approximately \$3,300,000 at December 31, 2018.

Liquidity and Capital Resources

Since our inception, our capital needs have been principally met through proceeds from the sale of equity and debt securities. We expect capital expenditures to be less than \$100,000 during the next twelve months.

The following sets forth our primary sources of capital during the previous two years:

We entered into an accounts receivable factoring arrangement with a financial institution (the "Factor") which has since been extended through October 31, 2019. Pursuant to the terms of the arrangement, from time to time, we sell to the Factor a minimum of \$150,000 of certain of our accounts receivable balances per quarter on a non-recourse basis for credit approved accounts. The Factor remits 35% of the foreign and 75% of the domestic accounts receivable balance to us (the "Advance Amount"), with the remaining balance, less fees, to be forwarded to us once the Factor collects the full accounts receivable balance from the customer. In addition, from time to time, we receive over advances from the Factor. Factoring fees range from 2.75% to 15% of the face value of the invoice factored, and are determined by the number of days required for collection of the invoice. We expect to continue to use this factoring arrangement periodically to assist with our general working capital requirements due to contractual requirements.

On September 22, 2017, we issued to Wong Kwok Fong (Kelvin), a director, executive officer and principal stockholder of the Company, 427,778 shares of common stock and warrants to purchase 138,889 shares of common stock for an aggregate purchase price of \$1,540,000, or \$3.60 per share. The purchase consisted of a cash payment of \$1,000,000 and the conversion of accrued dividends payable on the Company's Series A-1 Convertible Preferred Stock of \$540,000.

On August 24, 2018, we completed a public offering of units consisting of 1,380,000 shares of common stock and warrants to purchase 1,035,000 shares of common stock for an aggregate gross proceeds of \$2,070,000, or \$1.50 per unit.

On April 4, 2019, we issued a \$550,000 secured convertible debenture to an institutional investor which matures November 15, 2019 and is convertible into common stock at a conversion price of \$1.50 per share. The debenture may be redeemed at any time by payment of a premium to the principal balance starting at 5% and increasing to 20%. The debenture was issued at a 7% original issue discount. On July 10, 2019 this debenture was redeemed and repaid in full in connection with the financing described below.

On June 14, 2019, we issued a \$157,000 principal amount convertible note to an institutional investor which matures November 14, 2019 and is convertible into common stock at a conversion price of \$1.50 per share. The note may be redeemed at any time by payment of a premium to the principal balance starting at 10% and increasing to 30%. On July 10, 2019 this note was redeemed and repaid in full in connection with the financing described below.

On July 10, 2019, we issued a \$3,060,000 principal amount senior secured convertible note (the "Note") to an institutional investor. At closing, \$2,550,000 was funded. The principal amount due of the Note is due and payable as follows: \$918,000 is due 180 days after funding, \$1,071,000 is due 270 days after funding, and the remaining balance is due 12 months after the date of funding. The Note is secured by a lien on substantially all of our assets and properties and is convertible into shares of our common stock at a fixed conversion price of \$1.50 per share.

Liquidity outlook

At June 30, 2019, our total cash and cash equivalents were approximately \$687,000, as compared to approximately \$324,000 at December 31, 2018.

As discussed above, we have historically financed our operations through access to the capital markets by issuing secured and convertible debt securities, convertible preferred stock, common stock, and through factoring receivables. We estimate that we currently require approximately \$537,000 per month to conduct our operations, a monthly amount that we have been unable to consistently achieve through revenue generation. During the first half of 2019, we generated approximately \$1,280,000 of revenue, which is below our average monthly requirements.

If we are unable to continue to generate sufficient revenue to meet our goals, we will need to obtain additional third-party financing to (i) conduct the sales, marketing and technical support necessary to execute our plan to substantially grow operations, increase revenue and serve a significant customer base; and (ii) provide working capital. We may, therefore, need to obtain additional financing through the issuance of debt or equity securities.

Due to several factors, including our history of losses and limited revenue, our independent auditors have included an explanatory paragraph in their opinion related to our annual financial statements as to the substantial doubt about our ability to continue as a going concern. Our long-term viability and growth will depend upon the successful commercialization of our technologies and our ability to obtain adequate financing. To the extent that we require such additional financing, no assurance can be given that any form of additional financing will be available on terms acceptable to us, that adequate financing will be obtained to meet our needs, or that such financing would not be dilutive to existing stockholders. If available financing is insufficient or unavailable or we fail to continue to generate sufficient revenue, we may be required to reduce operating expenses, delay the expansion of operations, be unable to pursue merger or acquisition candidates, or in the extreme case, not continue as a going concern.

ITEM 4. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer (“CEO”) and Chief Financial Officer (“CFO”), evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of June 30, 2019. Based on the evaluation of our disclosure controls and procedures as of June 30, 2018, our CEO and CFO concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

No change in our internal control over financial reporting occurred during the fiscal quarter ended June 30, 2019, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On April 4, 2019, we issued a \$550,000 principal amount secured debenture due November 15, 2019 which is convertible into shares of common stock at a conversion price of \$1.50 per share in consideration of gross cash proceeds of \$511,500. In connection with this financing, we issued 80,000 shares of common stock in payment of a \$120,000 commitment fee and agreed to issue 10,000 shares of common stock to the investor each month in payment of a monthly commitment fee of \$15,000 until the earlier of November 1, 2019 or the repayment or conversion of the debenture. The debenture was redeemed and repaid in full on July 10, 2019. The foregoing securities were issued in a private placement transaction to one accredited investor pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, without general solicitation or advertising of any kind and without payment of placement agent or brokerage fees to any person.

On June 14, 2019, we issued a \$157,000 note due November 13, 2019 which is convertible into shares of common stock at a conversion price of \$1.50 per share in consideration of gross cash proceeds of \$157,000. In connection with this financing, we issued 200,000 shares of common stock in payment of a \$30,000 commitment fee, 180,000 of which were returned to us since the note was redeemed in full on July 10, 2019 prior to the maturity date. The foregoing securities were issued in a private placement transaction to one accredited investor pursuant to the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended, without general solicitation or advertising of any kind and without payment of placement agent or brokerage fees to any person.

ITEM 6. EXHIBITS

Exhibit No.	Description
10.1	<u>Securities Purchase Agreement dated July 10, 2019 by and between the Registrant and Lind Global Macro Fund, LP.,</u>
10.2	<u>Security Agreement dated July 10, 2019 by and between the Registrant and Lind Global Macro Fund, LP.,</u>
10.3	<u>Collateral Sharing Agreement dated July 10, 2019 by and among the Registrant, Lind Global Macro Fund, LP and Versant Funding LLC.</u>
10.4	<u>\$3,060.00 Senior Secured Convertible Promissory Note dated July 10, 2019.</u>
10.5	<u>Common Stock Purchase Warrant dated July 10, 2019.</u>
31.1	<u>Certificate of CEO of Registrant required under Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended</u>
31.2	<u>Certificate of CFO of Registrant required under Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended</u>
32.1	<u>Certificate of CEO of Registrant required under 18 U.S.C. Section 1350</u>
32.2	<u>Certificate of CFO of Registrant required under 18 U.S.C. Section 1350</u>
101.INS	XBRL Instance
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation
101.DEF	XBRL Taxonomy Extension Definition
101.LAB	XBRL Taxonomy Extension Labels
101.PRE	XBRL Taxonomy Extension Presentation

SIGNATURES

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, thereunto duly authorized.

BIO-Key International, Inc.

Dated: August 14, 2019

/s/ Michael W. DePasquale

Michael W. DePasquale
Chief Executive Officer
(Principal Executive Officer)

Dated: August 14, 2019

/s/ Cecilia C. Welch

Cecilia C. Welch
Chief Financial Officer
(Principal Financial Officer)

SECURITIES PURCHASE AGREEMENT

This Securities Purchase Agreement (as amended, supplemented, restated and/or modified from time to time, this "**Agreement**") is entered into as of July 10, 2019 by and between BIO-Key International, Inc., a Delaware corporation (the "**Company**"), and Lind Global Macro Fund, LP, a Delaware limited partnership (the "**Investor**").

BACKGROUND

A. The board of directors (the "**Board of Directors**") of the Company has authorized the issuance to Investor of the Note (as defined below), the Closing Shares (as defined below) and the Warrant (as defined below).

B. The Investor desires to purchase the Note, the Closing Shares and the Warrant on the terms and conditions set forth in this Agreement.

C. Concurrently with the execution of this Agreement, the Company and the Investor will enter into a Security Agreement, substantially in the form attached hereto as **Exhibit A** (the "**Security Agreement**"), pursuant to which the Company will grant a first priority security interest in certain of its assets and a second priority security interest in certain of its assets to secure the Company's obligations hereunder and the Company, the Investor and Versant (as defined in the Note) will enter into the Intercreditor Agreement (as defined in the Note).

NOW THEREFORE, in consideration of the foregoing recitals and the covenants and agreements set forth herein, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Company and the Investor hereby agree as follows:

1. DEFINITIONS. As used in this Agreement, the following terms shall have the following meanings specified or indicated below, and such meanings shall be equally applicable to the singular and plural forms of such defined terms:

"**1933 Act**" means the Securities Act of 1933, as amended.

"**1934 Act**" means the Securities Exchange Act of 1934, as it may be amended.

"**Acquisition**" means the acquisition by the Company or any direct or indirect Subsidiary of the Company of a majority of the Equity Interests or substantially all of the assets and business of any Person, whether by direct purchase of Equity Interests, asset purchase, merger, consolidation or like combination.

"**Affiliate**" means a Person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the Person specified.

"**Agreement**" has the meaning set forth in the preamble.

"**Blue Sky Application**" has the meaning set forth in [Section 9.3\(a\)](#).

"**Board of Directors**" has the meaning set forth in the recitals.

"**Business Day**" means any day other than a Saturday, Sunday or any other day on which banks are permitted or required to be closed in New York City.

"**Capital Stock**" means the Common Stock, the Preferred Stock and any other classes of capital stock of the Company.

"**Change of Control**" means, with respect to the Company:

- (a) a change in the composition of the board of directors of the Company at a single stockholder meeting where a majority of the individuals that were directors of the Company immediately prior to the start of such stockholder meeting are no longer directors at the conclusion of such meeting;
- (b) a change in composition of the board of directors of the Company prior to the termination of this Agreement where a majority of the individuals that were directors as of the date of this Agreement cease to be directors of the Company prior to the termination of this Agreement;
- (c) any of the individuals who are the Chief Executive Officer and Chairman of the Board of Directors or Chief Financial Officer as of the date of this Agreement cease to hold such position at any time prior to the termination of this Agreement;
- (d) other than a stockholder that holds such a position at the date of this Agreement, if a Person comes to have beneficial ownership, control or direction over more than forty percent (40%) of the voting rights attached to any class of voting securities of the Company; or
- (e) the sale or other disposition by the Company or any of its Subsidiaries in a single transaction, or in a series of transactions, of all or substantially all of their respective assets.

"**Closing**" has the meaning set forth in Section 2.2.

"**Closing Date**" has the meaning set forth in Section 2.2.

"**Closing Shares**" has the meaning set forth in Section 2.1.

"**Code**" has the meaning set forth in Section 2.1.

"**Commitment Fee**" means an amount equal to Fifty Thousand Dollars (\$50,000.00).

"**Common Stock**" means the common stock of the Company, par value \$0.001 per share.

"**Company**" has the meaning set forth in the preamble.

"**Company's Knowledge**" means the actual knowledge (with the applicable Person having the duty to conduct a reasonable inquiry and diligence with respect to the applicable matter) of any of Michael DePasquale, Cecilia Welch or any other individual serving as the CEO or CFO of the Company as of the relevant date of determination.

"Conversion Shares" means the shares of Common Stock issuable upon the full or any partial conversion of the Note.

"Effectiveness Period" has the meaning set forth in [Section 9.2\(a\)](#).

"Equity Interests" means and includes capital stock, membership interests and other similar equity securities, and shall also include warrants or options to purchase capital stock, membership interests or other equity interests.

"Event" means any event, change, development, effect, condition, circumstance, matter, occurrence or state of facts.

"Event of Default" has the meaning set forth in [Section 7.1](#).

"Exempted Securities" means (a) shares of Common Stock or rights, warrants or options to purchase Common Stock issued in connection with any Acquisition, (b) equity securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Common Stock, (c) shares of Common Stock or rights, warrants or options to purchase Common Stock issued to employees or directors of, or consultants or advisors to, the Company or any of its Subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors ("**Equity Plans**"), (d) shares of Common Stock actually issued upon the exercise of options or shares of Common Stock actually issued upon the conversion or exchange of any securities convertible into Common Stock, in each case provided that such issuance is pursuant to the terms of the applicable option or convertible security, or (e) shares of equity securities or rights, warrants or options to purchase equity securities or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities that are issued to a Strategic Investor.

"Funding Amount" means an amount equal to Two Million Five Hundred Fifty Thousand Dollars (\$2,550,000).

"HSR Act" has the meaning set forth in [Section 5.16](#).

"Investor" has the meaning set forth in the preamble.

"Investor Group" shall mean the Investor plus any other Person with which the Investor is considered to be part of a group under Section 13 of the 1934 Act or with which the Investor otherwise files reports under Sections 13 and/or 16 of the 1934 Act.

"Investor Party" has the meaning set forth in [Section 5.12\(a\)](#).

"Investor Shares" means the Conversion Shares, the Closing Shares, the Warrant Shares and any other shares issued or issuable to the Investor pursuant to this Agreement, the Note or the Warrant.

"IP Rights" has the meaning set forth in [Section 3.10](#).

"**Law**" means any law, rule, regulation, order, judgment or decree, including, without limitation, any federal and state securities Laws.

"**Losses**" has the meaning set forth in [Section 5.12\(a\)](#).

"**Material Adverse Effect**" means any material adverse effect on (a) the businesses, properties, assets, prospects, operations, results of operations or financial condition of the Company, or the Company and the Subsidiaries, taken as a whole, or (b) the ability of the Company to consummate the transactions contemplated by this Agreement or to perform its obligations hereunder or under the Note or the Warrant; *provided, however*, that none of the following shall be deemed either alone or in combination to constitute, and none of the following shall be taken into account in determining whether there has been or would be, a Material Adverse Effect: (a) any adverse effect resulting from or arising out of general economic conditions; (b) any adverse effect resulting from or arising out of general conditions in the industries in which the Company operates; (c) any adverse effective resulting from any changes to applicable Law (other than securities laws); or (d) any adverse effect resulting from or arising out of any natural disaster or any acts of terrorism, sabotage, military action or war or any escalation or worsening thereof; *provided, further*, that any event, occurrence, fact, condition or change referred to in clauses (a) through (d) immediately above shall be taken into account in determining whether a Material Adverse Effect has occurred or could reasonably be expected to occur to the extent that such event, occurrence, fact, condition or change has a disproportionate effect on the Company compared to other participants in the industries in which the Company operates.

"**Maximum Percentage**" means 4.99%; *provided*, that if at any time after the date hereof the Investor Group beneficially owns in excess of 4.99% of any class of Equity Interests in the Company that is registered under the 1934 Act (excluding any Equity Interests deemed beneficially owned by virtue of the Note and the Warrant), then the Maximum Percentage shall automatically increase to 9.99% so long as the Investor Group owns in excess of 4.99% of such class of Equity Interests (and shall, for the avoidance of doubt, automatically decrease to 4.99% upon the Investor Group ceasing to own in excess of 4.99% of such class of Equity Interests).

"**Money Laundering Laws**" has the meaning set forth in [Section 3.26](#).

"**New Securities**" means, collectively, equity securities of the Company, whether or not currently authorized, as well as rights, options, or warrants to purchase such equity securities, or securities of any type whatsoever that are, or may become, convertible or exchangeable into or exercisable for such equity securities.

"**Note**" has the meaning set forth in [Section 2.1](#).

"**OFAC**" has the meaning set forth in [Section 3.24](#).

"**Offer Notice**" has the meaning set forth in [Section 10.1](#).

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

"Preferred Stock" has the meaning set forth in Section 3.4(a).

"Principal Amount" has the meaning set forth in Section 2.1.

"Proceedings" has the meaning set forth in Section 3.6.

"Prohibited Transaction" means a transaction with a third party or third parties in which the Company issues or sells (or arranges or agrees to issue or sell):

(a) any debt, equity or equity-linked securities (including options or warrants) that are convertible into, exchangeable or exercisable for, or include the right to receive shares of the Company's Capital Stock:

(i) at a conversion, repayment, exercise or exchange rate or other price that is based on, and/or varies with, the trading prices of, or quotations for, shares of Common Stock; or

(ii) at a conversion, repayment, exercise or exchange rate or other price that is subject to being reset at some future date after the initial issuance of such debt, equity or equity-linked security or upon the occurrence of specified or contingent events (other than warrants that may be repriced by the Company); or

(b) any securities in a capital or debt raising transaction or series of related transactions which grant to an investor the right to receive additional securities based upon future transactions of the Company on terms more favorable than those granted to such investor in such first transaction or series of related transactions;

and are deemed to include transactions generally referred to as at-the-market transactions (ATMs) or equity lines of credit and stand-by equity distribution agreements, and convertible securities and loans having a similar effect. Notwithstanding the foregoing, and for the avoidance of doubt, rights issuances, shareholder purchase plans, Equity Plans, convertible securities, or issuances of Equity Interests, based on the trading price of the Common Stock on the Trading Market but each at a fixed price per share, shall not be deemed to be a Prohibited Transaction.

"Prospectus" means the prospectus included in any Registration Statement, as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Investor Shares covered by such Registration Statement and by all other amendments and supplements to the prospectus, including post-effective amendments and all material incorporated by reference in such prospectus, and any "free writing prospectus" as defined in Rule 405 under the 1933 Act.

"register," "registered" and "registration" refer to a registration made by preparing and filing a Registration Statement or similar document in compliance with the 1933 Act (as defined below), and the declaration or ordering of effectiveness of such Registration Statement or document.

"Registration Statement" means any registration statement of the Company filed under the 1933 Act that covers the resale of any of the Investor Shares pursuant to the provisions of this Agreement, including the Prospectus and amendments and supplements to such Registration Statement, and including post-effective amendments, all exhibits and all material incorporated by reference in such Registration Statement.

"Reverse Split" has the meaning set forth in Section 5.21.

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

"SEC Documents" has the meaning set forth in Section 3.5(a).

"Securities" means the Note, the Warrant and the Investor Shares.

"Securities Termination Event" means either of the following has occurred:

(a) trading in securities generally in the United States has been suspended or limited for a consecutive period of greater than three (3) Business Days;
or

(b) a banking moratorium has been declared by the United States or the New York State authorities and is continuing for a consecutive period of greater than three (3) Business Days.

"Security Agreement" has the meaning set forth in the recitals.

"Strategic Investor" shall mean a Person engaged in the research, development, commercialization or sale of fingerprint biometric technology, identity verification technologies, related security hardware and software solutions, or any other business that such Person views synergistic with Company's business.

"Subsidiaries" and **"Subsidiary"** have the meaning set forth in Section 3.4(b).

"Trading Market" means whichever of the New York Stock Exchange, NYSE: Amex Exchange, or the Nasdaq Stock Market (including the Nasdaq Capital Market), on which the Common Stock is listed or quoted for trading on the date in question.

"Transaction Documents" means this Agreement, the Note, the Warrant, the Security Agreement, the Intercreditor Agreement and any other documents or agreements executed or delivered in connection with the transactions contemplated hereunder.

"Warrant" has the meaning set forth in Section 2.1.

"Warrant Shares" means the shares of Common Stock issuable upon exercise of the Warrant.

2. PURCHASE AND SALE OF THE NOTE, THE CLOSING SHARES AND THE WARRANT.

2.1 Purchase and Sale of the Note, the Closing Shares and the Warrant. Subject to the terms and conditions set forth herein, at the Closing, the Company shall issue and sell to the Investor, and the Investor shall purchase from the Company, for the Funding Amount (a) a convertible promissory note, in the form attached hereto as **Exhibit B** (the "**Note**"), in the principal amount of Three Million Sixty Thousand Dollars (\$3,060,000.00) (the "**Principal Amount**"), (b) 266,667 shares of restricted Common Stock in payment of a due diligence fee in the amount of \$400,000 (the "**Closing Shares**") and (c) a Common Stock purchase warrant, in the form attached hereto as **Exhibit C**, registered in the name of the Investor, pursuant to which the Investor shall have the right to acquire 2,000,000 shares of Common Stock (the "**Warrant**"). The Investor and the Company agree that for U.S. federal income tax purposes and applicable state, local and non-U.S. tax purposes, the Funding Amount shall be allocable among the Note, the Closing Shares and the Warrant based on the relative fair market values thereof. Neither the Investor nor the Company shall take any contrary position on any tax return, or in any audit, claim, investigation, inquiry or proceeding in respect of taxes, unless otherwise required pursuant to a final determination within the meaning of Section 1313 of the Internal Revenue Code of 1986, as amended (the "**Code**"), or any analogous provision of applicable state, local or non-U.S. law.

2.2 Closing. The closing hereunder, including payment for and delivery of the Note, the Closing Shares and the Warrant, shall take place remotely via the exchange of documents and signatures, no later than twenty-four (24) hours following the execution and delivery of this Agreement, subject to satisfaction or waiver of the conditions set forth in Section 6, or at such other time and place as the Company and the Investor agree upon, orally or in writing (the "**Closing**," and the date of the Closing being the "**Closing Date**").

2.3 Commitment Fee. At the Closing, the Company shall pay to the Investor the Commitment Fee, in United States dollars and in immediately available funds. The Commitment Fee shall be paid by being offset against the Funding Amount payable by the Investor at Closing.

2.4 Prepayment Right. The Company will have the right to pre-pay the Note in accordance with Section 1.3(b) of the Note.

2.5 Senior Obligation. As an inducement for the Investor to enter into this Agreement and to purchase the Note, all obligations of the Company pursuant to this Agreement and the Note shall be secured by a first priority security interest in and lien upon all assets of the Company, other than, so long as the Intercreditor Agreement is in effect, the Company's Accounts (as such term is used in the Intercreditor Agreement) in which the Investor will have a second priority security interest so long as the Intercreditor Agreement is in effect, pursuant to the terms of the Security Agreement.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company represents and warrants to the Investor and covenants with the Investor that, except as is set forth in the Disclosure Letter being delivered to the Investor as of the date hereof and as of the Closing Date, the following representations and warranties are true and correct:

3.1 Organization and Qualification. The Company is a corporation duly organized and validly existing in good standing under the Laws of the State of Delaware and has the requisite corporate power and authority to own its properties and to carry on its business as now being conducted. The Company is duly qualified to do business and is in good standing in every jurisdiction in which the ownership of its 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 would not have a Material Adverse Effect.

3.2 Authorization; Enforcement; Compliance with Other Instruments. The Company has the requisite corporate power and authority to execute the Transaction Documents, to issue and sell the Note and the Warrant pursuant hereto, and to perform its obligations under the Transaction Documents, including issuing the Investor Shares on the terms set forth in this Agreement. The execution and delivery of the Transaction Documents by the Company and the issuance and sale of the Note, the Closing Shares and the Warrant pursuant hereto, including without limitation the reservation of the Conversion Shares and the Warrant Shares for future issuance, have been duly and validly authorized by the Company's Board of Directors and no further consent or authorization is required by the Company, its Board of Directors, its stockholders or any other Person in connection therewith. The Transaction Documents have been duly and validly executed and delivered by the Company and constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their respective terms, except as such enforceability may be limited by 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.

3.3 No Conflicts. The execution, delivery and performance of the Transaction Documents by the Company and the issuance and sale of the Note, the Closing Shares and the Warrant hereunder will not (a) conflict with or result in a violation of the Company's Certificate of Incorporation or Bylaws, (b) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both, would become a material default) under, or give to others any right of termination, amendment, acceleration or cancellation of, any material agreement to which the Company or any of the Subsidiaries is a party, or (c) subject to the making of the filings referred to in Section 5, and, violate in any material respect any Law or any rule or regulation of the Nasdaq Stock Market applicable to the Company or any of the Subsidiaries or by which any of their properties or assets are bound or affected. Assuming the accuracy of the Investor's representations in Section 4 and subject to the making of the filings referred to in Section 5, (i) no approval or authorization will be required from any governmental authority or agency, regulatory or self-regulatory agency or other third party (including the Nasdaq Stock Market) in connection with the issuance of the Note, the Warrant and the Closing Shares and the other transactions contemplated by this Agreement (including the issuance of the Conversion Shares upon conversion of the Note and the Warrant Shares upon exercise of the Warrant) and (ii) the issuance of the Note, the Warrant and the Closing Shares, and the issuance of the Conversion Shares upon the conversion of the Note and the Warrant Shares upon exercise of the Warrant will be exempt from the registration and qualification requirements under the 1933 Act and all applicable state securities Laws.

