

BIO KEY INTERNATIONAL INC  
Form S-1/A  
December 27, 2013

**As filed with the Securities and Exchange Commission on December 27, 2013**

**Registration No. 333-192504**

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**WASHINGTON, D.C. 20549**

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**AMENDMENT NO. 1 TO**

**FORM S-1**

**REGISTRATION STATEMENT**

**UNDER THE SECURITIES ACT OF 1933**

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**BIO-KEY INTERNATIONAL, INC.**

(Exact name of registrant as specified in its charter)

Delaware	3576	41-1741861
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

3349 Highway 138, Building A, Suite E  
Wall, NJ 07719  
(732) 359-1100  
(Address, including zip code, and telephone number,

including area code, of registrant's principal executive offices)

Michael W. DePasquale  
Chief Executive Officer  
BIO-Key International, Inc.  
3349 Highway 138, Building A, Suite E  
Wall, NJ 07719  
(732) 359-1100

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copy to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable following the effectiveness of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of “large accelerated filer,” “accelerated filer” and “smaller reporting company” in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

## **EXPLANATORY NOTE**

In accordance with Rule 429 under the Securities Act of 1933, as amended (the “Securities Act”), the prospectus included herein is a combined prospectus which relates to the Registrant’s Registration Statement on Form S-1, File No. 333-190200, which was first filed on July 26, 2013, as amended, (the “July Registration Statement”), as well as the registration of additional securities as set forth herein. This Registration Statement constitutes the first post-effective amendment to the July Registration Statement, as well as a new Registration Statement for the registration of additional securities. The post-effective amendment shall hereafter become effective concurrently with the effectiveness of this Registration Statement in accordance with Section 8(a) of the Securities Act .

The information in this prospectus is not complete and may be changed. The selling security holders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

**SUBJECT TO COMPLETION, DATED DECEMBER 27, 2013**

**PRELIMINARY PROSPECTUS**

**BIO-KEY INTERNATIONAL, INC.**

65,733,688 shares of common stock

The 65,733,688 shares of our common stock, \$.0001 par value per share, are being offered by the selling security holders identified in this prospectus. The shares of common stock offered by the selling security holders consist of:

- 24,647,337 shares of common stock issued in our October 2013 and November 2013 private offerings;
- 412,067 shares of common stock issued pursuant to certain anti-dilution rights held by certain investors in our July 2013 private offering;
- 24,647,337 shares of common stock underlying warrants issued in our October 2013 and November 2013 private offerings with an exercise price of \$0.25 per share, which expire three years after the date of grant;
- 12,526,941 shares of common stock issued in our February 2013 and July 2013 private offerings; and
- 3,500,006 shares of common stock underlying warrants issued in our July 2013 private offering with an amended exercise price of \$0.25 per share, which expire five years after the date of grant ;

The selling security holders may sell the shares covered by this prospectus through public or private transactions at prevailing market prices or at privately negotiated prices. We will not receive any part of the proceeds from sales of these shares by the selling security holders; however, we will receive proceeds upon any exercise of the warrants by the selling security holders.

Our common stock trades on the OTCB Marketplace under the symbol "BKYL." The closing price of our common stock on the OTCQB Marketplace on December 26, 2013, was \$0.15 per share.

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**Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 2 of this prospectus.**

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is \_\_\_\_\_, 2013.

## TABLE OF CONTENTS

PROSPECTUS SUMMARY	1
RISK FACTORS	2
DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS	8
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	9
BUSINESS	22
MANAGEMENT	27
EXECUTIVE COMPENSATION	29
SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT	33
CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS	34
DESCRIPTION OF SECURITIES	34
MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS	36
THE OFFERING	37
SELLING SECURITY HOLDERS	38
USE OF PROCEEDS	41
PLAN OF DISTRIBUTION	41
LEGAL MATTERS	43
EXPERTS	43
ABOUT THIS PROSPECTUS	43
WHERE YOU CAN FIND MORE INFORMATION	43
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS	F-1

**You should rely only on the information contained in or incorporated by reference into this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer of these securities in any state where the offer is not permitted. You should not assume that the information provided in this prospectus is accurate as of any date other than the date on the front of this prospectus.**

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## PROSPECTUS SUMMARY

This summary highlights selected information contained elsewhere in this prospectus. This summary does not contain all of the information that you should consider before investing in the common stock. You should read carefully the entire prospectus, including “*Risk Factors*” and the financial statements and notes thereto, before making an investment decision.

Unless otherwise indicated or the context otherwise requires, all references to the “Company,” the “registrant” “we,” “us” or “our” and similar terms in this prospectus refer to BIO-Key International, Inc. and its subsidiaries.

### **BIO-Key International, Inc.**

We were founded in 1993 as a fingerprint biometric technology company. Biometric technology is the science of analyzing specific human characteristics which are unique to each individual in order to identify a specific person from a broader population.

We develop and market advanced fingerprint biometric identification and identity verification technologies, cryptographic authentication-transaction security technologies, as well as related Identity Management and Credentialing software solutions. We were pioneers in developing automated, finger identification technology that supplements or compliments 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.

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™, or VST™, WEB-key® and BSP development kits are fingerprint biometric solutions that provide true interoperability with all major reader manufacturers, enabling application developers and integrators to seamlessly integrate fingerprint biometrics into their virtual applications.

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 and access control markets. Our primary market focus includes mobile payments and

credentialing, online payments and credentialing, and healthcare record and payment data security, among other things. Our secondary focus includes government markets, primarily law enforcement forensic investigation and the Department of Homeland Security.

We continue to research and develop advancements in our capabilities, as well as exploring and developing potential strategic relationships, including potential business combinations and acquisitions, which could help us leverage our capability to deliver our solutions. We have built a direct sales force of professionals, and also team with resellers, integrators and partner networks with substantial experience in selling technology solutions to government and corporate customers.

Our principal executive offices are located at 3349 Highway 138, Building A, Suite E, Wall, NJ 07719, and our telephone number is (732) 359-1100. We maintain a website at [www.bio-key.com](http://www.bio-key.com). Information contained on our website does not constitute part of this prospectus.

## **The Offering**

This prospectus covers the public sale of 65,733,688 shares of common stock to be sold by the selling security holders identified in this prospectus, which consist of 37,586,345 shares of common stock and 28,147,343 shares issuable upon the exercise of warrants. We issued (i) 24,647,337 shares of common stock and warrants to acquire 24,647,337 shares of common stock in private offerings which closed in October 2013 and November 2013 for gross cash consideration of \$3,697,099.95, (ii) 412,067 shares of common stock pursuant to certain anti-dilution rights held by certain investors in our July 2013 private offering, (iii) 9,026,935 shares of common stock in February 2013 for gross cash consideration of \$902,963, and (iv) 3,500,006 shares of common stock and warrants to acquire 3,500,006 shares of common stock in July 2013 for gross cash consideration of \$1,050,000. We will not receive any proceeds from the sale of the common stock by the selling security holders. We will, however, receive proceeds from any exercise of the warrants held by the selling security holders. If such warrants are exercised in full, we would receive gross cash proceeds of \$7,036,835.75. Any such proceeds are currently expected to be used for working capital and general corporate purposes. No assurances can be given that any of the warrants will be exercised.

The selling security holders may sell the shares covered by this prospectus through public or private transactions at prevailing market prices or at privately negotiated prices. We will not receive any part of the proceeds from sales of these shares by the selling security holders.