3.4 Capitalization and Subsidiaries.

(a) The authorized Capital Stock of the Company consists of: (i) 170,000,000 shares of Common Stock and (iii) 5,000,000 shares of Preferred Stock, par value \$0.001 per share (the "**Preferred Stock**"). As of the date hereof: (A) 14,095,923 shares of Common Stock were issued and outstanding (not including shares held in treasury); and (D) no shares of Preferred Stock were issued and outstanding or held by the Company in its treasury. As of the date of this Agreement (i) 582,253 shares of Common stock are issuable upon exercise of options granted under the BIO-Key International, Inc. 2015 Equity Incentive Plan, as amended, of which 77,430 shares are exercisable and 819,837 additional shares are reserved for future issuance thereunder, (ii) 33,335 shares of Common stock are issuable upon exercise of options granted under the BIO-Key International, Inc. 2004 Equity Incentive Plan all of which are exercisable and no additional shares are reserved for future issuance thereunder, (iii) 1,168,595 shares of Common stock are issuable upon exercise of options granted outside of the forgoing plans of which 853,581 shares are exercisable, and (iv) 3,780,978 shares of Common stock are issuable upon exercise of outstanding warrants all of which are exercisable. The Closing Shares, when issued pursuant to Section 2.1 of this Agreement will be been validly issued, fully paid non-assessable and free from all taxes, liens and charges with respect to the issuance thereof. The Company has duly reserved up to 2,040,000 shares of Common Stock for issuance upon conversion of the Note (which assumes that the Principal Amount (as defined in the Note) is converted to Common Stock at the Conversion Price (as defined in the Note) as of the date hereof) and has duly reserved 2,000,000 additional shares of Common Stock for issuance upon exercise of the Warrant. The Conversion Shares, when issued upon conversion of the Note in accordance with its terms, and the Warrant Shares, if and when issued upon exercise of the Warrant in accordance with its terms, will be validly issued, fully paid and non-assessable and free from all taxes, liens and charges with respect to the issuance thereof. No shares of the Company's Capital Stock are subject to preemptive rights or any other similar rights or any liens or encumbrances suffered or permitted by the Company. The Company's Certificate of Incorporation, as amended, and Bylaws on file on the SEC's EDGAR website are true and correct copies of the Company's Articles of Incorporation and Bylaws as in effect as of the date hereof. The Company is not in violation of any provision of its Certificate of Incorporation or Bylaws.

(b) Schedule 3.4(b) lists each direct and indirect subsidiary of the Company (each, a "**Subsidiary**" and collectively, the "**Subsidiaries**") and indicates for each Subsidiary (i) the authorized capital stock or other Equity Interest of such Subsidiary as of the date hereof, (ii) the number and kind of shares or other ownership interests of such Subsidiary that are issued and outstanding as of the date hereof, and (iii) the owner of such shares or other ownership interests. No Subsidiary has any outstanding stock options, warrants or other instruments pursuant to which such Subsidiary may at any time or under any circumstances be obligated to issue any shares of its capital stock or other Equity Interests. Each Subsidiary is duly organized and validly existing in good standing under the laws of its jurisdiction of formation and has all requisite power and authority to own its properties and to carry on its business as now being conducted.

(c) Except as set forth on Schedule 3.4(c), neither the Company nor any Subsidiary is bound by any agreement or arrangement pursuant to which it is obligated to register the sale of any securities under the 1933 Act. There are no outstanding securities of the Company or any of the Subsidiaries which contain any redemption or similar provisions, and there are no contracts, commitments, understandings or arrangements by which the Company or any Subsidiary is or may become bound to redeem or purchase any security of the Company or any Subsidiary. There are no outstanding securities or instruments containing anti-dilution or similar provisions that will be triggered by the issuance of the Note, the Warrant or the Investor Shares. Neither the Company nor any Subsidiary has any stock appreciation rights or "phantom stock" plans or agreements or any similar plan or agreement.

(d) The issuance and sale of any of the Securities will not obligate the Company to issue shares of Common Stock or other securities to any other Person and will not result in the adjustment of the exercise, conversion, exchange, or reset price of any outstanding securities.

3.5 SEC Documents: Financial Statements: Accounts Payable.

(a) As of the date hereof, 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 filing dates, 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, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(b) As of their respective dates, 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, and audited by a firm that is a member a member of the Public Companies Accounting Oversight Board consistently applied, during the periods involved (except as may be otherwise indicated in such financial statements or the notes thereto, or, 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 consolidated financial position of the Company as of the dates thereof and the consolidated results of its operations and consolidated cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end audit adjustments). No other written information provided by or on behalf of the Company to the Investor in connection with the Investor’s purchase of the Note and the Warrant or the issuance of the Closing Shares, which is not included in the SEC Documents contains any untrue statement of a material fact or omits to state any material fact necessary to make the statements therein, in the light of the circumstance under which they are or were made, not misleading.

(c) The Company and each of the Subsidiaries maintain a system of internal accounting controls sufficient to provide reasonable assurance that (i) transactions are executed in accordance with management’s general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain asset accountability, (iii) reasonable controls to safeguard assets are in place and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(d) The aggregate amount of the Company’s and its Subsidiaries’ accounts payable or other ordinary course liability that are more ninety (90) days old is less than \$500,000.

3.6 Litigation and Regulatory Proceedings. Except as disclosed in SEC Documents, there are no material actions, causes of action, suits, claims, proceedings, inquiries or investigations (collectively, "**Proceedings**") before or by any court, public board, government agency, self-regulatory organization or body pending or, to the knowledge of the executive officers of Company or any of the Subsidiaries, threatened against or affecting the Company or any of the Subsidiaries, the Common Stock or any other class of issued and outstanding shares of the Company's Capital Stock, or any of the Company's or the Subsidiaries' officers or directors in their capacities as such and, to the knowledge of the executive officers of the Company, there is no reason to believe that there is any basis for any such Proceeding.

3.7 No Undisclosed Events, Liabilities or Developments. No event, development or circumstance has occurred or exists, or to the knowledge of the executive officers of the Company is reasonably anticipated to occur or exist that (a) would reasonably be anticipated to have a Material Adverse Effect or (b) would be required to be disclosed by the Company under applicable securities Laws on a registration statement filed with the SEC relating to an issuance and sale by the Company of its Common Stock and which has not been publicly announced.

3.8 Compliance with Law. The Company and each of the Subsidiaries have conducted and are conducting their respective businesses in compliance in all material respects with all applicable Laws and are in compliance in all material respects with the rules and regulations of the Nasdaq Stock Market. The Company is not aware of any facts which could reasonably be anticipated to lead to a delisting of the Common Stock by the Nasdaq Stock Market in the future.

3.9 Employee Relations. Neither the Company nor any Subsidiary is involved in any union labor dispute nor, to the Company's Knowledge, is any such dispute threatened. Neither the Company nor any Subsidiary is a party to any collective bargaining agreement. No executive officer (as defined in Rule 501(f) of the 1933 Act) has notified the Company that such officer intends to leave the Company's employ or otherwise terminate such officer's employment with the Company.

3.10 Intellectual Property Rights. The Company and each Subsidiary owns or possesses adequate rights or licenses to use all 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, "**IP Rights**") necessary to conduct their respective businesses as now conducted. Schedule 3.10 sets forth all of the Company's and its Subsidiaries' registered IP Rights and any other IP Rights that the Company deems necessary, material or important to its and its Subsidiaries' business. Except as set forth on Schedule 3.10, none of the material IP Rights of the Company or any of the Subsidiaries are expected to expire or terminate within three (3) years from the date of this Agreement. Neither the Company nor any Subsidiary is infringing, misappropriating or otherwise violating any IP Rights of any other Person. No claim has been asserted, and no Proceeding is pending, against the Company or any Subsidiary alleging that the Company or any Subsidiary is infringing, misappropriating or otherwise violating the IP Rights of any other Person, and, to the Company's Knowledge, no such claim or Proceeding is threatened, and the Company is not aware of any facts or circumstances which might give rise to any such claim or Proceeding. The Company and the Subsidiaries have taken commercially reasonable security measures to protect the secrecy, confidentiality and value of all of their material IP Rights.

3.11 Environmental Laws. Except, in each case, as would not be reasonably anticipated to have a Material Adverse Effect, the Company and the Subsidiaries (a) are in compliance with any and all applicable Laws relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants, (b) have received and hold all permits, licenses or other approvals required of them under all such Laws to conduct their respective businesses and (c) are in compliance with all terms and conditions of any such permit, license or approval.

3.12 Title to Assets. The Company and the Subsidiaries have good and marketable title to all personal property owned by them which is material to their respective businesses, in each case free and clear of all liens, encumbrances and defects except those set forth on Schedule 3.12. Any real property and facilities held under lease by the Company or any Subsidiary are held 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 the Subsidiaries.

3.13 Insurance. The Company and each of the Subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as management of the Company reasonably believes to be prudent and customary in the businesses in which the Company and the Subsidiaries are engaged. Neither the Company nor any of the Subsidiaries has been refused any insurance coverage sought or applied for, and the Company has no reason to believe that it will not be able to renew all existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers.

3.14 Regulatory Permits. The Company and the Subsidiaries have in full force and effect all certificates, approvals, authorizations and permits from all regulatory authorities and agencies necessary to own, lease or operate their respective properties and assets and conduct their respective businesses, and neither the Company nor any Subsidiary has received any notice of Proceedings relating to the revocation or modification of any such certificate, approval, authorization or permit, except for such certificates, approvals, authorizations or permits with respect to which the failure to hold would not reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect.

3.15 No Materially Adverse Contracts, Etc. Neither the Company nor any of the Subsidiaries is (a) subject to any charter, corporate or other legal restriction, or any judgment, decree or order which in the judgment of the Company's officers has or is expected in the future to have a Material Adverse Effect or (b) a party to any contract or agreement which in the judgment of the Company's management has or would reasonably be anticipated to have a Material Adverse Effect.

3.16 Taxes. The Company and the Subsidiaries each has made or filed, or caused to be made or filed, all United States federal, and applicable state, local and non-U.S. tax returns, reports and declarations required by any jurisdiction to which it is subject and has paid all taxes and other governmental assessments and charges that are material in amount, required to be paid by it, regardless of whether such amounts are shown or determined to be due on such returns, reports and declarations, except those being contested in good faith by appropriate proceedings and for which it has set aside on its books provision reasonably adequate for the payment of all taxes for periods subsequent to the periods to which such returns, reports or declarations apply. There are no unpaid taxes in any material amount claimed to be due by the taxing authority of any jurisdiction, and, the Company's Knowledge, there is no basis for any such claim.

3.17 Solvency. After giving effect to the receipt by the Company of the proceeds from the transactions contemplated by this Agreement (a) the Company's fair saleable value of its assets exceeds the amount that will be required to be paid on or in respect of the Company's existing debts and other liabilities (including known contingent liabilities) as they mature; and (b) the current cash flow of the Company, together with the proceeds the Company would receive, were it to liquidate all of its assets, after taking into account all anticipated uses of the cash, would be sufficient to pay all amounts on or in respect of its debt when such amounts are required to be paid. The Company does not intend to incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be payable on or in respect of its debt). The Company has no knowledge of any facts or circumstances which lead it to believe that it will file for reorganization or liquidation under the bankruptcy or reorganization laws of any jurisdiction.

3.18 Investment Company. The Company is not, and is not an Affiliate of, an "investment company" within the meaning of the Investment Company Act of 1940, as amended.

3.19 Certain Transactions. Other than as disclosed in the SEC Documents, there are no contracts, transactions, arrangements or understandings between the Company or any of its Subsidiaries, on the one hand, and any director, officer or employee of thereof on the other hand, that would be required to be disclosed pursuant to Item 404 of Regulation S-K promulgated by the SEC in the Company's Form 10-K or proxy statement pertaining to an annual meeting of stockholders.

3.20 No General Solicitation. Neither the Company, nor any of its Affiliates, nor any person acting on its behalf, has engaged in any form of general solicitation or general advertising (within the meaning of Regulation D) in connection with the offer or sale of the Note pursuant to this Agreement.

3.21 Acknowledgment Regarding the Investor's Purchase of the Note and the Warrant and the Issuance of the Closing Shares. The Company's Board of Directors has approved the execution of the Transaction Documents and the issuance and sale of the Note and the Warrant and the issuance of the Closing Shares, based on its own independent evaluation and determination that the terms of the Transaction Documents are reasonable and fair to the Company and in the best interests of the Company and its stockholders. The Company is entering into this Agreement and the Security Agreement and is issuing and selling the Note and the Warrant and issuing the Closing Shares voluntarily and without economic duress. The Company has had independent legal counsel of its own choosing review the Transaction Documents and advise the Company with respect thereto. The Company acknowledges and agrees that the Investor is acting solely in the capacity of an arm's length purchaser with respect to the Note and the Warrant and the issuance of the Closing Shares and the transactions contemplated hereby and that neither the Investor nor any person affiliated with the Investor is acting as a financial advisor to, or a fiduciary of, the Company (or in any similar capacity) with respect to execution of the Transaction Documents or the issuance of the Note, the Warrant and the Closing Shares or any other transaction contemplated hereby.

3.22 Stockholder Approval. The Nasdaq Stock Market rules and regulations do not require the Company's stockholders to approve the issuance of the Note, the Warrant or the Investor Shares pursuant to the terms and conditions of this Agreement.

3.23 No Brokers', Finders' or Other Advisory Fees or Commissions. Except as set forth on Schedule 3.23, No brokers, finders or other similar advisory fees or commissions will be payable by the Company or any Subsidiary or by any of their respective agents with respect to the issuance of the Note or any of the other transactions contemplated by this Agreement.

3.24 OFAC. None of the Company nor any of the Subsidiaries nor, to the best knowledge of the Company, any director, officer, agent, employee, affiliate or person acting on behalf of the Company and/or any Subsidiary has been or is currently subject to any United States sanctions administered by the Office of Foreign Assets Control of the United States Department of the Treasury ("**OFAC**"); and the Company will not directly or indirectly use any proceeds received from the Investor, or lend, contribute or otherwise make available such proceeds to its Subsidiaries or to any affiliated entity, joint venture partner or other person or entity, to finance any investments in, or make any payments to, any country or person currently subject to any of the sanctions of the United States administered by OFAC.

3.25 No Foreign Corrupt Practices. None of the Company or any of the Subsidiaries has, directly or indirectly: (a) made or authorized any contribution, payment or gift of funds or property to any official, employee or agent of any governmental authority of any jurisdiction except as otherwise permitted under applicable Law; or (b) made any contribution to any candidate for public office, in either case, where either the payment or the purpose of such contribution, payment or gift was, is, or would be prohibited under the Foreign Corrupt Practices Act or the rules and regulations promulgated thereunder or under any other legislation of any relevant jurisdiction covering a similar subject matter applicable to the Company or its Subsidiaries and their respective operations and the Company has instituted and maintained policies and procedures designed to ensure, and which are reasonably expected to continue to ensure, continued compliance with such legislation.

3.26 Anti-Money Laundering. The operations of each of the Company and the Subsidiaries are and have been conducted at all times in compliance with all applicable anti-money laundering laws, regulations, rules and guidelines in its jurisdiction of incorporation and in each other jurisdiction in which such entity, as the case may be, conducts business (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental authority involving the Company or its Subsidiaries with respect to any of the Money Laundering Laws is, to the best knowledge of the Company, pending, threatened or contemplated.

3.27 Other Indebtedness. Upon the consummation of the transactions contemplated hereby, the only indebtedness for borrowed money of the Company will be the indebtedness under the Note, and the Permitted Factor Indebtedness (as such term is defined in the Note).

3.28 Disclosure. The Company confirms that neither it, nor to its knowledge, any other Person acting on its behalf has provided the Investor or its agents or counsel with any information that the Company believes constitutes material, non-public information. The Company understands and confirms that the Investor will rely on the foregoing representations and covenants in effecting transactions in securities of the Company.

3.29 No Other Representations. Except for the representations and warranties set forth in this Agreement and in other Transaction Documents, the Company makes no other representations or warranties to the Investor and makes no predictions or forecasts of future revenues or earnings.

4. REPRESENTATIONS AND WARRANTIES OF THE INVESTOR. The Investor represents and warrants to the Company as follows:

4.1 Organization and Qualification. The Investor is a limited partnership, duly organized and validly existing in good standing under the laws of the State of Delaware.

4.2 Authorization; Enforcement; Compliance with Other Instruments. The Investor has the requisite power and authority to enter into this Agreement and the Security Agreement and to perform its obligations under the Transaction Documents. The execution and delivery by the Investor of the Transaction Documents to which it is a party have been duly and validly authorized by the Investor's governing body and no further consent or authorization is required. The Transaction Documents to which it is a party have been duly and validly executed and delivered by the Investor and constitute valid and binding obligations of the Investor, enforceable against the Investor in accordance with their terms, except as such enforceability may be limited by 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.

4.3 No Conflicts. The execution, delivery and performance of the Transaction Documents to which it is a party by the Investor and the purchase of the Note and the Warrant by the Investor and the issuance of the Closing Shares to the Investor will not (a) conflict with or result in a violation of the Investor's organizational documents, (b) conflict with, or constitute a material default (or an event which, with notice or lapse of time or both, would become a material default) under, or give to others any rights of termination, amendment, acceleration or cancellation of, any material agreement, contract, indenture mortgage, indebtedness or instrument to which the Investor is a party, or (c) violate any Law applicable to the Investor or by which any of the Investor's properties or assets are bound or affected. No approval or authorization will be required from any governmental authority or agency, regulatory or self-regulatory agency or other third party in connection with the purchase of the Note, the Closing Shares and the Warrant and the other transactions contemplated by this Agreement.

4.4 Investment Intent; Accredited Investor. The Investor is purchasing the Note, the Closing Shares and the Warrants for its own account, for investment purposes, and not with a view towards distribution. The Investor is an "accredited investor" as such term is defined in Rule 501(a) of Regulation D of the 1933 Act. The Investor has, by reason of its business and financial experience, such knowledge, sophistication and experience in financial and business matters and in making investment decisions of this type that it is capable of (a) evaluating the merits and risks of an investment in the Note, the Warrant and the Investor Shares and making an informed investment decision, (b) protecting its own interests and (c) bearing the economic risk of such investment for an indefinite period of time.

4.5 Opportunity to Discuss. The Investor has received all materials relating to the business, finance and operations of the Company and the Subsidiaries as it has requested and has had an opportunity to discuss the business, management and financial affairs of the Company and the Subsidiaries with the Company's management. In making its investment decision, the Investor has relied solely on its own due diligence performed on the Company by its own representatives.

4.6 No Other Representations. Except for the representations and warranties set forth in this Agreement and in other Transaction Documents, the Investor makes no other representations or warranties to the Company.

5. OTHER AGREEMENTS OF THE PARTIES.

5.1 Legends, etc.

(a) Securities may only be disposed of pursuant to an effective registration statement under the 1933 Act, to the Company or pursuant to an available exemption from or in a transaction not subject to the registration requirements of the 1933 Act, and in compliance with any applicable state securities laws. In connection with any transfer of the Securities other than pursuant to an effective registration statement, to the Company, to an Affiliate of the Investor or in connection with a pledge as contemplated in Section 5.1(b), the Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of such transferred Securities under the 1933 Act.

(b) Certificates evidencing the Securities will contain the following legend, so long as is required by this Section 5.1(b) or Section 5.1(c):

[NEITHER THESE SECURITIES NOR THE SECURITIES ISSUABLE UPON EXERCISE OF THESE SECURITIES HAVE BEEN REGISTERED] [THESE SECURITIES HAVE NOT BEEN REGISTERED] WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. [THESE SECURITIES AND THE SECURITIES ISSUABLE UPON EXERCISE OF THESE SECURITIES] [THESE SECURITIES] MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT SECURED BY SUCH SECURITIES.

The Company acknowledges and agrees that the Investor may from time to time pledge, and/or grant a security interest in some or all of the Note, the Warrants or the Investor Shares, in accordance with applicable securities laws, pursuant to a bona fide margin agreement in connection with a bona fide margin account and, if required under the terms of such agreement or account, the Investor may transfer pledged or secured Securities to the pledgees or secured parties. Such a pledge or transfer would not be subject to approval or consent of the Company and no legal opinion of legal counsel to the pledgee, secured party or pledgor shall be required in connection with the pledge, but such legal opinion may be required in connection with a subsequent transfer following default by the Investor transferee of the pledge. No notice shall be required of such pledge. At the Investor's expense, the Company will execute and deliver such reasonable documentation as a pledgee or secured party of Securities may reasonably request in connection with a pledge or transfer of the Securities including the preparation and filing of any required prospectus supplement under Rule 424(b)(3) of the 1933 Act or other applicable provision of the 1933 Act to appropriately amend the list of selling stockholders thereunder.

(c) Certificates evidencing the Investor Shares shall not contain any legend (including the legend set forth in Section 5.1(b)): (i) while a Registration Statement is effective under the 1933 Act, or (ii) following any sale of such Investor Shares pursuant to Rule 144, or (iii) while such Investor Shares are eligible for sale under Rule 144(k), or (iv) if such legend is not required under applicable requirements of the 1933 Act (including judicial interpretations and pronouncements issued by the Staff of the SEC). The Company shall cause its counsel to issue any legal opinion or instruction required by the Company's transfer agent to comply with the requirements set forth in this Section. Following the Closing Date or at such earlier time as a legend is no longer required for the Investor Shares under this Section 5.1(c), the Company will, no later than three (3) Business Days following the delivery by the Investor to the Company or the Company's transfer agent of a certificate representing Investor Shares containing a restrictive legend, deliver or cause to be delivered to the Investor a certificate representing such Investor Shares that is free from all restrictive and other legends. The Company may not make any notation on its records or give instructions to any transfer agent of the Company that enlarge the restrictions on transfer set forth in this Section except as it may reasonably determine are necessary or appropriate to comply or to ensure compliance with those applicable laws that are enacted or modified after the Closing.

5.2 Furnishing of Information. As long as the Investor owns the Securities, the Company covenants to timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to the 1934 Act. As long as the Investor owns Securities, if the Company is not required to file reports pursuant to such laws, it will prepare and furnish to the Investor and make publicly available in accordance with Rule 144(c) such information as is required for the Investor to sell the Investor Shares under Rule 144. The Company further covenants that it will take such further action as any holder of Securities may reasonably request, all to the extent required from time to time to enable such Person to sell such Investor Shares without registration under the 1933 Act within the limitation of the exemptions provided by Rule 144 or other applicable exemptions.

5.3 Integration. The Company shall not, and shall use its commercially reasonable efforts to ensure that no Affiliate of the Company shall, sell, offer for sale or solicit offers to buy or otherwise negotiate in respect of any security (as defined in Section 2 of the 1933 Act) that will be integrated with the offer or sale of the Securities in a manner that would require the registration under the 1933 Act of the sale of the Securities to the Investor, or that will be integrated with the offer or sale of the Securities for purposes of the rules and regulations of any Trading Market that would require, under the rules of the Trading Market, stockholder approval.

5.4 Notification of Certain Events. The Company shall give prompt written notice to the Investor of (a) the occurrence or non-occurrence of any Event, the occurrence or non-occurrence of which would render any representation or warranty of the Company contained in this Agreement or any other Transaction Document, if made on or immediately following the date of such Event, untrue or inaccurate in any material respect, (b) the occurrence of any Event that, individually or in combination with any other Events, has had or could reasonably be expected to have a Material Adverse Effect, (c) any failure of the Company to comply with or satisfy any covenant or agreement to be complied with or satisfied by it hereunder or any Event that would otherwise result in the nonfulfillment of any of the conditions to the Investor's obligations hereunder, (d) any notice or other communication from any Person alleging that the consent of such Person is or may be required in connection with the consummation of the transactions contemplated by this Agreement or any other Transaction Document, or (e) any Proceeding pending or, to the Company's knowledge, threatened against a party relating to the transactions contemplated by this Agreement or any other Transaction Document.

5.5 Available Stock. The Company shall at all times keep authorized and reserved and available for issuance, free of preemptive rights, such number of shares of Common Stock as are issuable upon conversion of the Note and the Warrant at any time. If the Company determines at any time that it does not have a sufficient number of authorized shares of Common Stock to reserve and keep available for issuance as described in this Section 5.5, the Company shall use all commercially reasonable efforts to increase the number of authorized shares of Common Stock by seeking stockholder approval for the authorization of such additional shares.

5.6 Use of Proceeds. The Company will use the proceeds from the sale of the Note, the Closing Shares and the Warrant for general corporate and to repay existing indebtedness.

5.7 Additional Debt. The Company shall not be permitted to incur any other Indebtedness, including the issuance of any subordinated debt or convertible debt (other than the Note and other than the Permitted Factor Indebtedness) unless (a) otherwise agreed in writing by the Investor, (b) such Indebtedness represents an unsecured obligation for the deferred purchase price of assets and the aggregate amount of all such Indebtedness does not exceed \$150,000 in any fiscal year, or (c) unless such debt is unsecured, is subordinated on terms reasonably acceptable to the Investor and one hundred percent (100%) of the cash proceeds received by the Company, net of any usual and customary transaction expenses, exclusive of fees, for such debt are immediately used to repay the Outstanding Amount (as such term is defined in the Note) of the Note.

5.8 [Intentionally Omitted.]

5.9 No Shorting. So long as the Investor continues to hold the Note, the Warrant or any portion thereof, the Investor will comply with the provisions of Section 9 of the 1934 Act, and the rules promulgated thereunder, with respect to transactions involving the Common Stock and will not, either directly or indirectly through its Affiliates, principals or advisors, engage in any short sales or other similar hedging transactions with respect to the Common Stock.

5.10 Prohibited Transactions. The Company hereby covenants and agrees not to enter into any Prohibited Transactions until thirty (30) days after such time as the Note has been repaid in full and/or has been converted into Conversion Shares.

5.11 Securities Laws Disclosure; Publicity. The Company shall issue a press release acceptable in form and substance to the Investor disclosing the consummation of the transactions contemplated hereby and file a Current Report on Form 8-K disclosing the consummation of the transactions contemplated hereby. In addition, the Company will make such other filings and notices in the manner and time required by the SEC and the Trading Market on which the Common Stock is listed. Notwithstanding the foregoing, the Company shall not publicly disclose the name of the Investor, or include the name of the Investor in any filing with the SEC (other than a registration statement and any exhibits to filings made in respect of this transaction in accordance with periodic filing requirements under the 1934 Act) or any regulatory agency or Trading Market, without the prior written consent of the Investor, except to the extent such disclosure is required by law or Trading Market regulations, in which case the Company shall provide the Investor with prior notice of such disclosure.