## **RISK FACTORS**

*An investment in our common stock involves a high degree of risk. You should carefully consider the following risk factors in addition to other information in this prospectus before purchasing our common stock. The risks and uncertainties described below are those that we currently deem to be material and that we believe are specific to our company, our industry and our stock. In addition to these risks, our business may be subject to risks currently unknown to us. If any of these or other risks actually occurs, our business may be adversely affected, the trading price of our common stock may decline and you may lose all or part of your investment.*

### **Business and Financial Risks**

*Based on our lack of significant revenue and recurring losses from operations since inception, our auditors have included an explanatory paragraph in their opinion as to the substantial doubt about our ability to continue as a going concern.*

Due to, among other factors, our history of losses and limited revenue, our independent auditors have included an explanatory paragraph in their opinion for the year ended December 31, 2012 as to the substantial doubt about our ability to continue as a going concern. Our financial statements have been prepared in accordance with accounting principles generally accepted in the United States, which contemplate that we will continue to operate as a going concern. Our financial statements do not contain any adjustments that might result if we are unable to continue as a going concern.

*Since our formation, we have historically generated minimal revenue and have sustained substantial operating losses which may continue.*

As of September 30, 2013, we had a working capital deficit of \$771,764 and an accumulated deficit of \$53,941,385. Since our inception, we have focused almost exclusively on developing our core technologies and, until the fourth quarter of 2004, had not generated any significant revenue. In order to increase revenue, we have developed a direct sales force and anticipate the need to retain additional sales, marketing and technical support personnel and may need to incur substantial expenses. We cannot assure you that we will be able to secure these necessary resources, that a significant market for our technologies will develop, or that we will be able to achieve our targeted revenue. If we are unable to achieve revenue or raise capital sufficient to cover our ongoing operating expenses, we will be required to scale back operations, including marketing and research initiatives, or in the extreme case, discontinue operations.

*Our biometric technology has yet to gain widespread market acceptance and we do not know whether a significant market will develop for our technology.*

Biometric technology has received only limited market acceptance, particularly in the private sector. Our technology represents a novel security solution and we have not yet generated significant sales. Although recent security concerns relating to identification of individuals and appearance of biometric readers on popular consumer products, including the Apple iPhone 5S®, have increased interest in biometrics generally, it remains an undeveloped, evolving market. Biometric based solutions compete with more traditional security methods including keys, cards, personal identification numbers and security personnel. Acceptance of biometrics as an alternative to such traditional methods depends upon a number of factors including:

national or international events which may affect the need for or interest in biometric solutions;

the performance and reliability of biometric solutions;

marketing efforts and publicity regarding these solutions;

public perception regarding privacy concerns;

costs involved in adopting and integrating biometric solutions;

proposed or enacted legislation related to privacy of information; and

competition from non-biometric technologies that provide more affordable, but less robust, authentication (such as tokens and smart cards).

For these reasons, we are uncertain whether our biometric technology will gain widespread acceptance in any commercial markets or that demand will be sufficient to create a market large enough to produce significant revenue or earnings. Our future success depends, in part, upon business customers adopting biometrics generally, and our solution specifically.

*Biometric technology is a new approach to Internet security which must be accepted in order for our WEB-key® solution to generate significant revenue.*

Our WEB-key ® authentication initiative represents a new approach to Internet security which has been adopted on a limited basis by companies which distribute goods, content or software applications over the Internet. The implementation of our WEB-key ® solution requires the distribution and use of a finger scanning device and integration of database and server side software. Although we believe our solutions provide a higher level of security for information transmitted over the Internet than existing traditional methods, unless business and consumer markets embrace the use of a scanning device and believe the benefits of increased accuracy outweigh implementation costs, our solution will not gain market acceptance.

***The market for our solutions is still developing and if the biometrics industry adopts standards or a platform different from our standards or platform, then our competitive position would be negatively affected.***

The market for identity solutions is still developing. The evolution of this market may result in the development of different technologies and industry standards that are not compatible with our current solutions, products or technologies.

Several organizations set standards for biometrics to be used in identification and documentation. Although we believe that our biometric technologies comply with existing standards, these standards may change and any standards adopted could prove disadvantageous to or incompatible with the our business model and current or future solutions, products and services.

***Our software products may contain defects which will make it more difficult for us to establish and maintain customers.***

Although we have completed the development of our core biometric technology, it has only been used by a limited number of business customers. Despite extensive testing during development, our software may contain undetected design faults and software errors, or “bugs” that are discovered only after it has been installed and used by a greater number of customers. Any such defect or error in new or existing software or applications could cause delays in delivering our technology or require design modifications. These could adversely affect our competitive position and cause us to lose potential customers or opportunities. Since our technologies are intended to be utilized to secure physical and electronic access, the effect of any such bugs or delays will likely have a detrimental impact on us. In addition, given that biometric technology generally, and our biometric technology specifically, has yet to gain widespread acceptance in the market, any delays would likely have a more detrimental impact on our business than if we were a more established company.

While we have commenced a significant sales and marketing effort, we have only begun to develop a significant distribution channel and may not have the resources or ability to sustain these efforts or generate any meaningful sales.

***In order to generate revenue from our biometric products, we are dependent upon independent original equipment manufacturers, system integrators and application developers, which we do not control. As a result, it may be more difficult to generate sales.***

We market our technology through licensing arrangements with:

Original equipment manufacturers, system integrators and application developers which develop and market products and applications which can then be sold to end users; and

Companies which distribute goods, services or software applications over the Internet.

As a technology licensing company, our success will depend upon the ability of these manufacturers and developers to effectively integrate our technology into products and services which they market and sell. We have no control over these licensees and cannot assure you that they have the financial, marketing or technical resources to successfully develop and distribute products or applications acceptable to end users or generate any meaningful revenue for us. These third parties may also offer the products of our competitors to end users.

***We face intense competition and may not have the financial and human resources necessary to keep up with rapid technological changes, which may result in our technology becoming obsolete.***

The Internet, facility access control and information security markets are subject to rapid technological change and intense competition. We compete with both established biometric companies and a significant number of startup enterprises as well as providers of more traditional methods of access control. Most of our competitors have substantially greater financial and marketing resources than we do and may independently develop superior technologies, which may result in our technology becoming less competitive or obsolete. We may not be able to keep pace with this change. If we are unable to develop new applications or enhance our existing technology in a timely manner in response to technological changes, we will be unable to compete in our chosen markets. In addition, if one or more other biometric technologies such as voice, face, iris, hand geometry or blood vessel recognition are widely adopted, it would significantly reduce the potential market for our fingerprint identification technology.

***We depend on key employees and members of our management team, including our Chairman of the Board and Chief Executive Officer, in order to achieve our goals. We cannot assure you that we will be able to retain or attract such persons.***

Our consulting contract with Thomas J. Colatosti, our Chairman of the Board, expired in December 2011. Mr. Colatosti continues, however, to assist us in the areas of strategic planning and corporate finance. In addition, our employment contract with Michael W. DePasquale, our Chief Executive Officer, expires in March each year, and renews automatically for successive one year periods unless we provide notice of non-renewal. Although the contract does not prevent him from resigning, it does contain confidentiality and non-compete clauses which are intended to prevent him from working for a competitor within one year after leaving our Company. Our success depends on our ability to attract, train and retain employees with expertise in developing, marketing and selling software solutions. In order to successfully market our technology, we will need to retain additional engineering, technical support and marketing personnel. The market for such persons remains highly competitive and our limited financial resources will make it more difficult for us to recruit and retain qualified persons.



***We cannot assure you that the intellectual property protection for our core technology provides a sustainable competitive advantage or barrier to entry against our competitors.***

Our success and ability to compete is dependent in part upon proprietary rights to our technology. We rely primarily on a combination of patent, copyright and trademark laws, trade secrets and technical measures to protect our propriety rights. We have filed a patent application relating to both the optic technology and biometrics solution components of our technology wherein several claims have been allowed. Over the last few years, the U.S. Patent Office has issued us a series of patents for our Vector Segment fingerprint technology (VST), and our other core biometric analysis and identification technologies. However, we cannot assure you that we will be able to adequately protect our technology or other intellectual property from misappropriation in the U.S. and abroad. Any patent issued to us could be challenged, invalidated or circumvented or rights granted thereunder may not provide a competitive advantage to us. Furthermore, patent applications that we file may not result in issuance of a patent or, if a patent is issued, the patent may not be issued in a form that is advantageous to us. Despite our efforts to protect our intellectual property rights, others may independently develop similar products, duplicate our products or design around our patents and other rights. In addition, it is difficult to monitor compliance with, and enforce, our intellectual property rights on a worldwide basis in a cost-effective manner. In jurisdictions where foreign laws provide less intellectual property protection than afforded in the U.S. and abroad, our technology or other intellectual property may be compromised, and our business would be materially adversely affected. If any of our proprietary rights are misappropriated or we are forced to defend our intellectual property rights, we will have to incur substantial costs. Such litigation could result in substantial costs and diversion of our resources, including diverting the time and effort of our senior management, and could disrupt our business, as well as have a material adverse effect on our business, prospects, financial condition and results of operations. We can provide no assurance that we will have the financial resources to oppose any actual or threatened infringement by any third party. Furthermore, any patent or copyrights that we may be granted may be held by a court to infringe on the intellectual property rights of others and subject us to the payment of damage awards.

***We may be subject to claims with respect to the infringement of intellectual property rights of others, which could result in substantial costs and diversion of our financial and management resources.***

Third parties may claim that we are infringing on their intellectual property rights. We may violate the rights of others without our knowledge. We may expose ourselves to additional liability if we agree to indemnify our customers against third party infringement claims. While we know of no basis for any claims of this type, the existence of and ownership of intellectual property can be difficult to verify and we have not made an exhaustive search of all patent filings. Additionally, most patent applications are kept confidential for twelve to eighteen months, or longer, and we would not be aware of potentially conflicting claims that they make. We may become subject to legal proceedings and claims from time to time relating to the intellectual property of others in the ordinary course of our business. If we are found to have violated the intellectual property rights of others, we may be enjoined from using such intellectual property, and we may incur licensing fees or be forced to develop alternative technology or obtain other licenses. In addition, we may incur substantial expenses in defending against these third party infringement claims and be diverted from devoting time to our business and operational issues, regardless of the merits of any such claim.

In addition, in the event that we recruit employees from other technology companies, including certain potential competitors, and these employees are used in the development of portions of products which are similar to the development in which they were involved at their former employers, we may become subject to claims that such employees have improperly used or disclosed trade secrets or other proprietary information. If any such claims were to arise in the future, litigation or other dispute resolution procedures might be necessary to retain our ability to offer our current and future services, which could result in substantial costs and diversion of our financial and management resources. Successful infringement or licensing claims against us may result in substantial monetary damages, which may materially disrupt the conduct of our business and have a material adverse effect on our reputation, business, financial condition and results of operations. Even if intellectual property claims brought against us are without merit, they could result in costly and time consuming litigation, and may divert our management and key personnel from operating our business.

***If we are unable to effectively protect our intellectual property rights on a worldwide basis, we may not be successful in the international expansion of our business.***

Access to worldwide markets depends in part on the strength of our intellectual property portfolio. There can be no assurance that, as our business expands into new areas, we will be able to independently develop the technology, software or know-how necessary to conduct our business or that we can do so without infringing the intellectual property rights of others. To the extent that we have to rely on licensed technology from others, there can be no assurance that we will be able to obtain licenses at all or on terms we consider reasonable. The lack of a necessary license could expose us to claims for damages and/or injunction from third parties, as well as claims for indemnification by our customers in instances where we have a contractual or other legal obligation to indemnify them against damages resulting from infringement claims. With regard to our own intellectual property, we actively enforce and protect our rights. However, there can be no assurance that our efforts will be adequate to prevent the misappropriation or improper use of our protected technology in international markets.

***We face inherent product liability or other liability risks that could result in large claims against us.***

We have inherent risk of exposure to product liability and other liability claims resulting from the use of our products, especially to the extent customers may depend on our products in public safety situations that may involve physical harm or even death to individuals, as well as exposure to potential loss or damage to property. Despite quality control systems and inspection, there remains an ever-present risk of an accident resulting from a faulty manufacture or maintenance of products, or an act of an agent outside of our or our supplier's control. Even if our products perform properly, we may become subject to claims and costly litigation due to the catastrophic nature of the potential injury and loss. A product liability claim, or other legal claims based on theories including personal injury or wrongful death, made against us could adversely affect operations and financial condition. Although we may have insurance to cover product liability claims, the amount of coverage may not be sufficient.

***We expect that we will need to obtain additional financing to execute our business plan over the long-term, which may not be available. If we are unable to raise additional capital or generate significant revenue, we may not be able to continue operations.***

Since our inception, we have not generated significant, recurring revenue and have experienced substantial losses.

In February 2013, we raised additional capital of approximately \$500,000 from certain private and institutional investors and \$900,000 from DRNC Holdings, Inc. (“DRNC”) through a combination of debt and equity. In July 2013, we raised additional capital before expenses of approximately \$1,050,000 from certain private investors through sales of our equity securities. In October 2013 and November 2013, we raised additional capital before expenses of approximately \$3,697,100 from certain private investors through sales of our equity securities.

We believe that we have sufficient cash resources to fund operations for at least the next twelve months. If we are unable to generate sufficient revenue to cover operating expenses and fund our business plan, 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.

We cannot assure you that we will ever be able to secure any such additional financing on terms acceptable to us or at all. If we cannot obtain such financing, we will not be able to execute our business plan, will be required to reduce operating expenses, and in the extreme case, discontinue operations.

***We may not achieve sustainable profitability with respect to the biometric component of our business if we are unable to maintain, improve and develop the wireless data services we offer.***

We believe that our future business prospects depend in part on our ability to maintain and improve our current services and to develop new ones on a timely basis. Our services will have to achieve market acceptance, maintain technological competitiveness, and meet an expanding range of customer requirements. As a result of the complexities inherent in our service offerings, major new wireless data services and service enhancements require long development and testing periods. We may experience difficulties that could delay or prevent the successful development, introduction or marketing of new services and service enhancements. Additionally, our new services and service enhancements may not achieve market acceptance. If we cannot effectively develop and improve services, we may not be able to recover our fixed costs or otherwise become profitable.

*If we fail to adequately manage our resources, it could have a severe negative impact on our financial results or stock price.*

We could be subject to fluctuations in technology spending by existing and potential customers. Accordingly, we will have to actively manage expenses in a rapidly changing economic environment. This could require reducing costs during economic downturns and selectively growing in periods of economic expansion. If we do not properly manage our resources in response to these conditions, our results of operations could be negatively impacted.

The cash required to pay such accelerated amounts on the secured notes following an event of default would most likely come out of our working capital. As we rely on our working capital for our day to day operations, we may have insufficient funds to satisfy such amount, and can be forced to restructure, file for bankruptcy, sell assets or cease operations, all of which would have a material adverse effect on our business, operating results and financial condition. In addition, upon an event of default, the holder of the secured debt could foreclose on our assets or exercise any other remedies available to them, including taking possession of and selling our intellectual property or other assets. If our assets were foreclosed upon, we would most likely be forced to file for bankruptcy or cease operations; stockholders may not receive any proceeds from disposition of our assets and may lose their entire investment in our stock.

***Our obligations to the holder of our outstanding secured note may adversely affect our ability to enter into potential significant transactions with other parties.***

We will need to obtain the consent of the holder of our secured note before we can take certain actions, including the issuance of any loan or debt secured by our assets. Accordingly, unless we obtain such consent, we may not be able to enter into certain transactions.