5.12 Indemnification of the Investor.

(a) The Company will indemnify, defend and hold the Investor, its Affiliates and their respective directors, officers, managers, shareholders, members, partners, employees and agents and permitted successors and assigns (each, an **"Investor Party"**) harmless from any and all losses, liabilities, obligations, claims, contingencies, damages, costs and expenses, including all judgments, amounts paid in settlements, court costs and reasonable attorneys' fees and costs of investigation and defense (collectively, **"Losses"**) that any such Investor Party may suffer or incur as a result of or relating to:

(i) any breach or inaccuracy of any representation, warranty, covenant or agreement made by the Company in any Transaction Document;

(ii) any misrepresentation made by the Company in any Transaction Document or in any SEC Document;

(iii) any omission to state any material fact necessary in order to make the statements made in any SEC Document, in light of the circumstances under which they were made, not misleading;

(iv) any Proceeding before or by any court, public board, government agency, self-regulatory organization or body based upon, or resulting from the execution, delivery, performance or enforcement of any of the Transaction Documents or the consummation of the transactions contemplated thereby, and whether or not the Investor is party thereto by claim, counterclaim, crossclaim, as a defendant or otherwise, or if such Proceeding is based upon, or results from, any of the items set forth in clauses (i) through (iii) above.

(b) In addition to the indemnity contained herein, the Company will reimburse each Investor Party for its reasonable legal and other expenses (including the cost of any investigation, preparation and travel in connection therewith) incurred in connection therewith, as such expenses are incurred.

(c) The provisions of this Section 5.12 shall survive the termination or expiration of this Agreement.

5.13 Non-Public Information. The Company covenants and agrees that neither it nor any other Person acting on its behalf will provide the Investor or its agents or counsel with any information that the Company believes constitutes material non-public information, unless prior thereto the Investor shall have executed a written agreement regarding the confidentiality and use of such information (including agreement not to trade Company securities while in possession of such information). To the extent the Company provides the Investor with material non-public information, the Company shall publicly disclose such information within 48 hours of providing the information to the Investor; provided, however, in the event that such material non-public information is provided to Investor pursuant to Section 10, the Company shall publicly disclosure such information within twenty (20) Business Days of providing the information to the Investor. The Company understands and confirms that the Investor shall be relying on the foregoing representations in effecting transactions in securities of the Company.

5.14 Stockholder Approval. The Company shall not be required to issue any Investor Shares if such issuance would cause the Company to be required to obtain the approval of the stockholders of the Company either pursuant to the rules and regulations of the Trading Market or otherwise; *provided*, that the Company shall, at the request of the Investor, promptly call a meeting of the stockholders of the Company for the purpose of obtaining such approval.

5.15 Listing of Securities. The Company shall: (a) in the time and manner required by each Trading Market on which the Common Stock is listed, prepare and file with such Trading Market an additional shares listing application covering the Investor Shares, (b) take all steps necessary to cause such shares to be approved for listing on each Trading Market on which the Common Stock is listed as soon as possible thereafter, (c) provide to the Investor evidence of such listing, and (d) maintain the listing of such shares on each such Trading Market.

5.16 Antitrust Notification. If the Investor determines, in its sole judgment and upon the advice of counsel, that the issuance of the Note, the Warrant or the Investor Shares pursuant to the terms hereof would be subject to the provisions of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "**HSR Act**"), the Company shall file as soon as practicable after the date on which the Company receives notice from the Investor of the applicability of the HSR Act and a request to so file with the United States Federal Trade Commission and the United States Department of Justice the notification and report form required to be filed by it pursuant to the HSR Act in connection with such issuance.

5.17 Change of Prime Broker, Custodian. The Investor has informed the Company of the names of its prime broker and its share custodian. The Investor shall notify the Company of any change in its prime broker or share custodian within three (3) Business Days of such change having taken effect.

5.18 Share Transfer Agent. The Company has informed the Investor of the name of its share transfer agent and represents and warrants that the transfer agent participates in the Depository Trust Company Fast Automated Securities Transfer program. The Company shall not change its share transfer agent without the prior written consent of the Investor.

5.19 Tax Treatment. The Investor and the Company agree that for U.S. federal income tax purposes, and applicable state, local and non-U.S. income tax purposes, the Note is not intended to be, and shall not be, treated as indebtedness. Neither the Investor nor the Company shall take any contrary position on any tax return, or in any audit, claim, investigation, inquiry or proceeding in respect of taxes, unless otherwise required pursuant to a final determination within the meaning of Section 1313 of the Code, or any analogous provision of applicable state, local or non-U.S. law.

5.20 Set-Off.

(a) The Investor may set off any of its obligations to the Company (whether or not due for payment), against any of the Company's obligations to the Investor (whether or not due for payment) under this Agreement and/or any other Transaction Document.

(b) The Investor may do anything necessary to effect any set-off undertaken in accordance with this Section 5.20 (including varying the date for payment of any amount payable by the Investor to the Company).

5.21 Reverse Stock Split. If at any time the Company has received a deficiency notice from the Trading Market that the Company's Common Stock has failed to meet the \$1.00 minimum closing bid price requirement for 30 consecutive business days and the Company has committed to the Trading Market to regain compliance with such requirement by effecting a reverse stock split prior to the expiration of all applicable compliance period(s) it has been afforded, the Company shall promptly call a meeting of the stockholders of the Company for purposes of approving a reverse stock split of the shares of Common Stock (a "Reverse Split") and, subject to receipt of stockholder approval, shall use its commercially reasonable efforts to promptly effect a Reverse Split.

6. CLOSING CONDITIONS

6.1 Conditions Precedent to the Obligations of the Investor. The obligation of the Investor to fund the Note and acquire the Warrant and the Closing Shares at the Closing is subject to the satisfaction or waiver by the Investor, at or before the Closing, of each of the following conditions:

(a) Representations and Warranties. The representations and warranties of the Company contained herein shall be true and correct in all material respects as of the date when made and as of such Closing as though made on and as of such date;

(b) Performance. The Company shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by it at or prior to such Closing;

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents;

(d) No Suspensions of Trading in Common Stock; Listing. Trading in the Common Stock shall not have been suspended by the SEC or any Trading Market (except for any suspensions of trading of not more than one day on which the Trading Market is open solely to permit dissemination of material information regarding the Company) at any time since the date of execution of this Agreement, and the Common Stock shall have been at all times since such date listed for trading on a Trading Market;

(e) Limitation on Beneficial Ownership. The issuance of the Note, the Warrant and the Closing Shares shall not cause the Investor Group to become, directly or indirectly, a "beneficial owner" (within the meaning of Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder) of a number of Equity Interests of a class that is registered under the 1934 Act which exceeds the Maximum Percentage of the Equity Interests of such class that are outstanding at such time;

(f) Secretary's Certificate. The Company shall have delivered to the Investor a certificate of the Company executed by the Secretary of the Company, dated as of the Closing Date, certifying: (i) the resolutions of the Board of Directors approving the Transaction Documents and the transactions contemplated thereby, including those set forth in Annex A, and (ii) the name, title, incumbency and signatures of the officers authorized to execute the Transaction Documents.

(g) Supplemental Listing Application. The Company shall have filed a Supplemental Listing Application with the Nasdaq Stock Market with respect to the Investor Shares;

(h) Payoff Letters. The Company shall have delivered to the Investor a payoff letter, dated no more than three (3) Business Days prior to the Closing Date, from Eagle Equities, LLC and Peak One Opportunity Fund, LP; and

(i) Funds Flow Request. The Company shall have delivered to the Investor a flow of funds request, substantially in the form set out in Annex B.

6.2 Conditions Precedent to the Obligations of the Company. The obligation of the Company to issue the Note, the Warrant and the Closing Shares at the Closing is subject to the satisfaction or waiver by the Company, at or before the Closing, of each of the following conditions:

(a) Representations and Warranties. The representations and warranties of the Investor contained herein shall be true and correct in all material respects as of the date when made and as of such Closing Date as though made on and as of such date;

(b) Performance. The Investor shall have performed, satisfied and complied in all material respects with all covenants, agreements and conditions required by the Transaction Documents to be performed, satisfied or complied with by the Investor at or prior to the Closing; and

(c) No Injunction. No statute, rule, regulation, executive order, decree, ruling or injunction shall have been enacted, entered, promulgated or endorsed by any court or governmental authority of competent jurisdiction that prohibits the consummation of any of the transactions contemplated by the Transaction Documents.

7. EVENTS OF DEFAULT

7.1 Events of Default. The occurrence of any of the following events shall be an “**Event of Default**” under this Agreement:

(a) an Event of Default under the Note;

(b) any of the representations or warranties made by the Company or any of its agents, officers, directors, employees or representatives in any Transaction Document or public filing being inaccurate, false or misleading in any material respect, as of the date as of which it is made or deemed to be made, or any certificate or financial or other written statements furnished by or on behalf of the Company to the Investor or any of its representatives, is inaccurate, false or misleading, in any material respect, as of the date as of which it is made or deemed to be made, or on any Closing Date; or

(c) a failure by the Company to comply with any of its covenants or agreements set forth in this Agreement.

7.2 Investor Right to Investigate and Event of Default. If in the Investor’s reasonable opinion, an Event of Default has occurred, or is or may be continuing:

(a) the Investor may notify the Company that it wishes to investigate such purported Event of Default;

(b) the Company shall cooperate with the Investor in such investigation;

(c) the Company shall comply with all reasonable requests made by the Investor to the Company in connection with any investigation by the Investor and shall (i) provide all information requested by the Investor in relation to the Event of Default to the Investor; provided that the Investor agrees that any materially price sensitive information and/or non-public information will be subject to confidentiality, and (ii) provide all such requested information within three (3) Business Days of such request; and

(d) the Company shall pay all reasonable costs incurred by the Investor in connection with any such investigation.

7.3 Remedies Upon an Event of Default

(a) If an Event of Default occurs pursuant to Section 7.1(a), the Investor shall have such remedies as is set forth in the Note.

(b) If an Event of Default occurs pursuant to Section 7.1(b) or Section 7.1(c) and is not remedied within (i) two (2) Business Days of written notice thereof for an Event of Default occurring by the Company's failure to comply with 7.1(c), or (ii) ten (10) Business Days of written notice thereof for all other Events of Default, *provided, however*, that there shall be no cure period for an Event of Default described in 2.1(j) or 2.1(k) of the Note, the Investor may declare, by notice to the Company, effective immediately, all outstanding obligations (if any) by the Company under the Transaction Documents to be immediately due and payable in immediately available funds and the Investor shall have no obligation to consummate any Closing under this Agreement or to accept the conversion of any Note into Conversion Shares.

(c) If any Event of Default occurs and is not remedied within (i) two (2) Business Days of written notice thereof for an Event of Default occurring by the Company's failure to comply with 7.1(c), or (ii) ten (10) Business Days of written notice thereof for all other Events of Default, *provided, however*, that there shall be no cure period for an Event of Default described in 2.1(j) or 2.1(k) of the Note, the Investor may, by written notice to the Company, terminate this Agreement effective as of the date set forth in the Investor's notice.

8. TERMINATION

8.1 Events of Termination. This Agreement:

(a) may be terminated:

(i) by the Investor on the occurrence or existence of a Securities Termination Event or a Change of Control;

(ii) by the mutual written consent of the Company and the Investor, at any time;

(iii) by either Party, by written notice to the other Party, effective immediately, if the Closing has not occurred within fifteen (15) Business Days of the date of this Agreement or such later date as the Company and the Investor agree in writing, provided that the right to terminate this Agreement under this Section 8.1(a)(iii) is not available to any party that is in material breach of or material default under this Agreement or whose failure to fulfill any obligation under this Agreement has been the principal cause of, or has resulted in the failure of the Closing to occur; or

(iv) by the Investor, in accordance with Section 7.3(c).

8.2 Automatic Termination. This Agreement will automatically terminate, without further action by the parties, at the time after the Closing that the Principal Amount outstanding under the Note and any accrued but unpaid interest is reduced to zero (0), whether as a result of conversion or repayment by the Company in accordance with the terms of this Agreement and the Note.

8.3 Effect of Termination.

(a) Subject to Section 8.3(b), each party's right of termination under Section 8.1 is in addition to any other rights it may have under this Agreement or otherwise, and the exercise of a right of termination will not be an election of remedies.

(b) If the Investor terminates this Agreement under Section 8.1(a)(i):

(i) the Investor may declare, by notice to the Company, all outstanding obligations by the Company under the Transaction Documents to be due and payable (including, without limitation, the immediate repayment of any Principal Amount outstanding under the Note plus accrued but unpaid interest) without presentment, demand, protest or any other notice of any kind, all of which are expressly waived by the Company, anything to the contrary contained in this Agreement or in any other Transaction Document notwithstanding; and

(ii) the Company must within five (5) Business Days of such notice being received, pay to the Investor in immediately available funds the outstanding Principal Amount for the Note plus all accrued interest thereon (if any), unless the Investor terminates this Agreement as a result of an Event of Default and provided that (A) subsequent to the termination under Section 8.1(a)(i), the Investor is not prohibited by Law or otherwise from exercising its conversion rights pursuant to this Agreement or the Note, (B) the Investor actually exercises its conversion rights under this Agreement or the Note, and (C) the Company otherwise complies in all respects with its obligation to issue Conversion Shares in accordance with the Note (which obligation will survive termination).

(c) Upon termination of this Agreement, the Investor will not be required to fund any further amount after the date of termination of the Agreement, provided that termination will not affect any undischarged obligation under this Agreement, including, for the avoidance of doubt any obligation of the Company to issue Shares on exercise of the Warrants, and any obligation of the Company to pay or repay any amounts owing to the Investor hereunder and which have not been repaid at the time of termination.

(d) Nothing in this Agreement will be deemed to release any party from any liability for any breach by such party of the terms and provisions of this Agreement or to impair the right of any party to compel specific performance by any other Party of its obligations under this Agreement.

9. REGISTRATION RIGHTS

9.1 Registration.

(a) Registration Statement. Promptly, but in any event no later than seventy-five (75) days, following the date of this Agreement, the Company shall prepare and file with the SEC a Registration Statement covering the resale of all of the Investor Shares. The foregoing Registration Statement shall be filed on Form S-1 or a Form S-3 or any successor forms thereto. The Registration Statement (and each amendment or supplement thereto, and each request for acceleration of effectiveness thereof) shall be provided to the Investor and its counsel at least five (5) Business Days prior to its filing or other submission and the Company shall incorporate all reasonable comments provided by the Investor or its counsel.

(b) Expenses. Except as otherwise expressly provided herein, the Company will pay all fees and expenses incident to the performance of or compliance with this Section 9, including all fees and expenses associated with effecting the registration of the Investor Shares, including all filing and printing fees, the Company's counsel and accounting fees and expenses, costs associated with clearing the Investor Shares for sale under applicable state securities laws, listing fees, fees and expenses of one counsel to the Investor and the Investor's reasonable expenses in connection with the registration, but excluding discounts, commissions, fees of underwriters, selling brokers, dealer managers or similar securities industry professionals with respect to the Investor Shares being sold.

(c) Effectiveness. The Company shall use its commercially reasonable efforts to have the Registration Statement declared effective as soon as practicable after filing thereof but in no event later than the later of (A) September 30, 2019 or (B) the date that is seventy-five days following the Closing Date. The Company shall notify the Investor by e-mail as promptly as practicable, and in any event, within twenty-four (24) hours, after the Registration Statement is declared effective and shall simultaneously provide the Investor with copies of any related Prospectus to be used in connection with the sale or other disposition of the securities covered thereby.

(d) Piggyback Registration Rights. If the Company at any time determines to file a registration statement under the 1933 Act to register the offer and sale, by the Company, of Common Stock (other than (x) on Form S-4 or Form S-8 under the 1933 Act or any successor forms thereto, (y) an at-the-market offering, or (z) a registration of securities solely relating to an offering and sale to employees or directors of the Company pursuant to any employee stock plan or other employee benefit plan arrangement), the Company shall, as soon as reasonably practicable, give written notice to the Investor of its intention to so register the offer and sale of Common Stock and, upon the written request, given within five (5) Business Days after delivery of any such notice by the Company, of the Investor to include in such registration the Investor Shares (which request shall specify the number of Investor Shares proposed to be included in such registration), the Company shall cause all such Investor Shares to be included in such registration statement on the same terms and conditions as the Common Stock otherwise being sold pursuant to such registered offering.

9.2 Company Obligations. The Company will use its commercially reasonable efforts to effect the registration of the Investor Shares in accordance with the terms hereof, and pursuant thereto the Company will, as expeditiously as possible:

(a) use its commercially reasonable efforts to cause the Registration Statement to become effective and to remain continuously effective for a period that will terminate upon the first date on which all Investor Shares are either covered by the Registration Statement or may be sold without restriction, including volume or manner-of-sale restrictions, pursuant to Rule 144 or have been sold by the Investor (the "**Effectiveness Period**") and advise the Investor in writing when the Effectiveness Period has expired;

(b) prepare and file with the SEC such amendments and post-effective amendments and supplements to the Registration Statement and the Prospectus as may be necessary to keep the Registration Statement effective for the Effectiveness Period and to comply with the provisions of the 1933 Act and the 1934 Act with respect to the distribution of all of the Investor Shares covered thereby;

(c) provide copies to and permit counsel designated by the Investor to review all amendments and supplements to the Registration Statement no fewer than three (3) Business Days prior to its filing with the SEC and not file any document to which such counsel reasonably objects;

(d) furnish to the Investor and its legal counsel, without charge, (i) promptly after the same is prepared and publicly distributed, filed with the SEC, or received by the Company (but not later than two (2) Business Days after the filing date, receipt date or sending date, as the case may be) one copy of the Registration Statement and any amendment thereto, each preliminary prospectus and Prospectus and each amendment or supplement thereto, and each letter written by or on behalf of the Company to the SEC or the staff of the SEC, and each item of correspondence from the SEC or the staff of the SEC, in each case relating to the Registration Statement (other than any portion of any thereof which contains information for which the Company has sought confidential treatment), and (ii) such number of copies of a Prospectus, including a preliminary prospectus, and all amendments and supplements thereto and such other documents as the Investor may reasonably request in order to facilitate the disposition of the Investor Shares that are covered by the related Registration Statement;

(e) immediately notify the Investor of any request by the SEC for the amending or supplementing of the Registration Statement or Prospectus or for additional information;

(f) use its commercially reasonable efforts to (i) prevent the issuance of any stop order or other suspension of effectiveness and, (ii) if such order is issued, obtain the withdrawal of any such order at the earliest possible moment and notify the Company of the issuance of any such order and the resolution thereof, or its receipt of notice of the initiation or threat of any proceeding for such purpose;

(g) prior to any public offering of Investor Shares, use its commercially reasonable efforts to register or qualify or cooperate with the Investor and its counsel in connection with the registration or qualification of such Investor Shares for offer and sale under the securities or blue sky laws of such jurisdictions requested by the Investor and do any and all other commercially reasonable acts or things necessary or advisable to enable the distribution in such jurisdictions of the Investor covered by the Registration Statement and the Company shall promptly notify the Investor of any notification with respect to the suspension of the registration or qualification of any of such Investor Shares for sale under the securities or blue sky laws of such jurisdictions or its receipt of notice of the initiation or threat of any proceeding for such purpose;

(h) immediately notify the Investor, at any time prior to the end of the Effectiveness Period, upon discovery that, or upon the happening of any event as a result of which, the Registration Statement or Prospectus includes an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading (in the case of the Prospectus, in light of the circumstances in which they were made), and promptly prepare, file with the SEC and furnish to such holder a supplement to or an amendment of such Registration Statement or Prospectus as may be necessary so that such Registration Statement or Prospectus shall not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading (in the case of such Prospectus, in light of the circumstances in which they were made);

(i) otherwise use its commercially reasonable efforts to comply with all applicable rules and regulations of the SEC under the 1933 Act and the 1934 Act;

(j) hold in confidence and not make any disclosure of information concerning the Investor provided to the Company unless (i) disclosure of such information is necessary to comply with federal or state securities laws, (ii) the disclosure of such information is necessary to complete the Registration Statement or to avoid or correct a misstatement or omission in the Registration Statement, (iii) the release of such information is ordered pursuant to a subpoena or other final, non-appealable order from a court or governmental body of competent jurisdiction, or (iv) such information has been made generally available to the public other than by disclosure in violation of this Agreement or any other agreement, and upon learning that disclosure of such information concerning the Investor is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt written notice to the Investor and allow the Investor, at the Investor's expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, such information; and

(k) take all other reasonable actions necessary to expedite and facilitate disposition by the Investor of all Investor Shares pursuant to the Registration Statement.

9.3 Indemnification.

(a) Indemnification by the Company. The Company will indemnify and hold harmless the Investor Parties, from and against any Losses to which they may become subject under the 1933 Act or otherwise, arising out of, relating to or based upon: (i) any untrue statement or alleged untrue statement of any material fact contained in any Registration Statement, any preliminary Prospectus, final Prospectus or other document, including any Blue Sky Application (as defined below), or any amendment or supplement thereof or any omission or alleged omission of a material fact required to be stated therein or, in the case of the Registration Statement, necessary to make the statements therein not misleading or, in the case of any preliminary Prospectus, final Prospectus or other document, necessary to make the statements therein, in light of the circumstances in which they were made, not misleading; (ii) any blue sky application or other document executed by the Company specifically for that purpose or based upon written information furnished by the Company filed in any state or other jurisdiction in order to qualify any or all of the Investor Shares under the securities laws thereof (any such application, document or information herein called a "**Blue Sky Application**"); (iii) any violation or alleged violation by the Company or its agents of the 1933 Act, the 1934 Act or any similar federal or state law or any rule or regulation promulgated thereunder applicable to the Company or its agents and relating to any action or inaction required of the Company in connection with the registration or the offer or sale of the Investor Shares pursuant to any Registration Statement; or (iv) any failure to register or qualify the Investor Shares included in any such Registration Statement in any state where the Company or its agents has affirmatively undertaken or agreed in writing that the Company will undertake such registration or qualification on the Investor's behalf and will reimburse the Investor Indemnified Parties for any legal or other expenses reasonably incurred by them in connection with investigating, preparing or defending any such Losses; provided, however, that the Company will not be liable in any such case if and to the extent, but only to the extent, that any such Losses arise out of or are based upon an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by the Investor or any such controlling Person in writing specifically for use in such Registration Statement or Prospectus.

(b) Conduct of Indemnification Proceedings. Any Person entitled to indemnification hereunder shall (i) give prompt notice to the indemnifying party of any claim, action, suit or proceeding with respect to which it seeks indemnification following such Person's receipt of, or such Person otherwise become aware of, the commencement of such claim, action, suit or proceeding and (ii) permit such indemnifying party to assume the defense of such claim, action, suit or proceeding with counsel reasonably satisfactory to the indemnified party; provided, however, that any Person entitled to indemnification hereunder shall have the right to employ separate counsel and to participate in the defense of such claim, but the fees and expenses of such counsel shall be at the expense of such Person unless (A) the indemnifying party has agreed to pay such fees or expenses, (B) the indemnifying party shall have failed to assume the defense of such claim and employ counsel reasonably satisfactory to such Person or (C) in the reasonable judgment of any such Person, based upon written advice of its counsel, a conflict of interest exists between such Person and the indemnifying party with respect to such claims (in which case, if the Person notifies the indemnifying party in writing that such Person elects to employ separate counsel at the expense of the indemnifying party, the indemnifying party shall not have the right to assume the defense of such claim on behalf of such Person); and provided, further, that the failure or delay of any indemnified party to give notice as provided herein shall not relieve the indemnifying party of its obligations hereunder, except to the extent that such failure or delay to give notice shall materially adversely affect the indemnifying party in the defense of any such claim or litigation. It is understood that the indemnifying party shall not, in connection with any proceeding in the same jurisdiction, be liable for fees or expenses of more than one separate firm of attorneys at any time for all such indemnified parties. No indemnifying party will, except with the consent of the indemnified party, consent to entry of any judgment or enter into any settlement that does not include as an unconditional term thereof the giving by the claimant or plaintiff to such indemnified party of a release from all liability in respect of such claim or litigation.

(c) Contribution. If for any reason the indemnification provided for in the preceding paragraph (a) is unavailable to an indemnified party or insufficient to hold it harmless, other than as expressly specified therein, the indemnifying party shall contribute to the amount paid or payable by the indemnified party as a result of such Losses in such proportion as is appropriate to reflect the relative fault of the indemnified party and the indemnifying party, as well as any other relevant equitable considerations. No Person guilty of fraudulent misrepresentation within the meaning of Section 11(f) of the 1933 Act shall be entitled to contribution from any Person not guilty of such fraudulent misrepresentation. The indemnity and contribution agreements contained in this Section are in addition to any other rights or remedies that any indemnified party may have under applicable law, by separate agreement or otherwise.

10. RIGHTS TO FUTURE STOCK ISSUANCES. Subject to the terms and conditions of this Section 10 and applicable securities laws, if at any time prior to the second anniversary of the Closing, the Company proposes to offer or sell any New Securities, the Company shall offer the Investor the opportunity to purchase up to twenty percent (20%) of such New Securities. The Investor shall be entitled to apportion the right of first offer hereby granted to it in such proportions as it deems appropriate among itself and its Affiliates.

10.1 The Company shall give notice (the “**Offer Notice**”) to the Investor, stating (a) its bona fide intention to offer such New Securities, (b) the number of such New Securities to be offered, and (c) the price and terms, if any, upon which it proposes to offer such New Securities.

10.2 By notification to the Company within ten (10) days after the Offer Notice is given, the Investor may elect to purchase or otherwise acquire, at the price and on the terms specified in the Offer Notice, up to twenty percent (20%) of such New Securities. The closing of any sale pursuant to this Section 10 shall occur within the later of ninety (90) days of the date that the Offer Notice is given and the date of initial sale of New Securities pursuant to Section 10.3.

10.3 The Company may, during the ninety (90) day period following the expiration of the period provided in Section 10.2, offer and sell the remaining portion of such New Securities to any Person or Persons at a price not less than, and upon terms no more favorable to the offeree than, those specified in the Offer Notice. If the Company does not enter into an agreement for the sale of the New Securities within such period, or if such agreement is not consummated within thirty (30) days of the execution thereof, the right provided hereunder shall be deemed to be revived and such New Securities shall not be offered unless first reoffered to the Investors in accordance with this Section 10.

10.4 The right of first offer in this Section 10 shall not be applicable to Exempted Securities, any New Securities registered for sale under the 1933 Act.

11. GENERAL PROVISIONS

11.1 Fees and Expenses. Prior to the date of this Agreement, the Company has paid Morgan, Lewis & Bockius LLP \$20,000. At the Closing, the Company shall reimburse the Investor up to an additional \$20,000 of due diligence costs and reasonable fees and disbursements of Morgan, Lewis & Bockius LLP in connection with the preparation of the Transaction Documents it being understood that Morgan, Lewis & Bockius LLP has not rendered any legal advice to the Company in connection with the transactions contemplated hereby and that the Company has relied for such matters on the advice of its own counsel. Except as specified above, each party shall pay the fees and expenses of its advisers, counsel, accountants and other experts, if any, and all other expenses incurred by such party incident to the negotiation, preparation, execution, delivery and performance of the Transaction Documents. The Company shall pay all stamp and other taxes and duties levied in connection with the sale of the Note, the Closing Shares and the Warrant.

11.2 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (New York time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section on a day that is not a Business Day or later than 5:00 p.m. (New York time) on any date and earlier than 11:59 p.m. (New York time) on such date, (c) the Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as follows:

If to the Company:

BIO-Key International, Inc.
3349 Highway 138, Building A, Suite E
Wall, NJ 07719
Telephone: (732) 359-1111
Email: mike.depasquale@bio-key.com
Attention: Michael W. DePasquale, Chairman & CEO

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

Fox Rothschild LLP
Princeton Pike Corporate Center
997 Lenox Drive, Building 3
Lawrenceville, NJ 08648-2311
Telephone: (609) 896-4571
Email: VVietti@foxrothschild.com
Attention: Vincent A. Vietti

If to the Investor:

Lind Global Macro Fund, LP
c/o The Lind Partners LLC
370 Lexington Avenue, Suite 1900
New York, NY 10017
Telephone: (646) 395-3931
Email: jeaston@thelindpartners.com and
notice@thelindpartners.com
Attention: Jeff Easton

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

Morgan, Lewis & Bockius LLP
One Federal Street
Boston, MA 02110
Telephone: (617) 951-8211
Email: gitte.blanchet@morganlewis.com
Attention: Gitte J. Blanchet

or such other address as may be designated in writing hereafter, in the same manner, by such Person.

11.3 Severability. If any provision of this Agreement is held by a court of competent jurisdiction to be excessive in scope or otherwise invalid or unenforceable, such provision shall be adjusted rather than voided, if possible, so that it is enforceable to the maximum extent possible, and the validity and enforceability of the remaining provisions of this Agreement will not in any way be affected or impaired thereby.

11.4 Governing Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of New York, without reference to principles of conflict of laws or choice of laws.

11.5 Jurisdiction and Venue; Service of Process.

(a) Any action, proceeding or claim arising out of, or relating in any way to this Agreement shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York. The Company and the Investor irrevocably submit to the jurisdiction of such courts, which jurisdiction shall be exclusive, and hereby waive any objection to such exclusive jurisdiction or that such courts represent an inconvenient forum. The prevailing party in any such action shall be entitled to recover its reasonable and documented attorneys' fees and out-of-pocket expenses relating to such action or proceeding.

(b) The Company and the Investor hereby irrevocably waives personal service of process and consents to process being served in any such action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under Section 11.2 and agrees that such service shall constitute good and sufficient service of process and notice thereof.

11.6 WAIVER OF RIGHT TO JURY TRIAL. THE COMPANY AND THE INVESTOR HEREBY IRREVOCABLY WAIVE, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE OTHER TRANSACTION DOCUMENTS.

11.7 Survival. The representations, warranties, agreements and covenants contained herein shall survive the Closing and the delivery of the Securities.

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

11.9 Amendments; Waivers. No provision of this Agreement may be waived or amended except in a written instrument signed by the Company and the Investor. No waiver of any default with respect to any provision, condition or requirement of this Agreement shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

11.10 Construction. The headings herein are for convenience only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof. 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. This Agreement shall be construed as if drafted jointly by the parties, and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement or any of the Transaction Documents.

11.11 Successors and Assigns. This Agreement shall be binding upon, and inure to the benefit of and be enforceable by, the Company and the Investor and their respective successors and assigns. The Company may not assign this Agreement or any rights or obligations hereunder without the prior written consent of the Investor. The Investor may assign any or all of its rights under this Agreement to any Person to whom the Investor assigns or transfers any Securities, provided such transferee agrees in writing to be bound, with respect to the transferred Securities, by the provisions hereof that apply to the "Investor" and such transferee is an accredited investor.

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

11.13 Further Assurances. Each party hereto 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.

11.14 Counterparts. This Agreement may be executed in two identical counterparts, both 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. Signature pages delivered by facsimile or e-mail shall have the same force and effect as an original signature.

11.15 Specific Performance. The Company acknowledges that monetary damages alone would not be adequate compensation to the Investor for a breach by the Company of this Agreement and the Investor may seek an injunction or an order for specific performance from a court of competent jurisdiction if (a) the Company fails to comply or threatens not to comply with this Agreement or (b) the Investor has reason to believe that the Company will not comply with this Agreement.

[Signature Page Follows]

IN WITNESS WHEREOF, the undersigned have executed this Securities Purchase Agreement as of the date first set forth above.

COMPANY:

BIO-KEY INTERNATIONAL, INC.

INVESTOR:

LIND GLOBAL MACRO FUND, LP
BY: LIND GLOBAL PARTNERS, LLC,
ITS GENERAL PARTNER

By: _____
Name: Michael W. DePasquale
Title: CEO

By: _____
Name: Jeff Easton
Title: Managing Member

[Signature Page of Securities Purchase Agreement]

SECURITY AGREEMENT

SECURITY AGREEMENT (this "Agreement"), dated as of July 10, 2019, by and between **BIO-Key International, Inc.**, a Delaware corporation (the "Company") and **LIND GLOBAL MACRO FUND, LP** (the "Secured Party").

WHEREAS, the Company and the Secured Party have entered into (a) that certain Securities Purchase Agreement dated as of the date hereof (as amended and in effect from time to time, the "SPA") and (b) that certain Senior Secured Convertible Promissory Note dated as of the date hereof (as amended and in effect from time to time, the "Note"); and

WHEREAS, it is a condition precedent to the Secured Party agreeing to make loans or otherwise extend credit to the Company under the SPA and the Note that the Company execute and deliver to the Secured Party a security agreement in substantially the form hereof; and

WHEREAS, the Company wishes to grant security interests in favor of the Secured Party as herein provided;

NOW, THEREFORE, in consideration of the promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Definitions. All capitalized terms used herein without definitions shall have the respective meanings provided therefor in the SPA. All terms defined in the Uniform Commercial Code of the State (as hereinafter defined) and used herein shall have the same definitions herein as specified therein, however, if a term is defined in Article 9 of the Uniform Commercial Code of the State differently than in another Article of the Uniform Commercial Code of the State, the term has the meaning specified in Article 9, and the following terms shall have the following meanings:

"Event of Default" means the occurrence of any "Event of Default" under and as defined in each of the SPA and the Note, or the failure of the Company to comply with any term or covenant of any Transaction Document (including this Agreement) to which it is a party.

"Intercreditor Agreement" means that certain Collateral Sharing Agreement dated as of the date hereof by and among the Company, the Secured Party and Versant, as the same may be amended, restated and/or modified from time to time in accordance with the terms thereof.

"Lien" means any mortgage, charge, pledge, hypothecation, security interest, assignment by way of security, lien (statutory or otherwise), encumbrance, conditional sale agreement, capital lease, financing lease, deposit arrangement, title retention agreement, and any other agreement, trust or arrangement that in substance secures payment or performance of an obligation.

"Obligations" means, collectively, (a) all debts, liabilities and obligations, present or future, direct or indirect, absolute or contingent, matured or unmatured, at any time or from time to time due or accruing due and owing by or otherwise payable by the Company to the Secured Party in any currency, under, in connection with or pursuant to the any Transaction Document (including, without limitation, this Agreement), and whether incurred by the Company alone or jointly with another or others and whether as principal, guarantor or surety and in whatever name or style and (b) all expenses, costs and charges incurred by or on behalf of the Secured Party in connection with any Transaction Document (including this Agreement) or the Collateral, including all legal fees, court costs, receiver's or agent's remuneration and other expenses of taking possession of, repairing, protecting, insuring, preparing for disposition, realizing, collecting, selling, transferring, delivering or obtaining payment for the Collateral, and of taking, defending or participating in any action or proceeding in connection with any of the foregoing matters or otherwise in connection with the Secured Party's interest in any Collateral, whether or not directly relating to the enforcement of this Agreement or any other Transaction Document.

"Permitted Lien" means any of the following: (a) mechanics and materialman Liens and other statutory Liens (including Liens for taxes, fees, assessments and other governmental charges or levies) in respect of any amount (i) which is not at the time overdue or (ii) which may be overdue but the validity of which is being contested at the time in good faith by appropriate proceedings, in each case so long as the holder of such Lien has not taken any action to foreclose or otherwise exercise any remedies with respect to such Lien; (b) so long as the Intercreditor Agreement is in full force and effect, the Versant Liens; and (c) Liens which are permitted in writing by the Secured Party in its sole and absolute discretion.

"State" means the State of New York.

"Versant" means Versant Funding LLC, a Delaware limited liability company.

"Versant Agreement" means that certain Factoring Agreement dated as of December 20, 2011 by and between Versant and the Company.

"Versant Collateral" means those assets of the Company that comprise the "Collateral" as such term is defined in the Versant Security Agreement which are pledged to secure the obligations owing to Versant under the Versant Documents.

"Versant Documents" means, collectively, the Versant Agreement, the Versant Security Agreement and the Account Agreements (as such term is defined in the Versant Agreement).

"Versant Liens" means the Liens granted by the Company on the Versant Collateral in favor of Versant pursuant to the Versant Security Agreement to secure the obligations owing to Versant under the Versant Documents.

"Versant Security Agreement" means that certain Security Agreement dated as of December 20, 2011 by and between Versant and the Company.

2. Grant of Security Interest.

2.1. Grant; Collateral Description. The Company hereby grants to the Secured Party, to secure the payment and performance in full of all of the Obligations, a security interest in and pledges and assigns to the Secured Party the following properties, assets and rights of the Company, wherever located, whether now owned or hereafter acquired or arising, and all proceeds and products thereof (all of the same being hereinafter called the "Collateral"): all personal and fixture property of every kind and nature including all goods (including inventory, equipment and any accessions thereto), instruments (including promissory notes), documents (whether tangible or electronic), accounts (including health-care-insurance receivables), chattel paper (whether tangible or electronic), deposit accounts, letter-of-credit rights (whether or not the letter of credit is evidenced by a writing), commercial tort claims, securities and all other investment property, supporting obligations, any other contract rights or rights to the payment of money, insurance claims and proceeds, and all general intangibles (including all payment intangibles).

2.2. Commercial Tort Claims. The Secured Party acknowledges that the attachment of its security interest in any commercial tort claim as original collateral is subject to the Company's compliance with §4.7.

3. Authorization to File Financing Statements. The Company hereby irrevocably authorizes the Secured Party at any time and from time to time to file in any filing office in any Uniform Commercial Code jurisdiction any initial financing statements and amendments thereto that (a) indicate the Collateral (i) as all assets of the Company or words of similar effect, regardless of whether any particular asset comprised in the Collateral falls within the scope of Article 9 of the Uniform Commercial Code of the State or such jurisdiction, or (ii) as being of an equal or lesser scope or with greater detail, and (b) provide any other information required by part 5 of Article 9 of the Uniform Commercial Code of the State or such other jurisdiction for the sufficiency or filing office acceptance of any financing statement or amendment, including whether the Company is an organization, the type of organization and any organizational identification number issued to the Company. The Company agrees to furnish any such information to the Secured Party promptly upon the Secured Party's reasonable request.

4. Other Actions. Further to insure the attachment, perfection and first priority of (or, to the extent the Intercreditor Agreement is in full force and effect, with respect solely to the accounts, the second priority of), and the ability of the Secured Party to enforce, the Secured Party's security interest in the Collateral, the Company agrees, in each case at the Company's expense, to take the following actions with respect to the following Collateral and without limitation on the Company's other obligations contained in this Agreement:

4.1. Promissory Notes and Tangible Chattel Paper. If the Company shall, now or at any time hereafter, hold or acquire any promissory notes or tangible chattel paper with an aggregate value for all such promissory notes or tangible chattel paper in excess of \$50,000, the Company shall forthwith endorse, assign and deliver the same to the Secured Party, accompanied by such instruments of transfer or assignment duly executed in blank as the Secured Party may from time to time specify.

4.2. Deposit Accounts. For each deposit account that the Company, now or at any time hereafter, opens or maintains the Company shall, at the Secured Party's request and option, pursuant to an agreement in form and substance satisfactory to the Secured Party, either (a) cause the depository bank to agree to comply without further consent of the Company, at any time with instructions from the Secured Party to such depository bank directing the disposition of funds from time to time credited to such deposit account, or (b) arrange for the Secured Party to become the customer of the depository bank with respect to the deposit account, with the Company being permitted, only with the consent of the Secured Party, to exercise rights to withdraw funds from such deposit account. The Secured Party agrees with the Company that the Secured Party shall not give any such instructions or withhold any withdrawal rights from the Company, unless an Event of Default has occurred and is continuing, or, if effect were given to any withdrawal not otherwise permitted by the Transaction Documents, would occur. The provisions of this paragraph shall not apply to any deposit accounts specially and exclusively used for payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of the Company's salaried employees.

4.3. Investment Property. If the Company shall, now or at any time hereafter, hold or acquire any certificated securities, the Company shall forthwith endorse, assign and deliver the same to the Secured Party, accompanied by such instruments of transfer or assignment duly executed in blank as the Secured Party may from time to time specify. If any securities now or hereafter acquired by the Company are uncertificated and are issued to the Company or its nominee directly by the issuer thereof, the Company shall promptly (but in any event within two Business Days) notify the Secured Party thereof and, at the Secured Party's request and option, pursuant to an agreement in form and substance satisfactory to the Secured Party, either (a) cause the issuer to agree to comply without further consent of the Company or such nominee, at any time with instructions from the Secured Party as to such securities, or (b) arrange for the Secured Party to become the registered owner of the securities. If any securities, whether certificated or uncertificated, or other investment property now or hereafter acquired by the Company are held by the Company or its nominee through a securities intermediary or commodity intermediary, the Company shall promptly (but in any event within two Business Days) notify the Secured Party thereof and, at the Secured Party's request and option, pursuant to an agreement in form and substance satisfactory to the Secured Party, either (i) cause such securities intermediary or (as the case may be) commodity intermediary to agree to comply, in each case without further consent of the Company or such nominee, at any time with entitlement orders or other instructions from the Secured Party to such securities intermediary as to such securities or other investment property, or (as the case may be) to apply any value distributed on account of any commodity contract as directed by the Secured Party to such commodity intermediary, or (ii) in the case of financial assets or other investment property held through a securities intermediary, arrange for the Secured Party to become the entitlement holder with respect to such investment property, with the Company being permitted, only with the consent of the Secured Party, to exercise rights to withdraw or otherwise deal with such investment property. The Secured Party agrees with the Company that the Secured Party shall not give any such entitlement orders or instructions or directions to any such issuer, securities intermediary or commodity intermediary, and shall not withhold its consent to the exercise of any withdrawal or dealing rights by the Company, unless an Event of Default has occurred and is continuing, or, after giving effect to any such investment and withdrawal rights not otherwise permitted by the Transaction Documents, would occur. The provisions of this paragraph shall not apply to any financial assets credited to a securities account for which the Secured Party is the securities intermediary.

4.4. Collateral in the Possession of a Bailee. If any Collateral with an aggregate value in excess of \$100,000 is, now or at any time hereafter, in the possession of a bailee, the Company shall promptly notify the Secured Party thereof and, at the Secured Party's reasonable request and option, shall promptly obtain an acknowledgement from the bailee, in form and substance satisfactory to the Secured Party, that the bailee holds such Collateral for the benefit of the Secured Party and such bailee's agreement to comply, without further consent of the Company, at any time with instructions of the Secured Party as to such Collateral.

4.5. Electronic Chattel Paper, Electronic Documents and Transferable Records. If the Company, now or at any time hereafter, holds or acquires an interest in any Collateral that is electronic chattel paper, any electronic document or any "transferable record," as that term is defined in Section 201 of the federal Electronic Signatures in Global and National Commerce Act, or in §16 of the Uniform Electronic Transactions Act as in effect in any relevant jurisdiction, the Company shall promptly notify the Secured Party thereof and, at the request and option of the Secured Party, shall take such action as the Secured Party may reasonably request to vest in the Secured Party control, under §9-105 of the Uniform Commercial Code of the State or any other relevant jurisdiction, of such electronic chattel paper, control, under §7-106 of the Uniform Commercial Code of the State or any other relevant jurisdiction, of such electronic document or control, under Section 201 of the federal Electronic Signatures in Global and National Commerce Act or, as the case may be, §16 of the Uniform Electronic Transactions Act, as so in effect in such jurisdiction, of such transferable record. The Secured Party agrees with the Company that the Secured Party will arrange, pursuant to procedures satisfactory to the Secured Party and so long as such procedures will not result in the Secured Party's loss of control, for the Company to make alterations to the electronic chattel paper, electronic document or transferable record permitted under UCC §9-105, UCC §7-106, or, as the case may be, Section 201 of the federal Electronic Signatures in Global and National Commerce Act or §16 of the Uniform Electronic Transactions Act for a party in control to make without loss of control, unless an Event of Default has occurred and is continuing or would occur after taking into account any action by the Company with respect to such electronic chattel paper, electronic document or transferable record. The provisions of this §4.5 relating to electronic documents and "control" under UCC §7-106 apply in the event that the 2003 revisions to Article 7, with amendments to Article 9, of the Uniform Commercial Code, in substantially the form approved by the American Law Institute and the National Conference of Commissioners on Uniform State Laws, are now or hereafter adopted and become effective in the State or in any other relevant jurisdiction.

4.6. Letter-of-Credit Rights. If the Company is, now or at any time hereafter, a beneficiary under a letter of credit with a stated amount in excess of \$25,000, or if the Company is a beneficiary under letters of credit not assigned to the Secured Party with an aggregate stated amount in excess of \$50,000, the Company shall promptly notify the Secured Party thereof and, at the request and option of the Secured Party, the Company shall, pursuant to an agreement in form and substance satisfactory to the Secured Party, either (a) arrange for the issuer and any confirmer of such letter of credit to consent to an assignment to the Secured Party of the proceeds of the letter of credit or (b) arrange for the Secured Party to become the transferee beneficiary of the letter of credit.

4.7. Commercial Tort Claims. If the Company shall, now or at any time hereafter, hold or acquire a commercial tort claim, the Company shall promptly notify the Secured Party in a writing signed by the Company of the particulars thereof and grant to the Secured Party in such writing a security interest therein and in the proceeds thereof, all upon the terms of this Agreement, with such writing to be in form and substance satisfactory to the Secured Party.

4.8. Other Actions as to any and all Collateral. The Company further agrees, upon the request of the Secured Party and at the Secured Party's option, to take any and all other actions as the Secured Party may determine to be necessary or useful for the attachment, perfection and first priority of (or, to the extent the Intercreditor Agreement is in full force and effect, solely with respect to accounts, second priority of), and the ability of the Secured Party to enforce, the Secured Party's security interest in any and all of the Collateral, including (a) executing, delivering and, where appropriate, filing financing statements and amendments relating thereto under the Uniform Commercial Code of any relevant jurisdiction, to the extent, if any, that the Company's signature thereon is required therefor, (b) causing the Secured Party's name to be noted as secured party on any certificate of title for a titled good if such notation is a condition to attachment, perfection or priority of, or ability of the Secured Party to enforce, the Secured Party's security interest in such Collateral, (c) complying with any provision of any statute, regulation or treaty of the United States as to any Collateral if compliance with such provision is a condition to attachment, perfection or priority of, or ability of the Secured Party to enforce, the Secured Party's security interest in such Collateral, (d) obtaining governmental and other third party waivers, consents and approvals, in form and substance satisfactory to the Secured Party, including any consent of any licensor, lessor or other person obligated on Collateral, (e) obtaining waivers from mortgagees and landlords in form and substance satisfactory to the Secured Party and (f) taking all actions under any earlier versions of the Uniform Commercial Code or under any other law, as reasonably determined by the Secured Party to be applicable in any relevant Uniform Commercial Code or other jurisdiction, including any foreign jurisdiction.

5 . Representations and Warranties Concerning a Company's Legal Status. The Company has, on the date hereof, delivered to the Secured Party a certificate signed by the Company and entitled "Perfection Certificate" (the "Perfection Certificate"). The Company represents and warrants to the Secured Party as follows: as of the date hereof (a) the Company's exact legal name is that indicated on the Perfection Certificate and on the signature page hereof, (b) the Company is an organization of the type, and is organized in the jurisdiction, set forth in the Perfection Certificate, (c) the Perfection Certificate accurately sets forth the Company's organizational identification number or accurately states that the Company has none, (d) the Perfection Certificate accurately sets forth the Company's place of business or, if more than one, its chief executive office, as well as the Company's mailing address, if different, (e) all other information set forth on the Perfection Certificate pertaining to the Company is accurate and complete, and (f) there has been no change in any of such information since the date on which the Perfection Certificate was signed by the Company.

6. Covenants Concerning Company's Legal Status. The Company covenants with the Secured Party as follows: (a) without providing at least thirty (30) days prior written notice to the Secured Party, the Company will not change its name, its place of business or, if more than one, chief executive office, or its mailing address or organizational identification number if it has one, (b) if the Company does not have an organizational identification number and later obtains one, the Company will forthwith notify the Secured Party of such organizational identification number, and (c) the Company will not change its type of organization, jurisdiction of organization or other legal structure.

7. Representations and Warranties Concerning Collateral, Etc. The Company further represents and warrants to the Secured Party as follows: (a) the Company is the owner of or has other rights in or power to transfer the Collateral, free from any right or claim of any person or any adverse lien, except for the security interest created by this Agreement and the Permitted Liens, (b) none of the account debtors or other persons obligated on any of the Collateral is a governmental authority covered by the Federal Assignment of Claims Act or like federal, state or local statute or rule in respect of such Collateral, (c) the Company holds no commercial tort claim except as indicated on the Company's Perfection Certificate, (d) all other information set forth on the Company's Perfection Certificate pertaining to the Collateral is accurate and complete, and (e) there has been no change in any of such information since the date on which the Company's Perfection Certificate was signed by the Company.

8 . Covenants Concerning Collateral, Etc. The Company further covenants with the Secured Party as follows: (a) other than inventory sold in the ordinary course of business consistent with past practices and the sale of the Factored Receivables sold in accordance with the terms of the Intercreditor Agreement and the Note, the Collateral, to the extent not delivered to the Secured Party pursuant to §4, will be kept at those locations listed on the Perfection Certificate and the Company will not remove the Collateral from such locations, without providing at least thirty (30) days prior written notice to the Secured Party, (b) except for the security interest herein granted, the Company shall be the owner of or have other rights in the Collateral free from any right or claim of any other person or any Lien (other than Permitted Liens), and the Company shall defend the same against all claims and demands of all persons at any time claiming the same or any interests therein adverse to the Secured Party, (c) other than in favor of the Secured Party or, so long as the Intercreditor Agreement is in full force and effect, Versant with respect to the Versant Collateral and the Versant Lien, the Company shall not pledge, mortgage or create, or suffer to exist any right of any person in or claim by any person to the Collateral, or any Lien in the Collateral in favor of any person, or become bound (as provided in Section 9-203(d) of the Uniform Commercial Code of the State or any other relevant jurisdiction or otherwise) by a security agreement in favor of any person as secured party, (d) the Company will permit the Secured Party, or its designee, to inspect the Collateral at any reasonable time, wherever located, (e) the Company will pay promptly when due all taxes, assessments, governmental charges and levies upon the Collateral or incurred in connection with the use or operation of the Collateral or incurred in connection with this Agreement, and (f) the Company will not sell or otherwise dispose, or offer to sell or otherwise dispose, of the Collateral, or any interest therein except for, with respect to the Collateral, the sale of the Factored Receivables sold in accordance with the terms of the Intercreditor Agreement and the Note and, so long as no Event of Default has occurred and is continuing, dispositions of obsolete or worn-out property, the granting of non-exclusive licenses in the ordinary course of business, and the sale of inventory in the ordinary course of business consistent with past practices.

9. Collateral Protection Expenses: Preservation of Collateral

9.1. Expenses Incurred by Secured Party. In the Secured Party's discretion, the Secured Party may discharge taxes and other encumbrances at any time levied or placed on any of the Collateral, and pay any necessary filing fees or insurance premiums, in each case if the Company fails to do so. The Company agrees to reimburse the Secured Party on demand for all expenditures so made. The Secured Party shall have no obligation to the Company to make any such expenditures, nor shall the making thereof be construed as a waiver or cure of any Event of Default.