***Our business could be negatively impacted by security threats, including cybersecurity threats, and other disruptions.***

As a technology company, we face various security threats, including cybersecurity threats to gain unauthorized access to sensitive information. Although we utilize various procedures and controls to monitor these threats and mitigate our exposure to such threats, there can be no assurance that these procedures and controls will be sufficient in preventing security threats from materializing. If any of these events were to materialize, they could lead to losses of sensitive information, critical infrastructure, personnel or capabilities, essential to our operations and could have a material adverse effect on our reputation, financial position, results of operations, or cash flows.

Cybersecurity attacks in particular are evolving and include but are not limited to, malicious software, attempts to gain unauthorized access to data, and other electronic security breaches that could lead to disruptions in critical systems, unauthorized release of confidential or otherwise protected information and corruption of data. These events could damage our reputation and lead to financial losses from remedial actions, loss of business or potential liability.

## **Risks Related To Our Common Stock**

***We have issued a substantial number of securities that are convertible into shares of our common stock which could result in substantial dilution to the ownership interests of our existing stockholders.***

As of the date of this prospectus, approximately 44,369,129 shares of our common stock were reserved for issuance upon exercise or conversion of the following securities:

44,059,736 shares upon exercise of outstanding stock options and warrants; and

309,393 shares upon exercise of options available for future grant under our existing option plans.

The exercise or conversion of these securities will result in a significant increase in the number of outstanding shares and substantially dilute the ownership interests of our existing stockholders.

***Applicable SEC Rules governing the trading of “penny stocks” limits the trading and liquidity of our common stock, which may adversely affect the trading price of our common stock and the ability to sell our shares.***

Our common stock currently trades on the OTC Bulletin Board. Since our common stock continues to trade below \$5.00 per share, our common stock is considered a “penny stock” and is subject to SEC rules and regulations, which impose limitations upon the manner in which our shares can be publicly traded. These regulations require the delivery, prior to any transaction involving a penny stock, of a disclosure schedule explaining the penny stock market and the associated risks. Under these regulations, certain brokers who recommend such securities to persons other than established customers or certain accredited investors must make a special written suitability determination regarding such a purchaser and receive such purchaser’s written agreement to a transaction prior to sale. These regulations have the effect of limiting the trading activity of our common stock and reducing the liquidity of an investment in our common stock.

***We expect to raise additional funds in the future through issuances of securities and such additional funding may be dilutive to stockholders or impose operational restrictions.***

We expect that we will need to raise additional capital in the future to help fund our operations through sales of shares of our common stock or securities convertible into shares of our common stock, as well as issuances of debt. Such additional financing may be dilutive to our stockholders, and debt financing, if available, may involve restrictive covenants which may limit our operating flexibility. If additional capital is raised through the issuance of shares of our common stock or securities convertible into shares of our common stock, the percentage ownership of existing stockholders will be reduced. These stockholders may experience additional dilution in net book value per share and any additional equity securities may have rights, preferences and privileges senior to those of the holders of our common stock.

***Because we do not expect to pay dividends for the foreseeable future, investors seeking cash dividends should not purchase shares of common stock.***

We have never declared or paid any cash dividends on our common stock. We currently intend to retain future earnings, if any, to finance the expansion of our business. As a result, we do not anticipate paying any cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including but not limited to our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. Accordingly, investors seeking cash dividends should not purchase our shares.

***Provisions of our certificate of incorporation, bylaws and Delaware law may make a contested takeover of our Company more difficult.***

Certain provisions of our certificate of incorporation, bylaws and the General Corporation Law of the State of Delaware ("DGCL") could deter a change in our management or render more difficult an attempt to obtain control of us, even if such a proposal is favored by a majority of our stockholders. For example, we are subject to the provisions of the DGCL that prohibit a public Delaware corporation from engaging in a broad range of business combinations with a person who, together with affiliates and associates, owns 15% or more of the corporation's outstanding voting shares (an "interested stockholder") for three years after the person became an interested stockholder, unless the business combination is approved in a prescribed manner. Our certificate of incorporation also includes undesignated preferred stock, which may enable our board of directors to discourage an attempt to obtain control of us by means of a tender offer, proxy contest, merger or otherwise. Finally, our bylaws include an advance notice procedure for stockholders to nominate directors or submit proposals at a stockholders meeting. Delaware law and our charter may, therefore, inhibit a takeover.

*The trading price of our common stock may be volatile.*

The trading price of our shares has from time to time fluctuated widely and in the future may be subject to similar fluctuations. The trading price may be affected by a number of factors including the risk factors set forth in this prospectus as well as our operating results, financial condition, announcements of innovations or new products by us or our competitors, general conditions in the biometrics and access control industries, and other events or factors. Although we believe that approximately 15 registered broker dealers currently make a market in our common stock, we cannot assure you that any of these firms will continue to serve as market makers or have the financial capability to stabilize or support our common stock. A reduction in the number of market makers or the financial capability of any of these market makers could also result in a decrease in the trading volume of and price of our shares. In recent years broad stock market indices, in general, and the securities of technology companies, in particular, have experienced substantial price fluctuations. Such broad market fluctuations may adversely affect the future-trading price of our common stock.

## DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

The information contained in this prospectus contains certain forward-looking statements. All statements other than statements of historical facts contained or incorporated by reference in this prospectus, 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; infringement on 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 our products under development; 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**” on page 2 of this prospectus. 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 any forward-looking statement, whether as a result of new information, future events or otherwise.



## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

*This Management's Discussion and Analysis of Financial Condition and Results of Operations, and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties. All forward-looking statements included in this prospectus are based on information available to us on the date hereof, and we assume no obligation to update any such forward-looking statements. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of a number of factors, including those set forth in the section captioned "Risk Factors" on page 2 of this prospectus. The following should be read in conjunction with our audited financial statements included elsewhere herein.*

### OVERVIEW

BIO-key International, Inc. (the "Company," "BIO-key," "we," or "us") was founded in 1993 as a fingerprint biometric technology company. Biometric technology is the science of analyzing specific human characteristics which are unique to each individual in order to identify a specific person from a broader population.

We develop and market advanced fingerprint biometric identification and identity verification technologies, cryptographic authentication-transaction security technologies, as well as related identity management and credentialing software solutions. We were pioneers in developing automated, finger identification technology that supplements or compliments 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.

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™ 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 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, mobile payments & credentialing, online payments and credentialing, and healthcare record and payment data security. Our

secondary focus includes government markets, primarily law enforcement forensic investigation and Homeland Security.

## **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.

In October 2013, Apple Computer Corporation released the Apple iPhone 5s smartphone (“5s”). We believe the 5s to be the first broadly distributed smartphone to incorporate fingerprint biometrics in the phone. Since that time, HTC Corporation has also released a fingerprint biometric enabled smartphone. We believe other smartphone, tablet, laptop and related smart-device manufacturers will additionally make fingerprint-enabled smart devices available for consumer applications. 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.

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

corporate network access control, including corporate campuses, computer networks and applications;

consumer mobile credentialing, including mobile payments, credit and payment card programs, data and application access, and commercial loyalty programs; and.

government services and highly regulated industries, including Medicare, Medicaid, Social Security, drivers licenses, campus and school ID, passports/visas.

In the near-term, we expect to grow our business within government services and highly-regulated industries in which we have historically had a strong presence, such as the healthcare industry. We believe that continued heightened security and privacy requirements in these industries will generate increased demand for security solutions, including biometrics.

Over the longer term, 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.

## **CRITICAL ACCOUNTING POLICIES**

For detailed information on 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, 2012. 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.