9.2. Secured Party's Obligations and Duties. Anything herein to the contrary notwithstanding, the Company shall remain obligated and liable under each contract or agreement comprised in the Collateral to be observed or performed by the Company thereunder. The Secured Party shall not have any obligation or liability under any such contract or agreement by reason of or arising out of this Agreement or the receipt by the Secured Party of any payment relating to any of the Collateral, nor shall the Secured Party be obligated in any manner to perform any of the obligations of the Company under or pursuant to any such contract or agreement, to make inquiry as to the nature or sufficiency of any payment received by the Secured Party in respect of the Collateral or as to the sufficiency of any performance by any party under any such contract or agreement, to present or file any claim, to take any action to enforce any performance or to collect the payment of any amounts which may have been assigned to the Secured Party or to which the Secured Party may be entitled at any time or times. The Secured Party's sole duty with respect to the custody, safe keeping and physical preservation of the Collateral in its possession, under §9-207 of the Uniform Commercial Code of the State or otherwise, shall be to deal with such Collateral in the same manner as the Secured Party deals with similar property for its own account.

10. Securities and Deposits. Subject in all cases to the terms of the Intercreditor Agreement, the Secured Party may at any time following and during the continuance of a payment default or an Event of Default, at its option, transfer to itself or any nominee any securities constituting Collateral, receive any income thereon and hold such income as additional Collateral or apply it to the Obligations. Whether or not any Obligations are due, the Secured Party may, subject to the terms of the Intercreditor Agreement, following and during the continuance of a payment default or an Event of Default demand, sue for, collect, or make any settlement or compromise which it deems desirable with respect to the Collateral. Regardless of the adequacy of Collateral or any other security for the Obligations, but subject in all cases to the Intercreditor Agreement, any deposits or other sums at any time credited by or due from the Secured Party to the Company may at any time be applied to or set off against any of the Obligations then due and owing.

11. Notification to Account Debtors and Other Persons Obligated on Collateral. If an Event of Default shall have occurred and be continuing, but subject in all cases to the terms of the Intercreditor Agreement:

- (a) the Company shall, at the request and option of the Secured Party, notify account debtors and other persons obligated on any of the Collateral of the security interest of the Secured Party in any account, chattel paper, general intangible, instrument or other Collateral and that payment thereof is to be made directly to the Secured Party or to any financial institution designated by the Secured Party as the Secured Party's agent therefor;
 - (b) the Secured Party may itself, without notice to or demand upon the Company, so notify account debtors and other persons obligated on Collateral;
 - (c) after the making of such a request or the giving of any such notification, the Company shall hold any proceeds of collection of accounts, chattel paper, general intangibles, instruments and other Collateral received by the Company as trustee for the Secured Party, for the benefit of the Secured Party, without commingling the same with other funds of the Company and shall turn the same over to the Secured Party in the identical form received, together with any necessary endorsements or assignments; and
 - (d) the Secured Party shall apply the proceeds of collection of accounts, chattel paper, general intangibles, instruments and other Collateral and received by the Secured Party to the payment of the Obligations, such proceeds to be immediately credited after final payment in cash or other immediately available funds of the items giving rise to them.
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12. Power of Attorney.

12.1. Appointment and Powers of Secured Party. The Company hereby irrevocably constitutes and appoints the Secured Party and any officer or agent thereof, with full power of substitution, as its true and lawful attorneys-in-fact with full irrevocable power and authority in the place and stead of the Company or in the Secured Party's own name, for the purpose of carrying out the terms of this Agreement, to take any and all appropriate action and to execute any and all documents and instruments that may be necessary or useful to accomplish the purposes of this Agreement and, without limiting the generality of the foregoing, hereby gives said attorneys the power and right, on behalf of the Company, without notice to or assent by the Company, to do the following:

(a) upon the occurrence and during the continuance of an Event of Default, but subject in all cases to the terms of the Intercreditor Agreement, generally to sell, transfer, pledge, make any agreement with respect to or otherwise dispose of or deal with any of the Collateral in such manner as is consistent with the Uniform Commercial Code of the State or any other relevant jurisdiction and as fully and completely as though the Secured Party were the absolute owner thereof for all purposes, and to do, at the Company's expense, at any time, or from time to time, all acts and things which the Secured Party deems necessary or useful to protect, preserve or realize upon the Collateral and the Secured Party's security interest therein, in order to effect the intent of this Agreement, all no less fully and effectively as the Company might do, including (i) upon written notice to the Company, the exercise of voting rights with respect to voting securities, which rights may be exercised, if the Secured Party so elects, with a view to causing the liquidation of assets of the issuer of any such securities and (ii) the execution, delivery and recording, in connection with any sale or other disposition of any Collateral, of the endorsements, assignments or other instruments of conveyance or transfer with respect to such Collateral; and

(b) to the extent that the Company's authorization given in §3 is not sufficient, to file such financing statements with respect hereto, with or without the Company's signature, or a photocopy of this Agreement in substitution for a financing statement, as the Secured Party may deem appropriate and to execute in the Company's name such financing statements and amendments thereto and continuation statements which may require the Company's signature.

12.2. Ratification by Company. To the extent permitted by law, the Company hereby ratifies all that said attorneys shall lawfully do or cause to be done by virtue hereof. This power of attorney is a power coupled with an interest and is irrevocable.

12.3. No Duty on Secured Party. The powers conferred on the Secured Party hereunder are solely to protect the interests of the Secured Party in the Collateral and shall not impose any duty upon the Secured Party to exercise any such powers. The Secured Party shall be accountable only for the amounts that it actually receives as a result of the exercise of such powers, and neither it nor any of its officers, directors, employees or agents shall be responsible to the Company for any act or failure to act, except for the Secured Party's own gross negligence or willful misconduct.

13. Rights and Remedies.

13.1. General. If an Event of Default shall have occurred and be continuing, the Secured Party, without any other notice to or demand upon the Company, but subject in all cases to the terms of the Intercreditor Agreement, shall have in any jurisdiction in which enforcement hereof is sought, in addition to all other rights and remedies, the rights and remedies of a secured party under the Uniform Commercial Code of the State or any other relevant jurisdiction and any additional rights and remedies as may be provided to a secured party in any jurisdiction in which Collateral is located, including the right to take possession of the Collateral, and for that purpose the Secured Party may, so far as the Company can give authority therefor, enter upon any premises on which the Collateral may be situated and remove the same therefrom. The Secured Party may in its discretion, but subject in all cases to the terms of the Intercreditor Agreement, require the Company to assemble all or any part of the Collateral at such location or locations within the jurisdiction(s) of the Company's principal office(s) or at such other locations as the Secured Party may reasonably designate. Unless the Collateral is perishable or threatens to decline speedily in value or is of a type customarily sold on a recognized market, the Secured Party shall give to the Company at least ten (10) Business Days prior written notice of the time and place of any public sale of Collateral or of the time after which any private sale or any other intended disposition is to be made. The Company hereby acknowledges that ten (10) Business Days prior written notice of such sale or sales shall be reasonable notice. In addition, the Company waives any and all rights that it may have to a judicial hearing in advance of the enforcement of any of the Secured Party's rights and remedies hereunder, including its right following an Event of Default to take immediate possession of the Collateral and to exercise its rights and remedies with respect thereto.

14. Standards for Exercising Rights and Remedies. To the extent that applicable law imposes duties on the Secured Party to exercise remedies in a commercially reasonable manner, but subject at all times to the terms of the Intercreditor Agreement, the Company acknowledges and agrees that it is not commercially unreasonable for the Secured Party (a) to fail to incur expenses reasonably deemed significant by the Secured Party to prepare Collateral for disposition or otherwise to fail to complete raw material or work in process into finished goods or other finished products for disposition, (b) to fail to obtain third party consents for access to Collateral to be disposed of, or to obtain or, if not required by other law, to fail to obtain governmental or third party consents for the collection or disposition of Collateral to be collected or disposed of, (c) to fail to exercise collection remedies against account debtors or other persons obligated on Collateral or to fail to remove Liens on or any adverse claims against Collateral, (d) to exercise collection remedies against account debtors and other persons obligated on the Collateral directly or through the use of collection agencies and other collection specialists, (e) to advertise dispositions of the Collateral through publications or media of general circulation, whether or not the Collateral is of a specialized nature, (f) to contact other persons, whether or not in the same business as the Company, for expressions of interest in acquiring all or any portion of the Collateral, (g) to hire one or more professional auctioneers to assist in the disposition of the Collateral, whether or not the collateral is of a specialized nature, (h) to dispose of the Collateral by utilizing Internet sites that provide for the auction of assets of the types included in the Collateral or that have the reasonable capability of doing so, or that match buyers and sellers of assets, (i) to dispose of assets in wholesale rather than retail markets, (j) to disclaim disposition warranties, (k) to purchase insurance or credit enhancements to insure the Secured Party against risks of loss, collection or disposition of the Collateral or to provide to the Secured Party a guaranteed return from the collection or disposition of such Collateral, or (l) to the extent deemed appropriate by the Secured Party, to obtain the services of brokers, investment bankers, consultants and other professionals to assist the Secured Party in the collection or disposition of any of the Collateral. The Company acknowledges that the purpose of this §14 is to provide non-exhaustive indications of what actions or omissions by the Secured Party would fulfill the Secured Party's duties under the Uniform Commercial Code of the State or any other relevant jurisdiction in the Secured Party's exercise of remedies against the Collateral and that other actions or omissions by the Secured Party shall not be deemed to fail to fulfill such duties solely on account of not being indicated in this §14. Without limitation upon the foregoing, nothing contained in this §14 shall be construed to grant any rights to the Company or to impose any duties on the Secured Party that would not have been granted or imposed by this Agreement or by applicable law in the absence of this §14.

15. No Waiver by Secured Party, etc. The Secured Party shall not be deemed to have waived any of its rights and remedies in respect of the Obligations or the Collateral unless such waiver shall be in writing and signed by the Secured Party. No delay or omission on the part of the Secured Party in exercising any right or remedy shall operate as a waiver of such right or remedy or any other right or remedy. A waiver on any one occasion shall not be construed as a bar to or waiver of any right or remedy on any future occasion. All rights and remedies of the Secured Party with respect to the Obligations or the Collateral, whether evidenced hereby or by any other instrument or papers, shall be cumulative and may be exercised singularly, alternatively, successively or concurrently at such time or at such times as the Secured Party deems expedient.

16. Suretyship Waivers by Company. The Company waives demand, notice, protest, notice of acceptance of this Agreement, notice of loans made, credit extended, Collateral received or delivered or other action taken in reliance hereon and all other demands and notices of any description. With respect to both the Obligations and the Collateral, the Company assents to any extension or postponement of the time of payment or any other indulgence, to any substitution, exchange or release of or failure to perfect any security interest in any such Collateral, to the addition or release of any party or person primarily or secondarily liable, to the acceptance of partial payment thereon and the settlement, compromising or adjusting of any thereof, all in such manner and at such time or times as the Secured Party may deem advisable. The Secured Party shall have no duty as to the collection or protection of the Collateral or any income therefrom, the preservation of rights against prior parties, or the preservation of any rights pertaining thereto beyond the safe custody thereof as set forth in §9.2. The Company further waives any and all other suretyship defenses.

17. Marshaling. The Secured Party shall not be required to marshal any present or future collateral security (including but not limited to the Collateral) for, or other assurances of payment of, the Obligations or any of them or to resort to such collateral security or other assurances of payment in any particular order, and all of the rights and remedies of the Secured Party hereunder and of the Secured Party in respect of such collateral security and other assurances of payment shall be cumulative and in addition to all other rights and remedies, however existing or arising. To the extent that it lawfully may, the Company hereby agrees that it will not invoke any law relating to the marshaling of collateral which might cause delay in or impede the enforcement of the Secured Party's rights and remedies under this Agreement or under any other instrument creating or evidencing any of the Obligations or under which any of the Obligations is outstanding or by which any of the Obligations is secured or payment thereof is otherwise assured, and, to the extent that it lawfully may, the Company hereby irrevocably waives the benefits of all such laws.

18. Proceeds of Dispositions; Expenses. The Company shall pay to the Secured Party on demand any and all expenses, including attorneys' fees and disbursements, incurred or paid by the Secured Party in protecting or preserving the Secured Party's rights and remedies under or in respect of any of the Obligations or any of the Collateral and, in addition, the Company shall pay to the Secured Party on demand any and all expenses, including attorneys' fees and disbursements, incurred or paid by the Secured Party in enforcing the Secured Party's rights and remedies under or in respect of any of the Obligations or any of the Collateral. After deducting all of said expenses, the residue of any proceeds of collection or sale or other disposition of Collateral shall, to the extent actually received in cash, be applied to the payment of the Obligations in such order or preference as is provided in the SPA, proper allowance and provision being made for any Obligations not then due. Upon the final payment and satisfaction in full of all of the Obligations and after making any payments required by Sections 9-608(a)(1)(C) or 9-615(a)(3) of the Uniform Commercial Code of the State, any excess shall be returned to the Company. In the absence of final payment and satisfaction in full of all of the Obligations, the Company shall remain liable for any deficiency.

19. Overdue Amounts. Until paid, all amounts due and payable by the Company hereunder shall be a debt secured by the Collateral and shall bear, whether before or after judgment, interest at the rate of interest for overdue principal set forth in the Transaction Documents.

20. Governing Law; Consent to Jurisdiction. THIS AGREEMENT IS A CONTRACT UNDER THE LAWS OF THE STATE OF NEW YORK AND SHALL FOR ALL PURPOSES BE CONSTRUED IN ACCORDANCE WITH AND GOVERNED BY THE LAWS OF SAID STATE OF NEW YORK. THE COMPANY AND THE SECURED PARTY EACH AGREE THAT ANY SUIT FOR THE ENFORCEMENT OF THIS AGREEMENT OR ANY OTHER ACTION BROUGHT BY SUCH PERSON ARISING HEREUNDER OR IN ANY WAY RELATED TO THIS AGREEMENT SHALL BE BROUGHT IN THE COURTS OF THE STATE OF NEW YORK IN THE BOROUGH OF MANHATTAN OR ANY FEDERAL COURT SITTING THEREIN AND CONSENTS TO THE NONEXCLUSIVE JURISDICTION OF SUCH COURT AND SERVICE OF PROCESS IN ANY SUCH SUIT BEING MADE UPON SUCH PERSON BY MAIL AT THE ADDRESS SPECIFIED ON THE SIGNATURE PAGE OF EACH PARTY HERETO. THE COMPANY HEREBY WAIVES ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE VENUE OF ANY SUIT BROUGHT IN THE STATE OF NEW YORK OR ANY COURT SITTING THEREIN OR THAT A SUIT BROUGHT THEREIN IS BROUGHT IN AN INCONVENIENT COURT.

21. Waiver of Jury Trial. THE COMPANY AND THE SECURED PARTY WAIVES ITS RIGHT TO A JURY TRIAL WITH RESPECT TO ANY ACTION OR CLAIM ARISING OUT OF ANY DISPUTE IN CONNECTION WITH THIS AGREEMENT, ANY RIGHTS OR OBLIGATIONS HEREUNDER OR THE PERFORMANCE OR ENFORCEMENT OF ANY SUCH RIGHTS OR OBLIGATIONS. Except as prohibited by law, the Company waives any right which it may have to claim or recover in any litigation referred to in the preceding sentence any special, exemplary, punitive or consequential damages or any damages other than, or in addition to, actual damages. The Company (a) certifies that neither the Secured Party nor any representative, agent or attorney of the Secured Party has represented, expressly or otherwise, that the Secured Party would not, in the event of litigation, seek to enforce the foregoing waivers or other waivers contained in this Agreement and (b) acknowledges that, in entering into this Agreement and any other Transaction Document to which the Secured Party is a party, the Secured Party is relying upon, among other things, the waivers and certifications contained in this §21.

22. **Notices.** All notices, requests and other communications hereunder shall be made in the manner set forth in the SPA.

23. **Miscellaneous.** The headings of each section of this Agreement are for convenience only and shall not define or limit the provisions thereof. This Agreement and all rights and obligations hereunder shall be binding upon the Company and its successors and assigns, and shall inure to the benefit of the Secured Party and its successors and assigns. If any term of this Agreement shall be held to be invalid, illegal or unenforceable, the validity of all other terms hereof shall in no way be affected thereby, and this Agreement shall be construed and be enforceable as if such invalid, illegal or unenforceable term had not been included herein. The Company acknowledges receipt of a copy of this Agreement.

[Signature pages to follow]

IN WITNESS WHEREOF, intending to be legally bound, the Company has caused this Agreement to be duly executed as of the date first above written.

BIO-KEY INTERNATIONAL, INC.

By: _____
Title: Michael W. DePasquale, CEO

Accepted:

LIND GLOBAL MACRO FUND, LP
By: Lind Global Partners LLC, its general
partner

By: _____
Title: Jeff Easton, Managing Member

CERTIFICATE OF ACKNOWLEDGMENT

COMMONWEALTH OR STATE OF _____)
) ss.
COUNTY OF _____)

Before me, the undersigned, a Notary Public in and for the county aforesaid, on this ___ day of July, 2019, personally appeared _____ to me known personally, and who, being by me duly sworn, deposes and says that he/she is the _____ of BIO-Key International, Inc. and that said instrument was signed and sealed on behalf of said corporation by authority of its Board of Directors, and said _____ acknowledged said instrument to be the free act and deed of said corporation.

(official signature and seal of notary)

My commission expires:

COLLATERAL SHARING AGREEMENT

This AGREEMENT, dated as of July 10, 2019 by and among **Versant Funding LLC** (the "Earlier Creditor"), **Lind Global Macro Fund, LP** (the "Later Creditor") and BIO-key International, Inc. ("Debtor").

RECITALS

A. In connection with the factoring relationship, the Debtor is indebted to the Earlier Creditor and may in the future incur new obligations to the Earlier Creditor, direct and indirect, absolute and contingent (the existing obligations and any new obligations hereinafter collectively, the "Earlier Creditor Obligations"), secured by all assets of the Debtor together with the products and proceeds thereof (the "Collateral").

B. The Later Creditor has agreed to extend financial accommodations to the Debtor secured by the Collateral on the condition that its security interest in the Later Creditor Collateral of the Debtor is senior to that of the Earlier Creditor and that the security interest in the Debtor's Accounts is junior to the security interest of the Earlier Creditor solely with respect to obligations owing to the Earlier Creditor pursuant to that certain Factoring Agreement dated as of December 20, 2011 (as amended and in effect from time to time, the "Factoring Agreement") by and between the Debtor and the Earlier Creditor (the obligations owing under the Factoring Agreement that relate to the arrangements of the type contemplated by the Factoring Agreement as in effect on the date hereof being hereinafter referred to as the "Earlier Creditor Factoring Obligations").

C. The Creditors are executing this Agreement to adjust their lien priorities with respect to the Later Creditor Collateral of the Debtor.

NOW, THEREFORE, in consideration of the premises, and intending to be legally bound hereby, the Creditors hereby agree as follows:

AGREEMENT**1. Definitions and Index to Definitions.**

1.1. The following terms shall have the meanings set forth below:

- 1.1.1. "**Chosen State**" – New York.
- 1.1.2. "**Collateral**" - see Recital A.
- 1.1.3. "**Creditors**" - the Earlier Creditor and the Later Creditor.
- 1.1.4. "**Debtor**" – see Preamble.
- 1.1.5. "**Earlier Creditor**" - see Preamble.
- 1.1.6. "**Earlier Creditor Factoring Obligations**" - see Recital B.

1.1.7. "Earlier Creditor Obligations" - see Recital A.

1.1.8. "Later Creditor" - see Preamble.

1.1.9. "Later Creditor Collateral" – All Assets of the Debtor other than the Accounts.

1.1.10. "Later Creditor Obligations" - obligations of the Debtor to the Later Creditor absolute and contingent secured directly or indirectly by the Collateral.

1.1.11. "Later Creditor Security Interest" - any security interest of Later Creditor in the Collateral.

1.2. All capitalized terms used but not defined herein shall have the meaning as set forth in the Uniform Commercial Code then in effect.

2. **Priority.** So long as this Agreement shall be in effect and notwithstanding the terms or provisions of any agreement or arrangement which either Creditor may now or hereafter have with the Debtor or any rule of law and irrespective of the time, order or method of attachment or perfection of any security interest or the recordation or other filing in any public record of any financing statement, any Later Creditor Security Interest shall be senior to the security interest of the Earlier Creditor in the Later Creditor Collateral and any security interest of the Earlier Creditor in the Accounts which secure any Earlier Creditor Obligations other than the Earlier Creditor Factoring Obligations and the Earlier Creditor Security Interest shall be senior to the security interest of the Later Creditor in the Accounts which secure the Earlier Creditor Factoring Obligations. Furthermore, the Later Creditor releases any and all security interest that it has in the Accounts of the Debtor that are purchased by Earlier Creditor pursuant to the Factoring Agreement.

3. **Enforcement of Security Interest.**

3.1. The Earlier Creditor shall have no right to take any action with respect to the Later Creditor Collateral or with respect to any Accounts which secure any Earlier Creditor Obligations other than the Earlier Creditor Factoring Obligations whether by judicial or non-judicial foreclosure, or otherwise, unless and until all Later Creditor Obligations have been fully and indefeasibly paid, all commitments have been terminated and the Later Creditor has terminated all of its security interests therein.

3.2. Any proceeds of the Later Creditor Collateral or any Accounts which secure any Earlier Creditor Obligations other than the Earlier Creditor Factoring Obligations, or proceeds thereof (whether or not identifiable), received by the Earlier Creditor shall be held in trust and paid to the Later Creditor promptly upon receipt in like form with appropriate endorsement if applicable, for the account of the Debtor.

3.3. The Later Creditor shall have no right to take any action with respect to the Accounts which secure the Earlier Creditor Factoring Obligations, whether by judicial or non-judicial foreclosure, notification to the Debtor's account debtors, or otherwise, unless and until all Earlier Creditor Factoring Obligations have been fully and indefeasibly paid, all commitments under the Factoring Agreement have been terminated and the Earlier Creditor has terminated all of its security interests therein.

3.4. Any proceeds of the Accounts which secure the Earlier Creditor Factoring Obligations, or proceeds thereof (whether or not identifiable), received by the Later Creditor shall be held in trust and paid to the Earlier Creditor promptly upon receipt in like form with appropriate endorsement if applicable, for the account of the Debtor.

4. **Inducement.** This Agreement is entered into as a specific inducement to the Later Creditor to provide credit accommodations to the Debtor.

5. **Waiver of Marshaling.** The Creditors irrevocably waives any right to compel the other Creditor to marshal assets of the Debtor.

6. **Applicable Law.** This Agreement shall be governed by the law of the Chosen State.

7. **Benefits Of This Agreement.** This Agreement is solely for the benefit of and shall bind the Creditors and their respective successors and assigns and no other entity shall have any right, benefit, priority, or interest hereunder.

8. **Modification.** This Agreement shall be subject to modification only in writing, signed by the Creditors. Later Creditor and Earlier Creditor may each modify, amend or terminate any of the documents evidencing the obligations created by their respective documents without the consent of the other party, but such modifications shall in no way affect the priority of the Earlier Creditor or Later Creditor in the Collateral.

9. **Term.** This Agreement shall continue so long as both Creditors have a security interest in the Collateral. At such time as either the Earlier Creditor Factoring Obligations or the Later Creditor Obligations are paid in full, the applicable creditor shall promptly execute or file any documentation necessary to terminate that party's lien on their applicable collateral.

10. **Enforcement.** In the event that either party finds it necessary to retain counsel in connection with the interpretation, defense, or enforcement of this Agreement, the prevailing party shall recover its reasonable attorney's fees and expenses from the unsuccessful party. It shall be presumed (subject to rebuttal only by the introduction of competent evidence to the contrary) that the amount recoverable is the amount billed to the prevailing party by its counsel and that such amount will be reasonable if based on the billing rates charged to the prevailing party by its counsel in similar matters.

11. **Notice.**

11.1. All notices shall be deemed given upon the first to occur of (i) the date of delivery if deposited thereof in a receptacle under the control of the United States Postal Service and sent certified mail, return receipt requested, (ii) transmittal by electronic means to a receiver under the control of such party with electronic acknowledgement by the recipient that such transmission was received; or (iii) delivery to a nationally recognized overnight delivery service, properly addressed and prepaid.

11.2. For the purposes hereof, notices hereunder shall be sent to the following addresses, or to such other address as may have been advised by the recipient to the sender.

EARLIER CREDITOR

Address: 2500 N. Military Trail
Suite 465
Boca Raton, Florida 33431
Officer: Mark D. Weinberg, C.E.O.
Email: mweinberg@versantfunding.com

LATER CREDITOR

Address: c/o The Lind Partners LLC
370 Lexington Avenue, Suite 1900
New York, New York 10018
Officer: Jeff Easton
Email: jeaston@thelindpartners.com and
notice@thelindpartners.com

12. **Counterparts and Electronic Transmission.** This Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute the same agreement. Delivery of an executed counterpart of this Agreement by facsimile or other electronic method of transmission shall be equally as effective as delivery of an original manually executed counterpart.

13. **Waiver.** Later Creditor and Earlier Creditor each waive against the other any rights either may have to claim that the enforceability of this Agreement may be affected by any subsequent modification, release, extension, or other change, material or otherwise, in the Earlier Creditor Factoring Obligations, Later Creditor Obligations or the Collateral.

14. **Miscellaneous.** Earlier Creditor agrees that beginning July 1, 2019, it will purchase no more than Five-Hundred Thousand (\$500,000.00) Dollars of Accounts from the Debtor during each ninety (90) day period.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first above written.

EARLIER CREDITOR:

Versant Funding LLC

By: _____

Name: Mark D. Weinberg

Title: C.E.O.

LATER CREDITOR:

Lind Global Macro Fund, LP

By: _____

Name: _____

Title: _____

DEBTOR:

BIO-key International, Inc.

By: _____

Name: Michael W. DePasquale

Title: CEO

NEITHER THIS NOTE NOR THE SECURITIES ISSUABLE UPON CONVERSION OF THIS NOTE 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 OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY. THIS NOTE AND THE SECURITIES ISSUABLE UPON CONVERSION OF THIS NOTE MAY BE PLEDGED IN CONNECTION WITH A BONA FIDE MARGIN ACCOUNT SECURED BY SUCH SECURITIES.

BIO-KEY INTERNATIONAL, INC.

Form of Senior Secured
Convertible Promissory
Note due July 10, 2020

Note No. 1

\$3,060,000.00

Dated: July 10, 2019 (the "Issuance Date")

For value received, BIO-KEY INTERNATIONAL, INC., a Delaware corporation (the "Maker" or the "Company"), hereby promises to pay to the order of Lind Global Macro Fund, LP, a Delaware limited partnership (together with its successors and representatives, the "Holder"), in accordance with the terms hereinafter provided, the principal amount of THREE MILLION SIXTY THOUSAND DOLLARS (\$3,060,000.00) (the "Principal Amount") plus any other amounts owing pursuant to the terms hereof.

All payments under or pursuant to this Senior Secured Convertible Promissory Note (this "Note") shall be made in United States Dollars in immediately available funds to the Holder at the address of the Holder set forth in the Purchase Agreement (as hereinafter defined) or at such other place as the Holder may designate from time to time in writing to the Maker or by wire transfer of funds to the Holder's account, instructions for which are attached hereto as Exhibit A. The outstanding principal balance of this Note plus all accrued interest thereon (if any) shall be due and payable on July __, 2020 (the "Maturity Date") or at such earlier time as provided herein.

ARTICLE 1

1.1 Purchase Agreement. This Note has been executed and delivered pursuant to the Securities Purchase Agreement, dated as of July __, 2019 (as the same may be amended from time to time, the "Purchase Agreement"), by and between the Maker and the Holder. Capitalized terms used and not otherwise defined herein shall have the meanings set forth for such terms in the Purchase Agreement.

1.2 Interest. Except as set forth in Section 2.2, this Note shall not bear interest.

1.3 Payment of Principal and Interest.

(a) Principal Installment Payments. The Maker shall pay to the Holder in United States dollars and in immediately available funds: (i) Nine Hundred Eighteen Thousand Dollars (\$918,000) on the day that is the one hundred eighty (180) day anniversary of the Issuance Date (the "First Repayment Date"); (ii) One Million Seventy-One Thousand Dollars (\$1,071,000) on the day that is the two hundred seventy (270) day anniversary of the Issuance Date (the "Second Repayment Date" and, together with the First Repayment Date, each a "Payment Date"); and (iii) the remaining Outstanding Amount on the Maturity Date or, if earlier, upon acceleration, conversion or redemption of this Note in accordance with the terms herein.

(b) Prepayment. At any time after the Issuance Date the Maker may repay all (but not less than all) of the Outstanding Amount, upon at least ten (10) days written notice of the Holder (the "Prepayment Notice"). If the Maker elects to prepay this Note pursuant to the provisions of this Section 1.3(b), the Holder shall have the right, upon written notice to the Maker (a "Prepayment Conversion Notice") within five (5) Business Days of the Holder's receipt of a Prepayment Notice, to convert up to twenty-five percent (25%) of the Outstanding Amount (the "Maximum Amount") at the Conversion Price, in accordance with the provisions of Article 3, specifying the amount of the Outstanding Amount (up to the Maximum Amount) that the Holder will convert (the amount to so convert being hereinafter referred to as the "Conversion Amount"). Upon delivery of a Prepayment Notice, the Maker irrevocably and unconditionally agrees to, within five (5) Business Days of receiving a Prepayment Conversion Notice, and if no Prepayment Conversion Notice is received, within ten (10) Business Days of delivery of a Prepayment Notice: (i) repay the Outstanding Amount minus the Conversion Amount set forth in the Prepayment Conversion Notice and (ii) issue the applicable Conversion Shares to the Holder in accordance with Article 3. The foregoing notwithstanding, the Maker may not deliver a Prepayment Notice with respect to any Outstanding Amount that is subject to a Conversion Notice delivered by the Holder in accordance with Article 3.

1.4 Payment on Non-Business Days. Whenever any payment to be made shall be due on a day which is not a Business Day, such payment may be due on the next succeeding Business Day.

1.5 Transfer. This Note may be transferred or sold, subject to the provisions of Section 5.8 of this Note, or pledged, hypothecated or otherwise granted as security by the Holder.

1.6 Replacement. Upon receipt of a duly executed and notarized written statement from the Holder with respect to the loss, theft or destruction of this Note (or any replacement hereof), or, in the case of a mutilation of this Note, upon surrender and cancellation of such Note, the Maker shall issue a new Note, of like tenor and amount, in lieu of such lost, stolen, destroyed or mutilated Note.

1.7 Use of Proceeds. The Maker shall use the proceeds of this Note as set forth in the Purchase Agreement.

1.8 Status of Note and Security Interest. The obligations of the Maker under this Note shall be senior to all other existing Indebtedness and equity of the Company, other than Indebtedness owing to Versant under the Factor Documents (which payment obligations shall be pari passu with the obligations under this Note, and which Liens shall have the priority contemplated by the Intercreditor Agreement). Upon any Liquidation Event (as hereinafter defined), the Holder will be entitled to receive, before any distribution or payment is made upon, or set apart with respect to, any Indebtedness of the Maker or any class of capital stock of the Maker, an amount equal to the Outstanding Principal Amount plus all accrued interest thereon (if any). For purposes of this Note, "Liquidation Event" means a liquidation pursuant to a filing of a petition for bankruptcy under applicable law or any other insolvency or debtor's relief, an assignment for the benefit of creditors, or a voluntary or involuntary liquidation, dissolution or winding up of the affairs of the Maker.

1.9 Secured Note. The full amount of this Note is secured by the Collateral (as defined in the Security Agreement) identified and described as security therefor in the Security Agreement dated as of July __, 2019 (as amended and in effect from time to time, the "Security Agreement") by and between the Maker and the Holder.

1.10 Tax Treatment. The Maker and the Holder agree that for U.S. federal income tax purposes, and applicable state, local and non-U.S. income tax purposes, this Note is not intended to be, and shall not be, treated as indebtedness. Neither the Maker nor the Holder shall take any contrary position on any tax return, or in any audit, claim, investigation, inquiry or proceeding in respect of Taxes, unless otherwise required pursuant to a final determination within the meaning of Section 1313 of the Internal Revenue Code of 1986, as amended (the "Code"), or any analogous provision of applicable state, local or non-U.S. law.

ARTICLE 2

2.1 Events of Default. An "Event of Default" under this Note shall mean the occurrence of any of the events defined in the Purchase Agreement, and any of the additional events described below:

(a) any default in the payment of (i) the Principal Amount or accrued interest (if any) hereunder when due; or (ii) liquidated damages in respect of this Note as and when the same shall become due and payable (whether on a Payment Date, the Maturity Date or by acceleration or otherwise);

(b) the Maker shall fail to observe or perform any other covenant, condition or agreement contained in this Note or any Transaction Document;

(c) the Maker's notice to the Holder, including by way of public announcement, at any time, of its inability to comply (including for any of the reasons described in Section 3.6(a) hereof) or its intention not to comply with proper requests for conversion of this Note into shares of Common Stock;

(d) the Maker shall fail to (i) timely deliver the shares of Common Stock as and when required in Section 3.2; or (ii) make the payment of any fees and/or liquidated damages under this Note, the Purchase Agreement or the other Transaction Documents;

(e) default shall be made in the performance or observance of any material covenant, condition or agreement contained in the Purchase Agreement or any other Transaction Document that is not covered by any other provisions of this Section 2.1;

(f) at any time the Maker shall fail to have a sufficient number of shares of Common Stock authorized, reserved and available for issuance to satisfy the potential conversion in full (disregarding for this purpose any and all limitations of any kind on such conversion) of this Note or upon exercise of the Warrant;

(g) any representation or warranty made by the Maker or any of its Subsidiaries herein or in the Purchase Agreement, this Note, the Warrant or any other Transaction Document shall prove to have been false or incorrect or breached in a material respect on the date as of which made;

(h) unless otherwise approved in writing in advance by the Holder, a Change of Control shall be consummated;

(i) the Maker or any of its Subsidiaries shall (A) default in any payment of any amount or amounts of principal of or interest on any Indebtedness (other than the Indebtedness hereunder), the aggregate principal amount of which Indebtedness is in excess of \$250,000 or (B) default in the observance or performance of any other agreement or condition relating to any such Indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, or any other event shall occur or condition exist, the effect of which default or other event or condition is to cause, or to permit the holder or holders or beneficiary or beneficiaries of such Indebtedness to cause with the giving of notice if required, such Indebtedness to become due prior to its stated maturity;

(j) the Maker or any of its Subsidiaries shall: (i) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee or liquidator of itself or of all or a substantial part of its property or assets; (ii) make a general assignment for the benefit of its creditors; (iii) commence a voluntary case under the United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic); (iv) file a petition seeking to take advantage of any bankruptcy, insolvency, moratorium, reorganization or other similar law affecting the enforcement of creditors' rights generally; (v) acquiesce in writing to any petition filed against it in an involuntary case under United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic); (vi) issue a notice of bankruptcy or winding down of its operations or issue a press release regarding same; or (vii) take any action under the laws of any jurisdiction (foreign or domestic) analogous to any of the foregoing;

(k) a proceeding or case shall be commenced in respect of the Maker or any of its Subsidiaries, without its application or consent, in any court of competent jurisdiction, seeking: (i) the liquidation, reorganization, moratorium, dissolution, winding up, or composition or readjustment of its debts; (ii) the appointment of a trustee, receiver, custodian, liquidator or the like of it or of all or any substantial part of its assets in connection with the liquidation or dissolution of the Maker or any of its Subsidiaries; or (iii) similar relief in respect of it under any law providing for the relief of debtors, and such proceeding or case described in clause (i), (ii) or (iii) shall continue undismissed, or unstayed and in effect, for a period of forty-five (45) days or any order for relief shall be entered in an involuntary case under United States Bankruptcy Code (as now or hereafter in effect) or under the comparable laws of any jurisdiction (foreign or domestic) against the Maker or any of its Subsidiaries or action under the laws of any jurisdiction (foreign or domestic) analogous to any of the foregoing shall be taken with respect to the Maker or any of its Subsidiaries and shall continue undismissed, or unstayed and in effect for a period of forty-five (45) days;

(l) the failure of the Maker to instruct its transfer agent to remove any legends from shares of Common Stock and issue such unlegended certificates to the Holder within three (3) Trading Days of the Holder's request so long as the Holder has provided reasonable assurances to the Maker that such shares of Common Stock can be sold pursuant to Rule 144 or any other applicable exemption;

(m) the Maker's shares of Common Stock are no longer publicly traded or cease to be listed on any Trading Market or the Investor Shares have not been registered for resale under the 1933 Act pursuant to an effective Registration Statement by the later of (i) September 30, 2019 or (ii) the date that is seventy-five days following the Closing Date;

(n) the Maker consummates a "going private" transaction and as a result the Common Stock is no longer registered under Sections 12(b) or 12(g) of the 1934 Act;

(o) there shall be any SEC or judicial stop trade order or trading suspension stop-order or any restriction in place with the transfer agent for the Common Stock restricting the trading of such Common Stock;

(p) the Depository Trust Company places any restrictions on transactions in the Common Stock or the Common Stock is no longer tradeable through the Depository Trust Company Fast Automated Securities Transfer program;

(q) the Company's market capitalization is below \$6.0 million for ten (10) consecutive days; or

(r) the occurrence of a Material Adverse Effect in respect of the Maker, or the Maker and its Subsidiaries taken as a whole.

For the avoidance of doubt, any default pursuant to clause (i) above shall not be subject to any cure periods pursuant to the instrument governing such Indebtedness or this Note.

2.2 Remedies Upon an Event of Default.

(a) Upon the occurrence of any Event of Default that has not been remedied within (i) two (2) Business Days of written notice thereof for an Event of Default occurring by the Company's failure to comply with Section 7.1(c) of the Purchase Agreement, or (ii) ten (10) Business Days of written notice thereof for all other Events of Default, *provided, however*, that there shall be no cure period for an Event of Default described in Section 2.1(j) or 2.1(k), the Maker shall pay interest on the Outstanding Principal Amount hereunder at an interest rate per annum at all times equal to twelve percent (12%) per annum (the "Default Interest Rate") provided, to the extent any Event of Default results in the acceleration of all or any portion of the amounts owing under this Note, then the Default Interest Rate shall be increased, retroactive to the time such Event of Default occurred, to the lesser of eighteen percent (18%) per annum and the maximum rate permitted under applicable law; and (b) the Maker shall be obligated to pay to the Holder the Mandatory Default Amount, which Mandatory Default Amount shall be earned by the Holder on the date the Event of Default giving rise thereto occurs and shall be due and payable on the earlier to occur of the Maturity Date, upon conversion, redemption or prepayment of this Note or the date on which all amounts owing hereunder have been accelerated in accordance with the terms hereof. Accrued and unpaid interest (including interest on past due interest) shall be due and payable upon demand.

(b) Upon the occurrence of any Event of Default, the Maker shall, as promptly as possible but in any event within one (1) Business Day of the occurrence of such Event of Default, notify the Holder of the occurrence of such Event of Default, describing the event or factual situation giving rise to the Event of Default and specifying the relevant subsection or subsections of Section 2.1 hereof under which such Event of Default has occurred.

(c) If any Event of Default shall have occurred that has not been remedied within (i) two (2) Business Days of written notice thereof for an Event of Default occurring by the Company's failure to comply with Section 7.1(c) of the Purchase Agreement, or (ii) ten (10) Business Days of written notice thereof for all other Events of Default, *provided, however*, that there shall be no cure period for an Event of Default described in Section 2.1(j) or 2.1(k), the Holder shall have the right, in its sole and absolute discretion, to declare all or any portion of the Outstanding Amount immediately due and payable in cash (and to the extent the Holder does not elect to declare the entire Outstanding Amount immediately due and payable in cash, the Holder has the right to thereafter declare all remaining amounts immediately due and payable in cash). In addition, upon the occurrence of an Event of Default described in Sections 2.1(j) or 2.1(k) hereof, all amounts owing under this Note shall become immediately due and payable without presentment, demand, protest or other notice of any kind, all of which are hereby waived by the Company. In connection with such acceleration described herein, the Holder need not provide, and the Company hereby waives, any presentment, demand, protest or other notice of any kind (other than the Holder's election to declare such acceleration unless such acceleration is automatic as a result of the occurrence of an Event of Default described in Sections 2.1(j) or 2.1(k) hereof), and the Holder may immediately and without expiration of any grace period enforce any and all of its rights and remedies hereunder and all other remedies available to it under applicable law. Any acceleration may be rescinded and annulled by Holder at any time prior to payment hereunder and the Holder shall have all rights as a holder of the Note until such time, if any, as the Holder receives full payment pursuant to this Section 2.2(c). No such rescission or annulment shall affect any subsequent Event of Default or impair any right consequent thereon. In addition, upon the occurrence and during the continuation of an Event of Default that has not been remedied within (i) two (2) Business Days of written notice thereof for an Event of Default occurring by the Company's failure to comply with Section 7.1(c) of the Purchase Agreement, or (ii) ten (10) Business Days of written notice thereof for all other Events of Default, *provided, however*, that there shall be no cure period for an Event of Default described in Section 2.1(j) or 2.1(k), the Holder, in its sole and absolute discretion, may exercise or otherwise enforce any one or more of the Holder's rights, powers, privileges, remedies and interests under this Note, the Purchase Agreements, the other Transaction Documents and applicable law. No course of dealing or delay on the part of the Holder shall operate as a waiver thereof or otherwise prejudice the rights of the Holder. No remedy conferred hereby shall be exclusive of any other remedy referred to herein or now or hereafter available at law, in equity, by statute or otherwise. Upon the payment in full of all amounts owing hereunder (including, without limitation, principal interest, the Mandatory Default Amount and all other amounts owing hereunder), the Holder shall promptly surrender this Note to or as directed by the Company.

ARTICLE 3

3.1 Conversion.

(a) Voluntary Conversion. At any time and from time to time, subject to Section 3.3, this Note shall be convertible (in whole or in part), at the option of the Holder, into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing (x) that portion of the Outstanding Principal Amount plus any accrued interest thereon that the Holder elects to convert by (y) the Conversion Price then in effect on the date on which the Holder delivers a notice of conversion, in substantially the form attached hereto as Exhibit B (the "Conversion Notice"), in accordance with Section 5.1 to the Maker. The Holder shall deliver this Note to the Maker at the address designated in the Purchase Agreement at such time that this Note is fully converted. With respect to partial conversions of this Note, the Maker shall keep written records of the amount of this Note converted as of the date of such conversion (each, a "Conversion Date").

(b) Conversion Price. The "Conversion Price" means \$1.50, and shall be subject to adjustment as provided herein.

3.2 Delivery of Conversion Shares. As soon as practicable after any conversion in accordance with this Note and in any event within three (3) Trading Days thereafter (such date, the "Share Delivery Date"), the Maker shall, at its expense, cause to be issued in the name of and delivered to the Holder, or as the Holder may direct, a certificate or certificates evidencing the number of fully paid and nonassessable shares of Common Stock to which the Holder shall be entitled on such conversion (the "Conversion Shares"), in such denominations as may be requested by the Holder, which certificate or certificates shall be free of restrictive and trading legends (except for any such legends as may be required under the Securities Act). In lieu of delivering physical certificates for the shares of Common Stock issuable upon any conversion of this Note, provided the Company's transfer agent is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer program or a similar program, upon request of the Holder, the Company shall cause its transfer agent to electronically transmit such shares of Common Stock issuable upon conversion of this Note to the Holder (or its designee), by crediting the account of the Holder's (or such designee's) broker with DTC through its Deposit Withdrawal Agent Commission system (provided that the same time periods herein as for stock certificates shall apply) as instructed by the Holder (or its designee).

3.3 Ownership Cap. Notwithstanding anything to the contrary contained herein, the Holder shall not be entitled to receive shares representing Equity Interests upon conversion of this Note to the extent (but only to the extent) that such exercise or receipt would cause the Holder Group (as defined below) to become, directly or indirectly, a “beneficial owner” (within the meaning of Section 13(d) of the 1934 Act and the rules and regulations promulgated thereunder) of a number of Equity Interests of a class that is registered under the 1934 Act which exceeds the Maximum Percentage (as defined below) of the Equity Interests of such class that are outstanding at such time. Any purported delivery of Equity Interests in connection with the conversion of this Note prior to the termination of this restriction in accordance herewith shall be void and have no effect to the extent (but only to the extent) that such delivery would result in the Holder Group becoming the beneficial owner of more than the Maximum Percentage of the Equity Interests of a class that is registered under the 1934 Act that is outstanding at such time. If any delivery of Equity Interests owed to the Holder following conversion of this Note is not made, in whole or in part, as a result of this limitation, the Company’s obligation to make such delivery shall not be extinguished and the Company shall deliver such Equity Interests as promptly as practicable after the Holder gives notice to the Company that such delivery would not result in such limitation being triggered or upon termination of the restriction in accordance with the terms hereof. To the extent limitations contained in this Section 3.3 apply, the determination of whether this Note is convertible and of which portion of this Note is convertible shall be the sole responsibility and in the sole determination of the Holder, and the submission of a notice of conversion shall be deemed to constitute the Holder’s determination that the issuance of the full number of Conversion Shares requested in the notice of conversion is permitted hereunder, and the Company shall not have any obligation to verify or confirm the accuracy of such determination. For purposes of this Section 3.3, (i) the term “Maximum Percentage” shall mean 4.99%; provided, that if at any time after the date hereof the Holder Group beneficially owns in excess of 4.99% of any class of Equity Interests in the Company that is registered under the 1934 Act (excluding any Equity Interests deemed beneficially owned by virtue of this Note and the Warrant), then the Maximum Percentage shall automatically increase to 9.99% so long as the Holder Group owns in excess of 4.99% of such class of Equity Interests (and shall, for the avoidance of doubt, automatically decrease to 4.99% upon the Holder Group ceasing to own in excess of 4.99% of such class of Equity Interests); and (ii) the term “Holder Group” shall mean the Holder plus any other Person with which the Holder is considered to be part of a group under Section 13 of the 1934 Act or with which the Holder otherwise files reports under Sections 13 and/or 16 of the 1934 Act. In determining the number of Equity Interests of a particular class outstanding at any point in time, the Holder may rely on the number of outstanding Equity Interests of such class as reflected in (x) the Company’s most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, as the case may be, (y) a more recent public announcement by the Company or (z) a more recent notice by the Company or its transfer agent to the Holder setting forth the number of Equity Interests of such class then outstanding. For any reason at any time, upon written or oral request of the Holder, the Company shall, within one (1) Business Day of such request, confirm orally and in writing to the Holder the number of Equity Interests of any class then outstanding. The provisions of this Section 3.3 shall be construed, corrected and implemented in a manner so as to effectuate the intended beneficial ownership limitation herein contained.

3.4 Adjustment of Conversion Price.

(a) Until the Note has been paid in full or converted in full, the Conversion Price shall be subject to adjustment from time to time as follows (but shall not be increased, other than pursuant to Section 3.4(a)(i) hereof):

(i) Adjustments for Stock Splits and Combinations. If the Maker shall at any time or from time to time after the Closing Date (but whether before or after the Issuance Date) effect a split of the outstanding Common Stock, the applicable Conversion Price in effect immediately prior to the stock split shall be proportionately decreased. If the Maker shall at any time or from time to time after the Closing Date (but whether before or after the Issuance Date), combine the outstanding shares of Common Stock, the applicable Conversion Price in effect immediately prior to the combination shall be proportionately increased. Any adjustments under this Section 3.4(a)(i) shall be effective at the close of business on the date the stock split or combination occurs.

(ii) Adjustments for Certain Dividends and Distributions. If the Maker shall at any time or from time to time after the Closing Date (but whether before or after the Issuance Date) make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in shares of Common Stock, then, and in each event, the applicable Conversion Price in effect immediately prior to such event shall be decreased as of the time of such issuance or, in the event such record date shall have been fixed, as of the close of business on such record date, by multiplying the applicable Conversion Price then in effect by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date; and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

(iii) Adjustment for Other Dividends and Distributions. If the Maker shall at any time or from time to time after the Closing Date (but whether before or after the Issuance Date) make or issue or set a record date for the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in other than shares of Common Stock, then, and in each event, an appropriate revision to the applicable Conversion Price shall be made and provision shall be made (by adjustments of the Conversion Price or otherwise) so that the Holder of this Note shall receive upon conversions thereof, in addition to the number of shares of Common Stock receivable thereon, the number of securities of the Maker or other issuer (as applicable) or other property that it would have received had this Note been converted into Common Stock in full (without regard to any conversion limitations herein) on the date of such event and had thereafter, during the period from the date of such event to and including the Conversion Date, retained such securities (together with any distributions payable thereon during such period) or assets, giving application to all adjustments called for during such period under this Section 3.4(a)(iii) with respect to the rights of the holders of this Note; *provided, however*, that if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends or distributions.

(iv) Adjustments for Reclassification, Exchange or Substitution. If the Common Stock at any time or from time to time after the Closing Date (but whether before or after the Issuance Date) shall be changed to the same or different number of shares or other securities of any class or classes of stock or other property, whether by reclassification, exchange, substitution or otherwise (other than by way of a stock split or combination of shares or stock dividends provided for in Sections 3.4(a)(i), (ii) and (iii) hereof), then, and in each event, an appropriate revision to the Conversion Price shall be made and provisions shall be made (by adjustments of the Conversion Price or otherwise) so that the Holder shall have the right thereafter to convert this Note into the kind and amount of shares of stock or other securities or other property receivable upon reclassification, exchange, substitution or other change, by holders of the number of shares of Common Stock into which such Note might have been converted immediately prior to such reclassification, exchange, substitution or other change, all subject to further adjustment as provided herein.

(b) No Impairment. The Maker shall not, by amendment of 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 to be observed or performed hereunder by the Maker, but will at all times in good faith assist in the carrying out of all the provisions of this Section 3.4 and in the taking of all such action as may be necessary or appropriate in order to protect the conversion rights of the Holder against impairment. In the event the Holder shall elect to convert this Note as provided herein, the Maker cannot refuse conversion based on any claim that the Holder or anyone associated or affiliated with the Holder has been engaged in any violation of law, violation of an agreement to which the Holder is a party or for any reason whatsoever, unless, an injunction from a court, or notice, restraining and or adjoining conversion of this Note shall have issued and the Maker posts a surety bond for the benefit of the Holder in an amount equal to one hundred fifty percent (150%) of the Principal Amount of the Note plus any accrued interest the Holder has elected to convert, which bond shall remain in effect until the completion of arbitration/litigation of the dispute and the proceeds of which shall be payable to the Holder (as liquidated damages) in the event it obtains judgment.

(c) Certificates as to Adjustments. Upon occurrence of each adjustment or readjustment of the Conversion Price or number of shares of Common Stock issuable upon conversion of this Note pursuant to this Section 3.4, the Maker at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to the Holder a certificate setting forth such adjustment and readjustment, showing in detail the facts upon which such adjustment or readjustment is based. The Maker shall, upon written request of the Holder, at any time, furnish or cause to be furnished to the Holder a like certificate setting forth such adjustments and readjustments, the applicable Conversion Price in effect at the time, and the number of shares of Common Stock and the amount, if any, of other securities or property which at the time would be received upon the conversion of this Note. Notwithstanding the foregoing, the Maker shall not be obligated to deliver a certificate unless such certificate would reflect an increase or decrease of at least one percent (1%) of such adjusted amount.

(d) Issue Taxes. The Maker shall pay any and all issue and other taxes, excluding federal, state or local income taxes, that may be payable in respect of any issue or delivery of shares of Common Stock on conversion of this Note pursuant thereto; *provided, however*, that the Maker shall not be obligated to pay any transfer taxes resulting from any transfer requested by the Holder in connection with any such conversion.

(e) Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of this Note. In lieu of any fractional shares to which the Holder would otherwise be entitled, the Maker shall pay cash equal such fractional shares multiplied by the Conversion Price then in effect.