## **RECENT ACCOUNTING PRONOUNCEMENTS**

On July 18, 2013, the FASB issued Accounting Standards Update No. 2013-11, "Income Taxes (Topic 740): Presentation of an Unrecognized Tax Benefit When a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists" ("ASU 2013-11"). ASU 2013-11 is expected to reduce diversity in practice by providing guidance on the presentation of unrecognized tax benefits and will better reflect the manner in which an entity would settle at the reporting date any additional income taxes that would result from the disallowance of a tax position when net operating loss carryforwards, similar tax losses, or tax credit carryforwards exist. The amendments in this update should be applied prospectively for annual and interim periods beginning after December 15, 2013. The Company is currently evaluating the impact of its pending adoption of ASU 2013-11 on its 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.

**RESULTS OF OPERATIONS****THREE MONTHS ENDED SEPTEMBER 30, 2013 AS COMPARED TO SEPTEMBER 30, 2012****Consolidated Results of Operations - Percent Trend**

	<b>Three Months Ended</b>		<b>September 30, 2013</b>		<b>2012</b>	
<b>Revenues</b>						
Services	57	%	37	%		
License fees and other	43	%	63	%		
	100	%	100	%		
<b>Costs and other expenses</b>						
Cost of services	11	%	4	%		
Cost of license fees and other	13	%	20	%		
	24	%	24	%		
Gross Profit	76	%	76	%		
<b>Operating expenses</b>						
Selling, general and administrative	172	%	80	%		
Research, development and engineering	82	%	51	%		
	254	%	131	%		
<b>Operating loss</b>	-177	%	-55	%		
<b>Other deductions</b>						
Total other deductions	-4	%	-2	%		
<b>Net loss</b>	-181	%	-57	%		

**Three months  
ended****September 30,****2013****2012****\$****Change****%****Change***Revenues*

Service	\$246,760	\$151,044	\$95,716	63	%
License & other	184,816	258,875	(74,059)	-29	%
<i>Total Revenue</i>	\$431,576	\$409,919	\$21,657	5	%

*Cost of goods sold*

Service	\$47,531	\$18,479	\$29,052	157	%
License & other	55,439	80,788	(25,349)	-31	%
<i>Total COGS</i>	\$102,970	\$99,267	\$3,703	4	%

**Revenues**

For the three months ended September 30, 2013 and 2012, service revenues included approximately \$153,000 and \$151,000, respectively, of recurring maintenance and support revenue, and approximately \$93,000 and \$0 of non-recurring custom services revenue, respectively. Recurring service revenue increased during the current period as we continued to bundle maintenance agreements to our expanding customer license base.

License and other revenue (comprised of third party hardware and royalties) decreased during the three months ended September 30, 2013. The decrease consisted of an approximate \$38,000 or 38% decrease in our core software and royalty revenue which was offset by a \$12,000 or 12% increase in third party hardware sales. Royalty income during the three months ended September 30, 2013 was derived from an OEM agreement, and resulted in a 53% decrease in revenue of approximately \$23,500, due to a cancelled international contract.

***Costs of goods sold***

During the three months ended September 30, 2013, cost of services increased approximately \$29,000 from the corresponding period in 2012 due to increased associated requirements for non-recurring custom services revenue.

License and other costs for the three months ended September 30, 2013 decreased \$25,000 from the corresponding period in 2012 due to a decrease in hardware orders and associated costs.

***Selling, general and administrative***

	<b>Three months ended</b>			
	<b>September 30,</b>			
	<b>2013</b>	<b>2012</b>	<b>\$ Change</b>	<b>% Change</b>
<b>Selling, general and administrative</b>	\$740,725	\$329,881	\$410,844	125 %

Selling, general and administrative expenses increased by 125% during the three months ended September 30, 2013 from the corresponding period in 2012. The increase is largely attributable to a reversal of the allowance for doubtful accounts of \$300,000 in 2012 as we had previously set up an allowance of 75% of the balance due under a contract whose payments were behind schedule. The reversal represents 75% of a payment received under the contract in the third quarter of 2012. Other increases consisted of increased trade show attendance fees, enhanced website expenses, channel marketing expense, and new personnel costs.

***Research, development and engineering***

	<b>Three months ended</b>			
	<b>September 30,</b>			
	<b>2013</b>	<b>2012</b>	<b>\$ Change</b>	<b>% Change</b>

**Research, development and engineering** \$353,583 \$207,186 \$146,397 71 %

During the three months ended September 30, 2013, research, development and engineering costs increased 71% as we engaged temporary outside services and hired additional personnel for a specific projects.

*Other income and expense*

	Three months ended				
	September 30,				
	2013	2012	\$ Change	% Change	
<b>Interest expense</b>	(13,942)	(6,194)	(7,747 )	125	%
<b>Franchise tax</b>	(2,910 )	-	(2,910 )	100	%
<b>Total</b>	\$ (16,852)	(6,194)	\$ (10,657)	172	%

Interest expense during the three months ended September 30, 2013 was comprised of accrued interest on the promissory note issued in 2013 (see Note 5 to our financial statements contained elsewhere in this report), and the amortized portion of the deferred financing costs incurred in connection with the issuance of such note. Interest expense for the three months ended September 30, 2012 consisted of interest on the promissory note issued in 2010. Estimated minimum taxes due for 2013 were paid September 2013.



**NINE MONTHS ENDED SEPTEMBER 30, 2013 AS COMPARED TO SEPTEMBER 30, 2012****Consolidated Results of Operations - Percent Trend**

	<b>Nine Months Ended</b>	
	<b>September 30,</b>	
	<b>2013</b>	<b>2012</b>
<b>Revenues</b>		
Services	47 %	30 %
License fees and other	53 %	70 %
	100 %	100 %
<b>Costs and other expenses</b>		
Cost of services	7 %	7 %
Cost of license fees and other	12 %	11 %
	19 %	18 %
Gross Profit	81 %	82 %
<b>Operating expenses</b>		
Selling, general and administrative	124 %	71 %
Research, development and engineering	54 %	31 %
	178 %	102 %
<b>Operating loss</b>	-97 %	-20 %
<b>Other deductions</b>		
Total other deductions	-2 %	-1 %
<b>Net Income (loss)</b>	-99 %	-21 %

**Nine months ended**

	<b>September 30,</b>			
	<b>2013</b>	<b>2012</b>	<b>\$ Change</b>	<b>% Change</b>
<i>Revenues</i>				
Service	\$781,172	\$714,212	\$66,960	9 %
License & other	877,304	1,638,847	(761,543)	-46 %
<i>Total Revenue</i>	\$1,658,476	\$2,353,059	\$(694,583)	-30 %

*Cost of goods sold*

Service	\$ 116,395	\$ 166,161	\$(49,766 )	-30	%
License & other	199,353	256,321	(56,968 )	-22	%
<i>Total COGS</i>	\$ 315,748	\$ 422,482	\$(106,734)	-25	%

***Revenues***

For the nine months ended September 30, 2013 and 2012, service revenues included approximately \$505,000 and \$491,000, respectively, of recurring maintenance and support revenue, and approximately \$276,000 and \$223,000, respectively, of non-recurring custom services revenue. Recurring service revenue increased 3% from 2012 to 2013 as we continued to bundle maintenance agreements to our expanding customer license base.

For the nine months ended September 30, 2013 and 2012, license and other revenue (comprised of third party hardware and royalty) decreased approximately 46% as a result of several contributing factors. Software license revenue decreased approximately \$693,000 or 60%. During the nine months ended September 30, 2013 and 2012, we shipped orders from McKesson for their continued deployment of our identification technology in their AccuDose® product line, and for continued expansion of biometric ID deployments with commercial partners LexisNexis, Educational Biometric Technology, and Identimetrics. Third-party hardware sales decreased by approximately \$71,000 (18%), as a result smaller Healthcare deployments. Royalty income, from an OEM agreement, for the nine months ended September 30, 2013, increased 2% to approximately \$94,000 from \$92,000 during the corresponding period in 2012.

*Costs of goods sold*

For the nine months ended September 30, 2013, cost of service decreased approximately \$50,000 primarily as a result of costs associated with non-recurring custom services revenue. License and other costs for the nine months ended September 30, 2013 decreased approximately \$57,000 due to the decrease in third party hardware revenue.

*Selling, general and administrative*

	Nine months ended			
	September 30,		\$	%
	2013	2012	Change	Change
<b>Selling, general and administrative</b>	\$2,054,110	\$1,674,055	\$380,055	23 %

Selling, general and administrative expenses for the nine months ended September 30, 2013 increased 23% from the corresponding period in 2012. Increases included, sales and marketing personnel, channel marketing expense, and the comparative reversal of the allowance for doubtful accounts of approximately \$300,000 in 2012 as the result of a payment received on an overdue contract. The forgoing increases were offset by a decrease in commissions related to reduced revenue.

*Research, development and engineering*

	Nine months ended			
	September 30,		\$	%
	2013	2012	Change	Change
<b>Research, development and engineering</b>	\$902,558	\$720,603	\$181,955	25 %

For the nine months ended September 30, 2013, research, development and engineering costs increased 25% as we engaged temporary outside services and hired additional personnel for a specific projects.

*Other income and expense***Nine months ended****September 30,**

	<b>2013</b>	<b>2012</b>	<b>\$ Change</b>	<b>% Change</b>	
<b>Interest expense</b>	(36,113)	(18,449)	(17,664)	96	%
<b>Franchise tax</b>	(2,910 )	-	(2,910 )	100	%
<b>Total</b>	<b>\$(39,023)</b>	<b>\$(18,449)</b>	<b>\$(20,574)</b>	<b>112</b>	<b>%</b>

Interest expense during the nine months ended September 30, 2013 was comprised of accrued interest on the promissory note issued in 2013 (see Note 5 to our financial statements contained elsewhere in this report), and the amortized portion of the deferred financing costs related to the issuance of such note. Interest expense for the nine months ended September 30, 2012 consisted of interest on the promissory note issued in 2010. Estimated minimum taxes due for 2013 were paid September 2013.

*Cash Flows*

Net cash used in operations during the nine months ended September 30, 2013 was approximately \$1,764,000 which includes a one-time fee of approximately \$133,000 related to the transactions with InterDigital and DRNC. The cash used in operating activities was attributable primarily to the following items:

Positive cash flows related to a decrease in accounts receivable of approximately \$509,000 due to one large order of approximately \$293,000 being received and paid for in the first quarter and approximately \$229,000 in payments received from factored receivables, less an overadvance repayment of approximately \$49,000; and

Negative cash flows related to a decrease in accounts payable and accrued expenses of approximately \$671,000 due to working capital management, an increase in prepaid expenses of approximately \$23,000 due to prepaid trade shows, insurance and software licensing, and a decrease of approximately \$207,000 in deferred revenue.

Net cash provided by investing activities during the nine months ended September 30, 2013 was approximately \$23,400 and consisted of:

Negative cash flow for the purchase of capital expenditures

Net cash provided by financing activities during the nine months ended September 30, 2013 was approximately \$1,929,000 and attributable primarily to the following activities:

Positive cash flows from the issuance of 9,026,935 shares of common stock for an aggregate purchase price of \$902,693, the issuance of the 2013 Note payable in the principal amount of \$497,307, and the issuance of 3,500,006 shares of common stock and warrants for an aggregate purchase price of \$1,050,000; and

Negative cash flows of \$321,000 from the repayment of a 2010 Note payable, approximately \$142,000 for the one time fees associated with the stock issuances, and approximately \$57,000 for one time fees associated with the 2013 Note payable.

## **YEAR ENDED DECEMBER 31, 2012 AS COMPARED TO DECEMBER 31, 2011**

### **Two Year % trend**

	<b>Years ended December 31, 2012 2011</b>	
<b>Revenues</b>		
Services	29 %	24 %
License fees and other	71 %	76 %
	100 %	100 %
<b>Costs and other expenses</b>		
Cost of services	6 %	5 %

Cost of license fees and other	9 %	18 %
	15 %	23 %
Gross Profit	85 %	77 %

**Operating expenses**

Selling, general and administrative	59 %	86 %
Research, development and engineering	25 %	32 %
	84 %	118 %

<b>Operating income (loss)</b>	1 %	-41 %
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**Other income (deductions)**

Total other income (deductions)	-1 %	-13 %
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<b>Net income (loss)</b>	0 %	-54 %
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*Revenues and Costs of goods sold*

	2012	2011	2012 - 2011	
			\$ Chg	% Chg
<i>Revenues</i>				
Service	\$1,094,731	\$848,483	\$246,248	29 %
License & other	2,741,162	2,660,321	80,841	3 %
<b>Total Revenue</b>	<b>\$3,835,893</b>	<b>\$3,508,804</b>	<b>\$327,089</b>	<b>9 %</b>
<i>Cost of goods sold</i>				
Service	\$221,027	\$159,223	\$61,804	39 %
License & other	350,706	651,236	(300,530)	-46 %
<b>Total COGS</b>	<b>\$571,733</b>	<b>\$810,459</b>	<b>\$(238,726)</b>	<b>-29 %</b>

### ***Revenues***

For the years ended December 31, 2012 and 2011, service revenues included approximately \$688,000 and \$680,000, respectively, of recurring maintenance and support revenue, and approximately \$407,000 and \$168,000, respectively, of non-recurring custom services revenue. Non-recurring service revenue increased 142% from 2011 to 2012 as the Company completed services for a large custom contract and continued to provide custom services deployed to different sites from a legacy customer.

For the year ended December 31, 2012, license and other revenue (comprised of third party hardware and royalty income) increased as a result of several contributing factors. The Company realized an approximate \$441,000 increase (27%) from 2011 to 2012 in its core software license revenue from both new and existing customers. The percentage of license and other revenue as a proportion of total revenue decreased from 76% to 71%, due to the relative increase in service revenue from 24% to 29% of total revenue. Third-party hardware sales decreased by approximately \$381,000 (41%) from 2011 to 2012 primarily as a result of smaller deployments from new customers in the healthcare industry, who required initial start-up investments in hardware, in addition to expanding deployments from existing customers and other OEM requirements. Depending on the size and the timing requirements of the customers' software deployment roadmap, hardware purchases may be solely within the initial software order, or, as with our OEM partners in the healthcare industry, a recurring activity. McKesson continued their deployment of our identification technology in their AccuDose® product line, and our partners Allscripts, Medflow, ChoicePoint/LexisNexis, Educational Biometric Technology and Identimetrics all continued expansion of biometric ID deployments. The Company's royalty income for the year ended December 31, 2012 was derived from a December 2009 OEM agreement, and resulted in a 22% increase in revenue of approximately \$94,000 to \$116,000 from 2011 to 2012. The Company expects this revenue stream to be recurring.

### ***Costs of goods sold***

For the year ended December 31, 2012, cost of services increased from 2011 due to costs associated with the increased non-recurring custom services, as well as customer support, as needed for the expanding customer base. The Company expects these costs will increase in future periods as additional Biometric customers are added and non-recurring custom services increase with diversification of markets.

For the year ended December 31, 2012, cost of license and other decreased from 2011 due to the decrease in third party hardware costs commensurate with the decrease in hardware orders discussed in the "Revenues" section above. This was the main reason behind the increase in the Company's gross margin to 85% from 77% over the two year period.