(f) Reservation of Common Stock. The Maker shall at all while this Note shall be outstanding, reserve and keep available out of its authorized but unissued Common Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of this Note (disregarding for this purpose any and all limitations of any kind on such conversion). The Maker shall, from time to time, increase the authorized number of shares of Common Stock or take other effective action if at any time the unissued number of authorized shares shall not be sufficient to satisfy the Maker's obligations under this Section 3.4(f).

(g) Regulatory Compliance. If any shares of Common Stock to be reserved for the purpose of conversion of this Note require registration or listing with or approval of any governmental authority, stock exchange or other regulatory body under any federal or state law or regulation or otherwise before such shares may be validly issued or delivered upon conversion, the Maker shall, at its sole cost and expense, in good faith and as expeditiously as possible, secure such registration, listing or approval, as the case may be.

(h) Effect of Events Prior to the Issuance Date. If the Issuance Date of this Note is after the Closing Date, then, if the Conversion Price or any other right of the Holder of this Note would have been adjusted or modified by operation of any provision of this Note had this Note been issued on the Closing Date, such adjustment or modification shall be deemed to apply to this Note as of the Issuance Date as if this Note had been issued on the Closing Date.

3.5 Prepayment Following a Change of Control.

(a) Mechanics of Prepayment at Option of Holder in Connection with a Change of Control. No later than ten (10) days prior to the consummation of a Change of Control, but not prior to the public announcement of such Change of Control, the Maker shall deliver written notice ("Notice of Change of Control") to the Holder. At any time after receipt of a Notice of Change of Control (or, in the event a Notice of Change of Control is not delivered at least ten (10) days prior to a Change of Control, at any time within ten (10) days prior to a Change of Control), the Holder may require the Maker to prepay this Note, effective in conjunction with the consummation of such Change of Control at the COC Repayment Price by delivering written notice thereof ("Notice of Prepayment at Option of Holder Upon Change of Control") to the Maker.

(b) Payment of COC Repayment Price. Upon the Maker's receipt of a Notice(s) of Prepayment at Option of Holder Upon Change of Control from the Holder, the Maker shall deliver the COC Repayment Price in conjunction with the consummation of the Change of Control; provided that the Holder's original Note shall have been so delivered to the Maker.

3.6 Inability to Fully Convert.

(a) Holder's Option if Maker Cannot Fully Convert. If, upon the Maker's receipt of a Conversion Notice or as otherwise required under this Note, the Maker cannot issue shares of Common Stock for any reason, including, without limitation, because the Maker (x) does not have a sufficient number of shares of Common Stock authorized and available or (y) is otherwise prohibited by applicable law or by the rules or regulations of any stock exchange, interdealer quotation system or other self-regulatory organization with jurisdiction over the Maker or any of its securities from issuing all of the Common Stock which is to be issued to the Holder pursuant to this Note, then the Maker shall issue as many shares of Common Stock as it is able to issue and, with respect to the unconverted portion of this Note or with respect to any shares of Common Stock not timely issued in accordance with this Note, the Holder, solely at Holder's option, can elect to:

(i) require the Maker to prepay that portion of this Note for which the Maker is unable to issue Common Stock or for which shares of Common Stock were not timely issued (the "Mandatory Prepayment") at a price equal to the number of shares of Common Stock that the Maker is unable to issue multiplied by the VWAP on the date of the Conversion Notice (the "Mandatory Prepayment Price");

(ii) void its Conversion Notice and retain or have returned, as the case may be, this Note that was to be converted pursuant to the Conversion Notice (provided that the Holder's voiding its Conversion Notice shall not affect the Maker's obligations to make any payments which have accrued prior to the date of such notice); or

(iii) defer issuance of the applicable Conversion Shares until such time as the Maker can legally issue such shares; provided, that if the Holder elects to defer the issuance of the Conversion Shares, it may exercise its rights under either clause (i) or (ii) above at any time prior to the issuance of the Conversion Shares upon two (2) Business Days notice to the Maker.

(b) Mechanics of Fulfilling Holder's Election. The Maker shall immediately send to the Holder, upon receipt of a Conversion Notice from the Holder, which cannot be fully satisfied as described in Section 3.6(a) above, a notice of the Maker's inability to fully satisfy the Conversion Notice (the "Inability to Fully Convert Notice"). Such Inability to Fully Convert Notice shall indicate (i) the reason why the Maker is unable to fully satisfy the Holder's Conversion Notice; and (ii) the amount of this Note which cannot be converted. The Holder shall notify the Maker of its election pursuant to Section 3.6(a) above by delivering written notice to the Maker ("Notice in Response to Inability to Convert").

(c) Payment of Mandatory Prepayment Price. If the Holder shall elect to have its Note prepaid pursuant to Section 3.6(a)(i) above, the Maker shall pay the Mandatory Prepayment Price to the Holder within five (5) Business Days of the Maker's receipt of the Holder's Notice in Response to Inability to Convert; provided that prior to the Maker's receipt of the Holder's Notice in Response to Inability to Convert the Maker has not delivered a notice to the Holder stating, to the satisfaction of the Holder, that the event or condition resulting in the Mandatory Prepayment has been cured and all Conversion Shares issuable to the Holder can and will be delivered to the Holder in accordance with the terms of this Note. If the Maker shall fail to pay the applicable Mandatory Prepayment Price to the Holder on the date that is one (1) Business Day following the Maker's receipt of the Holder's Notice in Response to Inability to Convert, in addition to any remedy the Holder may have under this Note and the Purchase Agreement, such unpaid amount shall bear interest at the rate of two percent (2%) per month (prorated for partial months) until paid in full. Until the full Mandatory Prepayment Price is paid in full to the Holder, the Holder may (i) void the Mandatory Prepayment with respect to that portion of the Note for which the full Mandatory Prepayment Price has not been paid and (ii) receive back such Note.

(d) No Rights as Stockholder. Nothing contained in this Note shall be construed as conferring upon the Holder, prior to the conversion of this Note, the right to vote or to receive dividends or to consent or to receive notice as a stockholder in respect of any meeting of stockholders for the election of directors of the Maker or of any other matter, or any other rights as a stockholder of the Maker.

ARTICLE 4

4.1 Covenants. For so long as any Note is outstanding, without the prior written consent of the Holder:

(a) Compliance with Transaction Documents. The Maker shall, and shall cause its Subsidiaries to, comply with its obligations under this Note and the other Transaction Documents.

(b) Payment of Taxes, Etc. The Maker shall, and shall cause each of its Subsidiaries to, promptly pay and discharge, or cause to be paid and discharged, when due and payable, all lawful taxes, assessments and governmental charges or levies imposed upon the income, profits, property or business of the Maker and the Subsidiaries, except for such failures to pay that, individually or in the aggregate, have not had and would not reasonably be expected to have a Material Adverse Effect; provided, however, that any such tax, assessment, charge or levy need not be paid if the validity thereof shall currently be contested in good faith by appropriate proceedings and if the Maker or such Subsidiaries shall have set aside on its books adequate reserves with respect thereto, and provided, further, that the Maker and such Subsidiaries will pay all such taxes, assessments, charges or levies forthwith upon the commencement of proceedings to foreclose any lien which may have attached as security therefor.

(c) Corporate Existence. The Maker shall, and shall cause each of its Subsidiaries to, maintain in full force and effect its corporate existence, rights and franchises and all licenses and other rights to use property owned or possessed by it and reasonably deemed to be necessary to the conduct of its business.

(d) Investment Company Act. The Maker shall conduct its businesses in a manner so that it will not become subject to, or required to be registered under, the Investment Company Act of 1940, as amended.

(e) Sale of Collateral; Liens. From the date hereof until the full release of the security interest in the Collateral, (i) the Maker shall not sell, lease, transfer or otherwise dispose of any of the Collateral, or attempt or contract to do so, other than (x) sales of inventory in the ordinary course of business consistent with past practices and (y) subject to compliance with the provisions of the Intercreditor Agreement, the sale of the Factored Receivables under the Factor Documents; and (ii) the Maker shall not, directly or indirectly, create, permit or suffer to exist, and shall defend the Collateral against and take such other action as is necessary to remove, any lien, security interest or other encumbrance on the Collateral (except for the pledge, assignment and security interest created under the Security Agreement and Permitted Liens (as defined in the Security Agreement)).

(f) Prohibited Transactions. The Company hereby covenants and agrees not to enter into any Prohibited Transactions until thirty (30) days after such time as this Note has been converted into Conversion Shares or repaid in full.

(g) Additional Debt. The Company shall not be permitted to incur any other Indebtedness, including the issuance of any subordinated debt or convertible debt (other than the Note and other than the Permitted Factor Indebtedness) unless (a) otherwise agreed in writing by the Investor, (b) such Indebtedness represents an unsecured obligation for the deferred purchase price of assets and the aggregate amount of all such Indebtedness does not exceed \$150,000 in any fiscal year, or (c) unless such debt is unsecured, is subordinated on terms reasonably acceptable to the Holder and one hundred percent (100%) of the cash proceeds received by the Company, net of any usual and customary transaction expenses, exclusive of fees, for such debt are immediately used to repay the Outstanding Amount.

4.2 Set-Off. This Note shall be subject to the set-off provisions set forth in the Purchase Agreement.

ARTICLE 5

5.1 Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (New York time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section on a day that is not a Business Day or later than 5:00 p.m. (New York time) on any date and earlier than 11:59 p.m. (New York time) on such date, (c) the Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service, or (d) upon actual receipt by the party to whom such notice is required to be given. The addresses for notice shall be as set forth in the Purchase Agreement.

5.2 Governing Law. This Agreement shall be governed by and construed in accordance with the Laws of the State of New York, without reference to principles of conflict of laws or choice of laws. This Note shall not be interpreted or construed with any presumption against the party causing this Note to be drafted.

5.3 Headings. Article and section headings in this Note are included herein for purposes of convenience of reference only and shall not constitute a part of this Note for any other purpose.

5.4 Remedies, Characterizations, Other Obligations, Breaches and Injunctive Relief. The remedies provided in this Note shall be cumulative and in addition to all other remedies available under this Note, at law or in equity (including, without limitation, a decree of specific performance and/or other injunctive relief), no remedy contained herein shall be deemed a waiver of compliance with the provisions giving rise to such remedy and nothing herein shall limit the Holder's right to pursue actual damages for any failure by the Maker to comply with the terms of this Note. Amounts set forth or provided for herein with respect to payments, conversion and the like (and the computation thereof) shall be the amounts to be received by the holder thereof and shall not, except as expressly provided herein, be subject to any other obligation of the Maker (or the performance thereof). The Maker acknowledges that a breach by it of its obligations hereunder will cause irreparable and material harm to the Holder and that the remedy at law for any such breach would be inadequate. Therefore, the Maker agrees that, in the event of any such breach or threatened breach, the Holder shall be entitled, in addition to all other available rights and remedies, at law or in equity, to equitable relief, including but not limited to an injunction restraining any such breach or threatened breach, without the necessity of showing economic loss and without any bond or other security being required.

5.5 Enforcement Expenses. The Maker agrees to pay all costs and expenses of enforcement of this Note, including, without limitation, reasonable attorneys' fees and expenses.

5.6 Binding Effect. The obligations of the Maker and the Holder set forth herein shall be binding upon the successors and assigns of each such party, whether or not such successors or assigns are permitted by the terms herein.

5.7 Amendments; Waivers. No provision of this Note may be waived or amended except in a written instrument signed by the Company and the Holder. No waiver of any default with respect to any provision, condition or requirement of this Note shall be deemed to be a continuing waiver in the future or a waiver of any subsequent default or a waiver of any other provision, condition or requirement hereof, nor shall any delay or omission of either party to exercise any right hereunder in any manner impair the exercise of any such right.

5.8 Compliance with Securities Laws. The Holder of this Note acknowledges that this Note is being acquired solely for the Holder's own account and not as a nominee for any other party, and for investment, and that the Holder shall not offer, sell or otherwise dispose of this Note in violation of securities laws. This Note and any Note issued in substitution or replacement therefor shall be stamped or imprinted with a legend in substantially the following form:

"NEITHER THIS NOTE NOR THE SECURITIES ISSUABLE UPON CONVERSION OF THIS NOTE 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 OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY."

5.9 Jurisdiction; Venue; Service of Process.

(a) Any action, proceeding or claim arising out of, or relating in any way to this Agreement shall be brought and enforced in the New York Supreme Court, County of New York, or in the United States District Court for the Southern District of New York. The Company and the Holder irrevocably submit to the jurisdiction of such courts, which jurisdiction shall be exclusive, and hereby waive any objection to such exclusive jurisdiction or that such courts represent an inconvenient forum. The prevailing party in any such action shall be entitled to recover its reasonable and documented attorneys' fees and out-of-pocket expenses relating to such action or proceeding.

(b) The Maker and the Holder hereby irrevocably waives personal service of process and consents to process being served in any such action or proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under the Purchase Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof.

5.10 Parties in Interest. This Note shall be binding upon, inure to the benefit of and be enforceable by the Maker, the Holder and their respective successors and permitted assigns.

5.11 Failure or Indulgence Not Waiver. No failure or delay on the part of the Holder 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.

5.12 Maker Waivers. Except as otherwise specifically provided herein, the Maker and all others that may become liable for all or any part of the obligations evidenced by this Note, hereby waive presentment, demand, notice of nonpayment, protest and all other demands' and notices in connection with the delivery, acceptance, performance and enforcement of this Note, and do hereby consent to any number of renewals or extensions of the time or payment hereof and agree that any such renewals or extensions may be made without notice to any such persons and without affecting their liability herein and do further consent to the release of any person liable hereon, all without affecting the liability of the other persons, firms or Maker liable for the payment of this Note, AND DO HEREBY WAIVE TRIAL BY JURY.

(a) No delay or omission on the part of the Holder in exercising its rights under this Note, or course of conduct relating hereto, shall operate as a waiver of such rights or any other right of the Holder, nor shall any waiver by the Holder of any such right or rights on any one occasion be deemed a waiver of the same right or rights on any future occasion.

(b) THE MAKER ACKNOWLEDGES THAT THE TRANSACTION OF WHICH THIS NOTE IS A PART IS A COMMERCIAL TRANSACTION, AND TO THE EXTENT ALLOWED BY APPLICABLE LAW, HEREBY WAIVES ITS RIGHT TO NOTICE AND HEARING WITH RESPECT TO ANY PREJUDGMENT REMEDY WHICH THE HOLDER OR ITS SUCCESSORS OR ASSIGNS MAY DESIRE TO USE.

5.13 Definitions. Capitalized terms used herein and not defined shall have the meanings set forth in the Purchase Agreement. For the purposes hereof, the following terms shall have the following meanings:

(a) "COC Repayment Price" means, at the time of determination, an amount equal to 105% of the Outstanding Principal Amount plus all accrued interest thereon (if any).

(b) "Factor Documents" has the meaning set forth in the Intercreditor Agreement.

(c) "Factored Receivables" means those accounts receivable of the Company which are sold pursuant to, and in accordance with, the Factor Documents, provided, the aggregate face amount of accounts receivable permitted to be sold in any calendar quarter does not exceed \$500,000 and such sale is otherwise a "Permitted AR Sale" as defined in the Intercreditor Agreement.

(d) "Indebtedness" means: (i) all obligations for borrowed money; (ii) all obligations evidenced by bonds, debentures, notes, or other similar instruments and all reimbursement or other obligations in respect of letters of credit, bankers acceptances, current swap agreements, interest rate hedging agreements, interest rate swaps, or other financial products; (iii) all capital lease obligations that exceed \$150,000 in the aggregate in any fiscal year; (iv) all obligations or liabilities secured by a lien or encumbrance on any asset of the Maker, irrespective of whether such obligation or liability is assumed (including obligations under the Factor Documents); (v) all obligations for the deferred purchase price of assets; (vi) trade accounts payable (other than trade accounts payable in the ordinary course of business unless such accounts payable are more than ninety (90) days past due, provided, that if an account payable is more than ninety (90) days past due because the Maker is contesting such account payable in good faith and has maintained adequate reserves with respect thereto, such account payable shall not be considered Indebtedness during such period); (vii) all synthetic leases; (viii) any obligation guaranteeing or intended to guarantee (whether directly or indirectly guaranteed, endorsed, co-made, discounted or sold with recourse) any of the foregoing obligations of any other person; and (ix) endorsements for collection or deposit.

(e) "Intercreditor Agreement" means that certain Collateral Sharing Agreement dated as of the date hereof among the Company, the Holder and Versant, as the same may be amended from time to time in accordance with the terms thereof.

(f) "Mandatory Default Amount" means an amount equal to twenty percent (20%) of the outstanding principal amount of this Note and accrued and unpaid interest hereon on the date on which the first Event of Default has occurred hereunder.

(g) "Outstanding Amount" means, at the time of determination, the Outstanding Principal Amount plus all accrued interest (if any) plus the Mandatory Default Amount (if any) earned on or prior to such date plus all other amounts owing by the Company hereunder.

(h) "Outstanding Principal Amount" means, at the time of determination, the Principal Amount outstanding after giving effect to any conversions or prepayments pursuant to the terms hereof.

(i) "Permitted Factor Indebtedness" means all obligations of the Company owing to Versant under the Factor Documents so long as such obligations are not incurred in contravention of the Intercreditor Agreement.

(j) "Trading Day" means a day on which the Common Stock is traded on a Trading Market.

(k) "Versant" means Versant Funding LLC.

(l) "VWAP" means, as of any date, the price determined by the first of the following clauses that applies: (i) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of one share of Common Stock trading in the ordinary course of business on the applicable Trading Price for such date (or the nearest preceding date) on such Trading Market as reported by Bloomberg Financial L.P.; (ii) if the Common Stock is not then listed on a Trading Market and if the Common Stock is traded in the over-the-counter market, as reported by the OTC Bulletin Board, the volume weighted average price of one share of Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, as reported by Bloomberg Financial L.P.; (iii) if the Common Stock is not then listed or quoted on the OTC Bulletin Board and if prices for the Common Stock is then reported in the "Pink Sheets" published by the Pink OTC Markets Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price of one share of Common Stock so reported, as reported by Bloomberg Financial L.P.; or (iv) in all other cases, the fair market value of one share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company (in each case rounded to four decimal places).

[Signature Pages Follow]

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

BIO-KEY INTERNATIONAL, INC.

By: _____
Name: Michael W. DePasquale
Title: CEO

NEITHER THIS WARRANT NOR THE SHARES ACQUIRED UPON THE EXERCISE OF THIS WARRANT 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 OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFEROR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE COMPANY.

THE NUMBER OF SHARES OF COMMON STOCK ISSUABLE UPON EXERCISE OF THIS WARRANT MAY BE LESS THAN THE AMOUNTS SET FORTH ON THE FACE HEREOF.

This Warrant is issued pursuant to that certain Securities Purchase Agreement dated July __, 2019 by and between the Company and the Holder (as defined below) (the "Purchase Agreement"). Capitalized terms used and not otherwise defined herein shall have the meanings set forth for such terms in the Purchase Agreement. Receipt of this Warrant by the Holder shall constitute acceptance and agreement to all of the terms contained herein.

No. 1

BIO-KEY INTERNATIONAL, INC.

COMMON STOCK PURCHASE WARRANT

BIO-Key International, Inc., a Delaware corporation (together with any corporation which shall succeed to or assume the obligations of BIO-Key International, Inc. hereunder, the "Company"), hereby certifies that, for value received, Lind Global Macro Fund, LP, a Delaware limited partnership (the "Holder"), is entitled, subject to the terms set forth below, to purchase from the Company at any time during the Exercise Period (as defined in Section 9) up to Two Million (2,000,000) fully paid and non-assessable shares of Common Stock (as defined in Section 9), at a purchase price per share equal to the Exercise Price (as defined in Section 9). The number of shares of Common Stock for which this Common Stock Purchase Warrant (this "Warrant") is exercisable and the Exercise Price are subject to adjustment as provided herein.

1. DEFINITIONS. Certain terms are used in this Warrant as specifically defined in Section 9.
2. EXERCISE OF WARRANT.

2.1. Exercise. This Warrant may be exercised prior to its expiration pursuant to Section 2.5 hereof by the Holder at any time or from time to time during the Exercise Period, by submitting the form of subscription attached hereto (the "Exercise Notice") duly executed by the Holder, to the Company at its principal office, indicating whether the Holder is electing to purchase a specified number of shares by paying the Aggregate Exercise Price as provided in Section 2.2 or is electing to exercise this Warrant as to a specified number of shares pursuant to the net exercise provisions of Section 2.3. On or before the first Trading Day following the date on which the Company has received the Exercise Notice, the Company shall transmit by electronic mail an acknowledgement of confirmation of receipt of the Exercise Notice. Subject to Section 2.4, this Warrant shall be deemed exercised for all purposes as of the close of business on the day on which the Holder has delivered the Exercise Notice to the Company. The Aggregate Exercise Price, if any, shall be paid by wire transfer to the Company within five (5) Business Days of the date of exercise and prior to the time the Company issues the certificates evidencing the shares issuable upon such exercise. In the event this Warrant is not exercised in full, the Company may, at its expense, require the Holder, after such partial exercise, to promptly return this Warrant to the Company and the Company will forthwith issue and deliver to or upon the order of the Holder a new Warrant or Warrants of like tenor, in the name of the Holder or as the Holder (upon payment by the Holder of any applicable transfer taxes) may request, calling in the aggregate on the face or faces thereof for the number of shares of Common Stock equal (without giving effect to any adjustment therein) to the number of such shares called for on the face of this Warrant minus the number of such shares (without giving effect to any adjustment therein) for which this Warrant shall have been exercised.

2.2. Payment of Exercise Price by Wire Transfer. If the Holder elects to purchase a specified number of shares by paying the Aggregate Exercise Price, the Holder shall pay such amount by wire transfer of immediately available funds to the account designated by the Company in its acknowledgement of receipt of such Exercise Notice pursuant to Section 2.1.

2.3. Net Exercise. If a registration statement covering the shares of Common Stock that are the subject of the Notice of Exercise (the "Unavailable Warrant Shares") is not available for the resale of such Unavailable Warrant Shares to the public or upon exercise of this Warrant in connection with a Fundamental Transaction, the Holder may elect to exercise this Warrant by receiving shares of Common Stock equal to the number of shares determined pursuant to the following formula:

$$X = \frac{Y (A - B)}{A}$$

where,

X = the number of shares of Common Stock to be issued to Holder;

Y = the number of shares of Common Stock as to which this Warrant is to be exercised (as indicated on the Exercise Notice);

A = VWAP for the Trading Day immediately preceding the date of exercise; and

B = the Exercise Price.

2.4. Antitrust Notification. If the Holder determines, in its sole judgment upon the advice of counsel, that the issuance of any Warrant Shares pursuant to the terms hereof would be subject to the provisions of the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended (the "HSR Act"), the Company shall file as soon as practicable after the date on which the Company receives notice from the Holder of the applicability of the HSR Act and a request to so file with the United States Federal Trade Commission and the United States Department of Justice the notification and report form required to be filed by it pursuant to the HSR Act in connection with such issuance.

2.5. Termination. This Warrant shall terminate upon the earlier to occur of (i) exercise in full or (ii) the expiration of the Exercise Period.

3. REGISTRATION RIGHTS. The Holder of this Warrant has certain rights to require the Company to register its resale of the Warrant Shares under the Securities Act and any blue sky or securities laws of any jurisdictions within the United States at the time and in the manner specified in the Purchase Agreement.

4. DELIVERY OF STOCK CERTIFICATES ON EXERCISE.

4.1. Delivery of Exercise Shares. As soon as practicable after any exercise of this Warrant and in any event within three (3) Trading Days thereafter (such date, the "Exercise Share Delivery Date"), the Company shall, at its expense (including the payment by it of any applicable issue or stamp taxes), cause to be issued in the name of and delivered to the Holder, or as the Holder may direct, a certificate or certificates evidencing the number of fully paid and nonassessable shares of Common Stock (which number shall be rounded down to the nearest whole share in the event any fractional share may otherwise be issuable upon such exercise and the Company shall pay a cash adjustment to the Holder in respect of such final fraction in an amount equal to such fraction multiplied by the Exercise Price) to which the Holder shall be entitled on such exercise, in such denominations as may be requested by the Holder, which certificate or certificates shall be free of restrictive and trading legends (except for any such legends as may be required under the Securities Act). In lieu of delivering physical certificates for the shares of Common Stock issuable upon any exercise of this Warrant, provided the Warrant Shares are not restricted securities and the Company's transfer agent is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer program or a similar program, upon request of the Holder, the Company shall cause its transfer agent to electronically transmit such shares of Common Stock issuable upon exercise of this Warrant to the Holder (or its designee), by crediting the account of the Holder's (or such designee's) broker with DTC through its Deposit Withdrawal Agent Commission system (provided that the same time periods herein as for stock certificates shall apply) as instructed by the Holder (or its designee).

4.2. Compensation for Buy-In on Failure to Timely Deliver Exercise Shares. In addition to any other rights available to the Holder, if the Company fails to cause its transfer agent to transmit to the Holder Exercise Shares pursuant to an exercise on or before the Exercise Share Delivery Date, and if after such date the Holder is required by its broker to purchase (in an open market transaction or otherwise) or the Holder's brokerage firm otherwise purchases, shares of Common Stock to deliver in satisfaction of a sale by the Holder of the Exercise Shares which the Holder anticipated receiving upon such exercise (a "Buy-In"), then the Company shall (a) pay in cash to the Holder the amount, if any, by which (x) the Holder's total purchase price (including brokerage commissions, if any) for the shares of Common Stock so purchased exceeds (y) the amount obtained by multiplying (1) the number of Exercise Shares that the Company was required to deliver to the Holder in connection with the exercise at issue times (2) the price at which the sell order giving rise to such purchase obligation was executed, and (b) at the option of the Holder, either reinstate the portion of the Warrant and equivalent number of Exercise Shares for which such exercise was not honored (in which case such exercise shall be deemed rescinded) or deliver to the Holder the number of shares of Common Stock that would have been issued had the Company timely complied with its exercise and delivery obligations hereunder. For example, if the Holder purchases Common Stock having a total purchase price of \$11,000 to cover a Buy-In with respect to an attempted exercise of shares of Common Stock with an aggregate sale price giving rise to such purchase obligation of \$10,000, under clause (a) of the immediately preceding sentence the Company shall be required to pay the Holder \$1,000. The Holder shall provide the Company written notice indicating the amounts payable to the Holder in respect of the Buy-In and evidence of the amount of such loss. Nothing herein shall limit a Holder's right to pursue a decree of specific performance and/or injunctive relief with respect to the Company's failure to timely deliver shares of Common Stock upon exercise of the Warrant as required pursuant to the terms hereof.