*Selling, general and administrative*

2012	2011	2012 - 2011	
		\$ Chg	% Chg
<b>Total</b>	\$2,288,903	\$3,036,299	\$(747,396) -25 %

Selling, general and administrative costs decreased 25% for the year ended December 31, 2012 as compared to the same period 2011. Reductions included a reversal of a bad debt expense related to a contract whose payments were behind schedule for \$377,000 in 2012, which was expensed in 2011, a decrease in personnel fees of approximately \$233,000 and marketing related expenses of \$50,000. The decreases were offset by an increase in legal and settlement fees for litigation filed by Blue Spike, LLC of approximately \$208,000.

*Research, development and engineering*

2012	2011	2012 - 2011	
		\$ Chg	% Chg
<b>Total</b>	\$947,371	\$1,116,658	\$(169,287) -15 %



For the year ended December 31, 2012, R & D costs decreased as compared to 2011, primarily related to consultant expenses for the development of a new software application completed in 2011, and not continued into 2012. The Company expects to continue to devote similar funding to its R & D function as it further develops new features to its product suite.

***Other income and expense***

			<b>2012 - 2011</b>	
	<b>2012</b>	<b>2011</b>	<b>\$ Chg</b>	<b>% Chg</b>
Interest income	\$7	\$95,033	\$(95,026)	-100%
Interest expense	(24,626)	(411,527)	386,901	-94%
Income tax	—	(26,500)	26,500	-100%
Net discounts of notes payable and receivable	—	(100,000)	100,000	-100%
	\$(24,619)	\$(442,994)	\$418,375	-94%

Interest income for the fiscal year ended 2011 was attributable to the note receivable received for the sale of the Law Division, which was fully paid in May 2011.

Series D Convertible Preferred Stock, accrued and unpaid dividends thereon and convertible debt issued in prior periods was converted to two notes payable, one note which was discounted as a result of the issuance of detachable warrants associated with the conversion. For 2011, the amortization of the discount, which was included in interest expense in the Statements of Operations, was attributable to the Note Payable. Interest expense for the fiscal year ended 2011 was comprised of approximately \$104,000 owing to the holders of the notes payable and approximately \$308,000 in non-cash amortization of the discount attached to the Notes.

The interest expense for the fiscal year ended 2012 in the above table was attributable to the note payable, of which approximately \$321,000 remained outstanding as of December 31, 2012.

For the year ended December 31, 2011, the net discounts of notes payable and receivable were non-cash items with respect to the value of the net early payment discount granted to the holder of the note receivable.

For the year ended December 31, 2011, income taxes were comprised of federal alternative minimum tax and minimum state taxes. For the year ended December 31, 2012, the Company incurred a taxable loss.

### *Cash Flows*

Net working capital deficit at September 30, 2013 was approximately \$772,000 as compared to approximately \$1,447,000 at December 31, 2012. The improvement was driven mainly by the financing activities in the first and third quarters of 2013.

Net cash provided by operations during the year ended December 31, 2012 was approximately \$66,000. The cash provided by operating activities of continuing operations was primarily used to fund operations. Other items of note were as follows:

Positive cash flows related to a decrease in accounts receivable of approximately \$360,000, due to a large payment received in the third quarter of 2012, offset by a non-cash reduction in the allowance for doubtful accounts for this customer. During 2012, we also established a receivable balance of approximately \$190,000 due from the Factor (See below), which was received in early 2013.

Positive cash flows from an increase of approximately \$161,000 in accounts payable and accrued liabilities, comprising of obligations for third party hardware shipped, delayed vendor payments due to cash management strategies and unpaid accrued commissions.

We recorded approximately \$50,000 of charges in 2012 for the expense of issuing options to employees for services.

There were no cash flows from investing activities during the year.

Net cash used for financing activities of \$25,000 was due to a principal payment against the secured note.

Net working capital deficit at December 31, 2012 was approximately \$1,447,000 as compared to a deficit of approximately \$1,540,000 at December 31, 2011. The change was due to the steady improvement in the operations of the business.

## **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. We do not currently maintain a line of credit or term loan with any commercial bank or other financial institution.

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

Effective December 31, 2010, Thomas Colatosti (“Colatosti”), our Chairman of the Board agreed to exchange all of his outstanding shares of Series D Convertible Preferred Stock, including all accrued and unpaid dividends thereon, and the 7% Convertible Promissory Note dated as of December 28, 2009 in the original principal amount of \$64,878, for a new non-convertible 7% Secured Promissory Note in the original principal amount of \$350,804 (the “Colatosti Note”). In February 2013, the principal balance and accrued interest owing under the Colatosti Note was repaid in full from the proceeds of the financing with InterDigital described below.

As of December 2011, we entered into a 24-month accounts receivable factoring arrangement with a financial institution (the “Factor”). Pursuant to the terms of this arrangement, from time to time, we sell to the Factor certain of our accounts receivable balances on a non-recourse basis for credit approved accounts. The Factor remits 75% of the accounts receivable balance to us (the “Advance Amount”), with the remaining balance, less fees payable by us, once the Factor collects the full accounts receivable balance from the customer. 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. In April 2012, the terms were updated from monthly to quarterly, and the 24-month arrangement was extended to August 1, 2014. We expect to continue to use this factoring arrangement periodically to assist with our general working capital requirements due to contractual requirements.

On February 26, 2013, we issued a promissory note in the principal amount of \$497,307 (the “InterDigital Note”) to DRNC. The InterDigital Note accrues interest at a rate of 7% per annum, with a default rate of 9% per annum while a nonpayment default is continuing, matures on December 31, 2015, is secured by all of our tangible and intangible assets, and is subject to acceleration upon an event of default. Commencing July 1, 2013, we are required to comply with certain financial covenants, including a leverage ratio covenant and an annual limit on capital expenditures other than in the ordinary course of business. A portion of the proceeds from the sale of the InterDigital Note was used to repay the Colatosti Note in full, and the remaining proceeds were used for general corporate purposes. At September

30, 2013 we were not in compliance with the leverage ratio covenant but no actions were taken by DRNC. At September 30, 2013, the balance due under the InterDigital Note was \$497,307. On November 22, 2013, we repaid in full the \$497,307 balance due under the InterDigital Note. In connection with the repayment, DRNC's security interest in all of our tangible and intangible assets was terminated.

On February 26, 2013, we issued 4,026,935 shares of common stock to DRNC for an aggregate purchase price of \$402,693. DRNC has anti-dilution rights that require us to issue additional shares to DRNC on a full-ratchet basis if, within the nine months following February 26, 2013, we sell or issue any common stock or common stock equivalents (other than sales or issuances to directors, officers, employees or independent contractors in the ordinary course of business for compensation purposes and stock splits and stock dividends payable in respect of our common stock) at a purchase, exercise or conversion price per share less than \$0.10.

On February 26, 2013, we issued 5,000,000 shares of common stock to a limited number of investors for an aggregate purchase price of \$500,000.

On July 23, 2013, we issued units to certain investors consisting of 3,500,006 shares of our common stock and warrants to purchase an additional 3,500,006 shares of our common stock at a purchase price \$0.30 per unit, for an aggregate purchase price of \$1,050,000. The warrants are exercisable at \$0.40 per share and expire five years after the date of the grant. On December 2, 2013, we agreed to reduce the exercise price of the warrants to \$0.25 per share.