4.3. Charges, Taxes and Expenses. Issuance of Exercise Shares shall be made without charge to the Holder for any issue or transfer tax or other incidental expense in respect of the issuance of such Exercise Shares, all of which taxes and expenses shall be paid by the Company, and such Exercise Shares shall be issued in the name of the Holder or in such name or names as may be directed by the Holder; provided, however, that in the event Exercise Shares are to be issued in a name other than the name of the Holder, this Warrant when surrendered for exercise shall be accompanied by the Assignment Form attached hereto (the "Assignment Form") duly executed by the Holder and the Company may require, as a condition thereto, the payment of a sum sufficient to reimburse it for any transfer tax incidental thereto.

5. CERTAIN ADJUSTMENT.

5.1. Stock Dividends and Splits. If the Company, at any time while this Warrant is outstanding: (a) pays a stock dividend or otherwise makes a distribution or distributions on shares of its Common Stock or any other equity or equity equivalent securities payable in shares of Common Stock (which, for avoidance of doubt, shall not include any shares of Common Stock issued by the Company upon exercise of this Warrant), (b) subdivides outstanding shares of Common Stock into a larger number of shares, (c) combines (including by way of reverse stock split) outstanding shares of Common Stock into a smaller number of shares, or (d) issues by reclassification of shares of the Common Stock any shares of capital stock of the Company, then in each case the Exercise Price shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock outstanding immediately after such event and the number of shares issuable upon exercise of this Warrant shall be proportionately adjusted such that the aggregate Exercise Price of this Warrant shall remain unchanged. Any adjustment made pursuant to this Section 5.1 shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution and shall become effective immediately after the effective date in the case of a subdivision, combination or reclassification.

5.2 Pro Rata Distributions. During such time as this Warrant is outstanding, if the Company shall declare or make any dividend or other distribution of its assets (or rights to acquire its assets) to holders of shares of Common Stock, by way of return of capital or otherwise (including, without limitation, any distribution of cash, stock or other securities, property or options by way of a dividend, spin off, reclassification, corporate rearrangement, scheme of arrangement or other similar transaction) (a "Distribution"), at any time after the issuance of this Warrant, then, in each such case, the Holder shall be entitled to participate in such Distribution to the same extent that the Holder would have participated therein if the Holder had held the number of shares of Common Stock acquirable upon complete exercise of this Warrant (without regard to any limitations on exercise hereof, including without limitation, the Beneficial Ownership Limitation) immediately before the date of which a record is taken for such Distribution, or, if no such record is taken, the date as of which the record holders of shares of Common Stock are to be determined for the participation in such Distribution (provided, however, that, to the extent that the Holder's right to participate in any such Distribution would result in the Holder exceeding the beneficial ownership limitation provided for in Section 10, then the Holder shall not be entitled to participate in such Distribution to such extent (or in the beneficial ownership of any shares of Common Stock as a result of such Distribution to such extent) and the portion of such Distribution shall be held in abeyance for the benefit of the Holder until such time, if ever, as its right thereto would not result in the Holder exceeding the beneficial ownership limitation).

5.3 Fundamental Transaction. If, at any time while this Warrant is outstanding, (a) the Company effects any merger or consolidation of the Company with or into another Person, (b) the Company effects any sale of all or substantially all of its assets in one or a series of related transactions, (c) any tender offer or exchange offer (whether by the Company or another Person) is completed pursuant to which holders of the Common Stock are permitted to tender or exchange their shares for other securities, cash or property, or (d) 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 (each, a "Fundamental Transaction"), then, upon the closing of a Fundamental Transaction and payment of the exercise price therefore (including at the election of the Holder by cashless exercise), the Holder shall receive, for each Warrant Share that would have been issuable upon such exercise immediately prior to the occurrence of such Fundamental Transaction, the number of shares of Common Stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and any additional consideration (the "Alternate Consideration") receivable as a result of such merger, consolidation or disposition of assets by a holder of the number of shares of Common Stock for which this Warrant is exercisable immediately prior to such event. For purposes of any such exercise, the determination of the Exercise Price shall be appropriately adjusted to apply to such Alternate Consideration based on the amount of Alternate Consideration issuable in respect of one share of Common Stock in such Fundamental Transaction, and the Company shall apportion the Exercise Price among the Alternate Consideration in a reasonable manner reflecting the relative value of any different components of the Alternate Consideration. If holders of Common Stock are given any choice as to the securities, cash or property to be received in a Fundamental Transaction, then the Holder shall be given the same choice as to the Alternate Consideration it receives upon exercise of this Warrant upon the closing of such Fundamental Transaction. The foregoing notwithstanding, if the Company effects any reclassification of the Common Stock or any compulsory share exchange, in each case, into another security of the Company, this Warrant shall remain outstanding and the Holder shall be entitled to receive the Alternative Consideration upon any subsequent exercise of this Warrant and the payment of the exercise price therefor. The terms of any agreement pursuant to which a Fundamental Transaction is effected shall include terms requiring any such successor or surviving entity to comply with the provisions of this Section 5.3

5.4 Calculations. All calculations under this Section 5 shall be made to the nearest cent or the nearest 1/100th of a share, as the case may be. For purposes of this Section 5, the number of shares of Common Stock deemed to be issued and outstanding as of a given date shall be the sum of the number of shares of Common Stock (excluding treasury shares, if any) issued and outstanding at the close of the Trading Day on or, if not applicable, most recently preceding, such given date.

5.5 Notice to Holder.

(a) Adjustment to Exercise Price. Whenever the Exercise Price is adjusted pursuant to any provision of this Section 5, the Company shall promptly mail to the Holder a notice setting forth the Exercise Price after such adjustment and setting forth a brief statement of the facts requiring such adjustment.

(b) Notice to Allow Exercise by Holder. If (i) the Company shall declare a dividend (or any other distribution in whatever form) on the Common Stock; (ii) the Company shall declare a special nonrecurring cash dividend on or a redemption of the Common Stock; (iii) the Company shall authorize the granting to all holders of the Common Stock rights or warrants to subscribe for or purchase any shares of capital stock of any class or of any rights; (iv) the approval of any stockholders of the Company shall be required in connection with any reclassification of the Common Stock, any consolidation or merger to which the Company is a party, any sale or transfer of all or substantially all of the assets of the Company, of any compulsory share exchange whereby the Common Stock is converted into other securities, cash or property; or (v) the Company shall authorize the voluntary or involuntary dissolution, liquidation or winding up of the affairs of the Company; then, in each case, the Company shall cause to be mailed to the Holder at its last address as it shall appear upon the Warrant Register of the Company, at least twenty (20) calendar days prior to the applicable record or effective date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of such dividend, distribution, redemption, rights or warrants, or if a record is not to be taken, the date as of which the holders of the Common Stock of record to be entitled to such dividend, distributions, redemption, rights or warrants are to be determined or (y) the date on which such reclassification, consolidation, merger, sale, transfer or share exchange is expected to become effective or close, and the date as of which it is expected that holders of the Common Stock of record shall be entitled to exchange their shares of the Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer or share exchange; provided that the failure to mail such notice or any defect therein or in the mailing thereof shall not affect the validity of the corporate action required to be specified in such notice. Subject to applicable law, the Holder is entitled to exercise this Warrant during the period commencing on the date of such notice to the effective date of the event triggering such notice. Notwithstanding the foregoing, the delivery of the notice described in this Section 5.5 is not intended to and shall not bestow upon the Holder any voting rights whatsoever with respect to outstanding unexercised Warrants.

6. NO IMPAIRMENT. The Company will not, by amendment of the 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 taking all such action as may be necessary or appropriate in order to protect the rights of the Holder against impairment. Without limiting the generality of the foregoing, the Company (a) will not increase the par value of any shares of Common Stock receivable on the exercise of this Warrant above the amount payable therefor on such exercise and (b) will take all such action as may be necessary or appropriate in order that the Company may validly and legally issue fully paid and non-assessable shares of stock on the exercise of this Warrant from time to time outstanding.

7. NOTICES OF RECORD DATE. In the event of:

(a) any taking by the Company of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend or other distribution, or any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right;

(b) any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any transfer of all or substantially all the assets of the Company to or any consolidation or merger of the Company with or into any other Person or any other Change of Control; or

(c) any voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, and in each such event, the Company will mail or cause to be mailed to the Holder a notice specifying (i) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and stating the amount and character of such dividend, distribution or right, or (ii) the date on which any such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up is anticipated to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock shall be entitled to exchange their shares of Common Stock for securities or other property deliverable on such reorganization, reclassification, recapitalization, transfer, consolidation, merger, dissolution, liquidation or winding-up. Such notice shall be mailed at least fifteen (15) days prior to the date specified in such notice on which any such action is to be taken.

8. RESERVATION OF STOCK ISSUABLE ON EXERCISE OF WARRANT; REGULATORY COMPLIANCE.

8.1. Reservation of Stock Issuable on Exercise of Warrant. The Company shall at all times while this Warrant shall be outstanding, reserve and keep available out of its authorized but unissued Common Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the exercise of all or any portion of the Warrant Shares (disregarding for this purpose any and all limitations of any kind on such exercise). The Company shall, from time to time in accordance with the Delaware General Corporation Law, increase the authorized number of shares of Common Stock or take other effective action if at any time the unissued number of authorized shares shall not be sufficient to satisfy the Company's obligations under this Section 8.

8.2. Regulatory Compliance. If any shares of Common Stock to be reserved for the purpose of exercise of the Warrant Shares require registration or listing with or approval of any Governmental Authority, stock exchange or other regulatory body under any federal or state law or regulation or otherwise before such shares may be validly issued or delivered upon exercise, the Company shall, at its sole cost and expense, in good faith and as expeditiously as possible, secure such registration, listing or approval, as the case may be.

9. DEFINITIONS. As used herein the following terms, unless the context otherwise requires, have the following respective meanings:

"Affiliate" means a Person that directly, or indirectly through one or more intermediaries, controls or is controlled by, or is under common control with, the Person specified.

"Aggregate Exercise Price" means, in connection with the exercise of this Warrant at any time, an amount equal to the product obtained by multiplying (i) the Exercise Price times (ii) the number of shares of Common Stock for which this Warrant is being exercised at such time.

"Business Day" means any day other than a Saturday, Sunday or any other day on which banks are permitted or required to be closed in New York City.

"Certificate of Incorporation" means the Company's Certificate of Incorporation as amended to date.

"Change of Control" has the meaning set forth in the Purchase Agreement.

"Common Stock" means (i) the Company's Common Stock, \$0.0001 par value per share, and (ii) any other securities into which or for which any of the securities described in clause (i) above have been converted or exchanged pursuant to a plan of recapitalization, reorganization, merger, sale of assets or otherwise.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

"Exercise Period" means the period commencing on the Issue Date and ending 11:59 P.M. (New York City time) on the five year anniversary of the Issue Date or earlier closing of a Fundamental Transaction (other than a Fundamental Transaction of the type described in clause (d) of the definition thereof resulting in the conversion into or exchange for another security of the Company).

"Exercise Price" means \$1.50 per share, as may be adjusted pursuant to the terms hereof.

"Exercise Shares" means the shares of Common Stock for which this Warrant is then being exercised.

"Fair Market Value" means, with respect to any security or other property, the fair market value of such security or other property as determined by the Board of Directors, acting in good faith.

"Governmental Authority" means the government of the United States or any other nation, or of any political subdivision thereof, whether state or local, and any agency, authority, instrumentality, regulatory body, court, central bank or other entity exercising executive, legislative, judicial, taxing, regulatory or administrative powers or functions of or pertaining to government (including any supra-national bodies such as the European Union or the European Central Bank).

"Issue Date" means July __, 2019.

"Note" means the senior secured convertible promissory note issued by the Company to the Holder pursuant to the Purchase Agreement.

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

"Securities Act" means the Securities Act of 1933, as amended from time to time, and the rules and regulations promulgated thereunder from time to time in effect.

"Subsidiary" means, as of any time of determination and with respect to any Person, any United States corporation, partnership, limited liability company or limited liability partnership, all of the stock (or other equity interest) of every class of which, except directors' qualifying shares (or any equivalent), shall, at such time, be owned by such Person either directly or through Subsidiaries and of which such Person or a Subsidiary shall have 100% control thereof, except directors' qualifying shares. Unless the context otherwise clearly requires, any reference to a "Subsidiary" is a reference to a Subsidiary of the Company.

"Trading Day" means a day on which the Common Stock is traded on a Trading Market.

"Trading Market" means whichever of the New York Stock Exchange, NYSE: Amex Exchange, or the Nasdaq Stock Market (including the Nasdaq Capital Market), on which the Common Stock is listed or quoted for trading on the date in question.

"VWAP" means, as of any date, the price determined by the first of the following clauses that applies: (a) if the Common Stock is then listed or quoted on a Trading Market, the daily volume weighted average price of one share of Common Stock trading in the ordinary course of business on the applicable Trading Price for such date (or the nearest preceding date) on such Trading Market as reported by Bloomberg Financial L.P.; (b) if the Common Stock is not then listed on a Trading Market and if the Common Stock is traded in the over-the-counter market, as reported by the OTC Bulletin Board, the volume weighted average price of one share of Common Stock for such date (or the nearest preceding date) on the OTC Bulletin Board, as reported by Bloomberg Financial L.P.; (c) if the Common Stock is not then listed or quoted on the OTC Bulletin Board and if prices for the Common Stock is then reported in the "Pink Sheets" published by the Pink OTC Markets Inc. (or a similar organization or agency succeeding to its functions of reporting prices), the most recent bid price of one share of Common Stock so reported, as reported by Bloomberg Financial L.P.; or (d) in all other cases, the fair market value of one share of Common Stock as determined by an independent appraiser selected in good faith by the Holder and reasonably acceptable to the Company (in each case rounded to four decimal places).

"Warrant Shares" means collectively the shares of Common Stock of the Company issuable upon exercise of the Warrant in accordance with its terms, as such number may be adjusted pursuant to the provisions thereof.

10. LIMITATION ON BENEFICIAL OWNERSHIP. Notwithstanding anything to the contrary contained herein, the Holder shall not be entitled to receive shares of Common Stock or other securities (together with Common Stock, "Equity Interests") upon exercise of this Warrant to the extent (but only to the extent) that such exercise or receipt would cause the Holder Group to become, directly or indirectly, a "beneficial owner" (within the meaning of Section 13(d) of the Exchange Act and the rules and regulations promulgated thereunder) of a number of Equity Interests of a class that is registered under the Exchange Act which exceeds the Maximum Percentage (as defined below) of the Equity Interests of such class that are outstanding at such time. Any purported delivery of Equity Interests in connection with the exercise of the Warrant prior to the termination of this restriction in accordance herewith shall be void and have no effect to the extent (but only to the extent) that such delivery would result in the Holder Group becoming the beneficial owner of more than the Maximum Percentage of the Equity Interests of a class that is registered under the Exchange Act that is outstanding at such time. If any delivery of Equity Interests owed to the Holder following exercise of this Warrant is not made, in whole or in part, as a result of this limitation, the Company's obligation to make such delivery shall not be extinguished and the Company shall deliver such Equity Interests as promptly as practicable after the Holder gives notice to the Company that such delivery would not result in such limitation being triggered or upon termination of the restriction in accordance with the terms hereof. To the extent limitations contained in this Section 10 apply, the determination of whether this Warrant is exercisable and of which portion of this Warrant is exercisable shall be the sole responsibility and in the sole determination of the Holder, and the submission of an Exercise Notice shall be deemed to constitute the Holder's determination that the issuance of the full number of Warrant Shares requested in the Exercise Notice is permitted hereunder, and neither the Company nor any Warrant agent shall have any obligation to verify or confirm the accuracy of such determination. For purposes of this Section 10, (i) the term "Maximum Percentage" shall mean 4.99%; provided, that if at any time after the date hereof the Holder Group beneficially owns in excess of 4.99% of any class of Equity Interests in the Company that is registered under the Exchange Act (excluding any Equity Interests deemed beneficially owned by virtue of this Warrant or the Note), then the Maximum Percentage shall automatically increase to 9.99% so long as the Holder Group owns in excess of 4.99% of such class of Equity Interests (and shall, for the avoidance of doubt, automatically decrease to 4.99% upon the Holder Group ceasing to own in excess of 4.99% of such class of Equity Interests); and (ii) the term "Holder Group" shall mean the Holder plus any other Person with which the Holder is considered to be part of a group under Section 13 of the Exchange Act or with which the Holder otherwise files reports under Sections 13 and/or 16 of the Exchange Act. In determining the number of Equity Interests of a particular class outstanding at any point in time, the Holder may rely on the number of outstanding Equity Interests of such class as reflected in (x) the Company's most recent Annual Report on Form 10-K or Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission, as the case may be, (y) a more recent public announcement by the Company or (z) a more recent notice by the Company or its transfer agent to the Holder setting forth the number of Equity Interests of such class then outstanding. For any reason at any time, upon written or oral request of the Holder, the Company shall, within one (1) Trading Day of such request, confirm orally and in writing to the Holder the number of Equity Interests of any class then outstanding. The provisions of this Section 10 shall be construed, corrected and implemented in a manner so as to effectuate the intended beneficial ownership limitation herein contained.

11. REGISTRATION AND TRANSFER OF WARRANT.

11.1. Registration of Warrant. The Company shall register and record transfers, exchanges, reissuances and cancellations of this Warrant, upon the records to be maintained by the Company for that purpose, in the name of the record holder hereof 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. The Company shall be entitled to rely, and held harmless in acting or refraining from acting in reliance upon, any notices, instructions or documents it believes in good faith to be from an authorized representative of the Holder.

11.2 Transferability. This Warrant and all rights hereunder (including, without limitation, any registration rights) are transferable, in whole or in part, upon surrender of this Warrant at the principal office of the Company or its designated agent, together with a written assignment of this Warrant substantially in the form of assignment (the "Assignment Notice") attached hereto duly executed by the Holder or its agent or attorney. The Company may require the transferor thereof to provide to the Company an opinion of counsel selected by the transferor, the form and substance of which opinion shall be reasonably satisfactory to the Company, to the effect that such transfer does not require registration of the transferred Warrant under the 1933 Act. Upon such surrender, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees, as applicable, and in the denomination or denominations specified in such Assignment Notice, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. This Warrant, if properly assigned in accordance herewith, may be exercised by a new holder for the purchase of Exercise Shares without having a new Warrant issued.

11.3. New Warrants. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 11.2, as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for this Warrant or Warrants to be divided or combined in accordance with such notice. All Warrants issued on transfers or exchanges shall be dated the original Issue Date and shall be identical with this Warrant except as to the number of Exercise Shares issuable pursuant thereto.

12. LOSS, THEFT, DESTRUCTION OR MUTILATION OF WARRANT. The Company covenants that upon receipt by the Company of evidence reasonably satisfactory to it of the loss, theft, destruction or mutilation of this Warrant or any stock certificate relating to the Exercise Shares, and in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to it (which, in the case of this Warrant, shall not include the posting of any bond), and upon surrender and cancellation of such Warrant or stock certificate, if mutilated, the Company will make and deliver a new Warrant or stock certificate of like tenor and dated as of such cancellation, in lieu of such Warrant or stock certificate.

13. REMEDIES. The Company stipulates that the remedies at law of the Holder in the event of any default or threatened default by the Company in the performance of or compliance with any of the terms of this Warrant are not and will not be adequate, and that such terms may be specifically enforced by a decree for the specific performance of any agreement contained herein or by an injunction against a violation of any of the terms hereof or otherwise.

14. NO RIGHTS AS A STOCKHOLDER. Except as otherwise specifically provided herein, 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, conveyance or otherwise), receive notice of meetings, receive dividends or subscription rights, or otherwise, prior to the issuance to the Holder of the Exercise Shares.

15. NOTICES. All notices, requests, demands and other communications that are required or may be given pursuant to the terms of this Warrant shall be in writing and shall be deemed delivered (i) on the date of delivery when delivered by hand on a Business Day during normal business hours or, if delivered on a day that is not a Business Day or after normal business hours, then on the next Business Day, (ii) on the date of transmission when sent by facsimile transmission or email during normal business hours on a Business Day with telephone confirmation of receipt or, if transmitted on a day that is not a Business Day or after normal business hours, then on the next Business Day, or (iii) on the second Business Day after the date of dispatch when sent by a reputable courier service that maintains records of receipt. The addresses for notice shall be as set forth in the Purchase Agreement.

1 6 . CONSENT TO AMENDMENTS. Any term of this Warrant may be amended, and the Company may take any action herein prohibited, or compliance therewith may be waived, only if the Company shall have obtained the written consent (and not without such written consent) to such amendment, action or waiver from the Holder. No course of dealing between the Company and the Holder nor any delay in exercising any rights hereunder shall operate as a waiver of any rights of the Holder.

1 7 . MISCELLANEOUS. In case any provision of this Warrant shall be invalid, illegal or unenforceable, or partially invalid, illegal or unenforceable, the provision shall be enforced to the extent, if any, that it may legally be enforced and the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby. If any provision of this Warrant is found to conflict with the Purchase Agreement, the provisions of this Warrant shall prevail. If any provision of this Warrant is found to conflict with the Note, the provisions of the Note shall prevail. THIS WARRANT SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, AND THE RIGHTS OF THE PARTIES SHALL BE GOVERNED BY, THE INTERNAL LAW OF THE STATE OF DELAWARE EXCLUDING CHOICE-OF-LAW PRINCIPLES OF THE LAW OF SUCH STATE THAT WOULD PERMIT THE APPLICATION OF THE LAWS OF A JURISDICTION OTHER THAN SUCH STATE. The headings in this Warrant are for purposes of reference only, and shall not limit or otherwise affect any of the terms hereof.

[Remainder of Page Intentionally Left Blank]

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed by its duly authorized officer.

Dated as of July ____, 2019

BIO-KEY INTERNATIONAL, INC.

By: _____

Name: Michael W. DePasquale

Title: CEO

FORM OF SUBSCRIPTION

(To be signed only on exercise
of Common Stock Purchase Warrant)

TO: BIO-Key International, Inc.

1. The undersigned Holder of the attached Warrant hereby elects to exercise its purchase right under such Warrant to purchase shares of Common Stock of BIO-Key International, Inc., a Delaware corporation (the "Company"), as follows (check one or more, as applicable):

to exercise the Warrant to purchase _____ shares of Common Stock and to pay the Aggregate Exercise Price therefor by wire transfer of United States funds to the account of the Company, which transfer has been made prior to or as of the date of delivery of this Form of Subscription pursuant to the instructions of the Company;

and/or

to exercise the Warrant with respect to _____ shares of Common Stock pursuant to the net exercise provisions specified in Section 2.3 of the Warrant.

2. In exercising this Warrant, the undersigned Holder hereby confirms and acknowledges that the shares of Common Stock are being acquired solely for the account of the undersigned and not as a nominee for any other party, and for investment, and that the undersigned shall not offer, sell or otherwise dispose of any such shares of Common Stock except under circumstances that will not result in a violation of the Securities Act or any state securities laws. The undersigned hereby further confirms and acknowledges that it is an "accredited investor", as that term is defined under the Securities Act.

3. Please issue a stock certificate or certificates representing the appropriate number of shares of Common Stock in the name of the undersigned or in such other name(s) as is specified below:

Name: _____

Address: _____

TIN: _____

Dated: _____

(Signature must conform exactly to name of Holder as specified on the
face of the Warrant)

FORM OF ASSIGNMENT
(To be signed only on transfer of Warrant)

For value received, the undersigned hereby sells, assigns, and transfers unto _____ the right represented by the within Warrant to purchase _____ shares of Common Stock of BIO-Key International, Inc., a Delaware corporation, to which the within Warrant relates, and appoints _____ attorney to transfer such right on the books of BIO-Key International, Inc., with full power of substitution in the premises.

[insert name of Holder]

Dated: _____

By: _____

Title: _____

[insert address of Holder]

Signed in the presence of:

CERTIFICATION

I, Michael W. DePasquale, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BIO-key International, Inc. (the "Company");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;
5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Dated: August 14, 2019

/s/ Michael W. DePasquale
Michael W. DePasquale
Chief Executive Officer

CERTIFICATION

I, Cecilia C. Welch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BIO-key International, Inc. (the "Company");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;
5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Dated: August 14, 2019

/s/ Cecilia C. Welch
Cecilia C. Welch
Chief Financial Officer

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

In connection with the Quarterly Report of BIO-key International, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael W. DePasquale, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

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

BIO-KEY INTERNATIONAL, INC.

By: /s/ Michael W. DePasquale
Michael W. DePasquale
Chief Executive Officer

Dated: August 14, 2019

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

In connection with the Quarterly Report of BIO-key International, Inc. (the "Company") on Form 10-Q for the period ended June 30, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Cecilia Welch, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of The Sarbanes-Oxley Act of 2002, that to my knowledge:

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

BIO-KEY INTERNATIONAL, INC.

By: /s/ Cecilia C. Welch
Cecilia C. Welch
Chief Financial Officer

Dated: August 14, 2019