On October 25 and November 8, 2013, we issued an aggregate of 24,647,337 units consisting of 24,647,337 shares of common stock and warrants to purchase an additional 24,647,337 shares of common stock at a purchase price \$0.15 per unit for an aggregate purchase price of \$3,697,100 prior to deduction for placement agent fees and expenses. The warrants are exercisable at \$0.25 per share and expire three years after the date of the grant. Investors in this offering have certain anti-dilution rights which require us to issue additional shares of common stock to the investors if within the nine months following November 8, 2013, we sell or issue any common stock or common stock equivalents (other than sales or issuances to directors, officers, employees or independent contractors in the ordinary course of business for compensation purposes and stock splits and stock dividends payable in respect our common stock) having a purchase, exercise or conversion price per share of less than \$0.15. We have agreed to register the public resale of the shares of common stock and the shares of common stock underlying the warrants sold in this offering by filing a registration statement within 30 days and causing such registration statement to be declared effective within 90 days.

### *Liquidity outlook*

At September 30, 2013, our total cash and cash equivalents were approximately \$225,000, as compared to approximately \$84,000 at December 31, 2012.

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 recently through factoring receivables. We currently require approximately \$400,000 per month to conduct our operations, a monthly amount that we have been unable to consistently achieve through revenue generation. During the first nine months of 2013, we generated approximately \$1,658,000 of revenue, which is below our average monthly requirements. We recently completed a private placement of our equity securities resulting in gross proceeds of approximately \$3.7 million. As a result, we expect that we have sufficient capital resources to conduct operations for at least the next 12 months.

If we are unable to generate sufficient revenue to meet our goals over the longer term, 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. Therefore, we may need to obtain additional financing through the issuance of debt or equity securities, or to restructure our financial position through transactions similar to those consummated during recent years and described above.

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 further reduce operating expenses, delay the expansion of operations, be unable to pursue merger or acquisition candidates, or continue as a going concern.

## **OFF-BALANCE SHEET ARRANGEMENTS**

As of September 30, 2013, we did not have any relationships with unconsolidated entities or financial partners, such as entities often referred to as structured finance or special purpose entities, that had been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such relationships.

## **CRITICAL ACCOUNTING POLICIES**

Our financial statements are prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires that we make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ significantly from these estimates under different assumptions or conditions. There have been no material changes to these estimates for the periods presented in this prospectus.

We believe that of our significant accounting policies, which are described in Note A of the notes to our consolidated financial statements included in this prospectus, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, these are the policies we believe are the most critical to aid in fully understanding and evaluating our financial condition and results of operations.

### *1. Revenue Recognition*

Revenues from software licensing are recognized in accordance with ASC 985-605, “*Software Revenue Recognition.*” Accordingly, revenue from software licensing is recognized when all of the following criteria are met: persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, and collectability is probable.

We intend to enter into arrangements with end users for items which may include software license fees, and services or various combinations thereof. For each arrangement, revenues will be recognized when evidence of an agreement has been documented, the fees are fixed or determinable, collection of fees is probable, delivery of the product has occurred and no other significant obligations remain.

Multiple-Element Arrangements: For multiple-element arrangements, we apply the residual method in accordance with ASC 985-605. The residual method requires that the portion of the total arrangement fee attributable to the undelivered elements be deferred based on its VSOE of fair value and subsequently recognized as the service is delivered. The difference between the total arrangement fee and the amount deferred for the undelivered elements is recognized as revenue related to the delivered elements, which is generally the software license. VSOE of fair value for all elements in an arrangement is based upon the normal pricing for those products and services when sold separately. VSOE of fair value for support services is additionally determined by the renewal rate in customer contracts. We have established VSOE of fair value for support as well as consulting services.

License Revenues: Amounts allocated to license revenues are recognized at the time of delivery of the software and all other revenue recognition criteria discussed above have been met.

Revenue from licensing software, which requires significant customization and modification, is recognized using the percentage of completion method, based on the hours of effort incurred by us in relation to the total estimated hours to complete. In instances where third party hardware, software or services form a significant portion of a customer’s contract, we recognize revenue for the element of software customization by the percentage of completion method described above. Otherwise, third party hardware, software, and services are recognized upon shipment or acceptance as appropriate. If we make different judgments or utilize different estimates of the total amount of work expected to be required to customize or modify the software, the timing and revenue recognition, from period to period, and the margins on the project in the reporting period, may differ materially from amounts reported. Anticipated contract losses are recognized as soon as they become known and are estimable.

Service Revenues: Revenues from services are comprised of maintenance and consulting and implementation services. Maintenance revenues include providing for unspecified when-and-if available product updates and customer

telephone support services, and are recognized ratably over the term of the service period. Consulting services are generally sold on a time-and-materials basis and include a range of services including installation of software and assisting in the design of interfaces to allow the software to operate in customized environments. Services are generally separable from other elements under the arrangement since performance of the services are not essential to the functionality of any other element of the transaction and are described in the contract such that the total price of the arrangement would be expected to vary as the result of the inclusion or exclusion of the services. Revenues from services are generally recognized as the services are performed.

We provide customers, free of charge or at a minimal cost, testing kits which potential licensing customers may use to test compatibility/acceptance of our technology with the customer's intended applications.

Costs and other expenses: Includes professional compensation and other direct contract expenses, as well as costs attributable to the support of client service professional staff, depreciation and amortization costs related to assets used in revenue-generating activities, and other costs attributable to serving our client base. Professional compensation consists of payroll costs and related benefits including stock-based compensation and bonuses. Other direct contract expenses include costs directly attributable to client engagements, such as out-of-pocket costs including travel and subsistence for client service professional staff, costs of hardware and software and costs of subcontractors. The allocation of lease and facilities charges for occupied offices is included in costs of service.

We account for our warranties under the FASB ASC 450 "*Contingencies*." We generally warrant that our products are free from defects in material and workmanship for a period of one year from the date of initial delivery to our customers. The warranty does not cover any losses or damage that occurs as a result of improper installation, misuse or neglect or repair or modification by anyone other than us or its authorized repair agent. Our policy is to accrue anticipated warranty costs based upon historical percentages of items returned for repair within one year of the initial sale. Our repair rate of products under warranty has been minimal, and a historical percentage has not been established. Our software license agreements generally include certain provisions for indemnifying customers against liabilities if our software products infringe upon a third party's intellectual property rights. We have not provided for any reserves for warranty liabilities as it was determined to be immaterial.



## *2. Impairment or Disposal of Long Lived Assets, including Intangible Assets*

We review our long-lived assets, including intangible assets subject to amortization, whenever events or changes in circumstances indicate that the carrying amount of such an asset may not be recoverable. Recoverability of these assets is measured by comparison of their carrying amount to the future undiscounted cash flows the assets are expected to generate. If such assets are considered impaired, the impairment to be recognized is equal to the amount by which the carrying value of the assets exceeds their fair value determined by either a quoted market price, if any, or a value determined by utilizing a discounted cash flow technique. In assessing recoverability, we must make assumptions regarding estimated future cash flows and discount factors. If these estimates or related assumptions change in the future, we may be required to record impairment charges. Intangible assets with determinable lives are amortized over their estimated useful lives, based upon the pattern in which the expected benefits will be realized, or on a straight-line basis, whichever is greater. We did not record any impairment charges in any of the years presented.

## *3. Research and Development Expenditures*

Research and development expenses include costs directly attributable to the conduct of research and development programs primarily related to the development of our software products and improving the efficiency and capabilities of our existing software. Such costs include salaries, payroll taxes, employee benefit costs, materials, supplies, depreciation on research equipment, services provided by outside contractors, and the allocable portions of facility costs, such as rent, utilities, insurance, repairs and maintenance, depreciation and general support services. All costs associated with research and development are expensed as incurred.

## *4. Income Taxes*

The provision for, or benefit from, income taxes includes deferred taxes resulting from the temporary differences in income for financial and tax purposes using the liability method. Such temporary differences result primarily from the differences in the carrying value of assets and liabilities. Future realization of deferred income tax assets requires sufficient taxable income within the carryback, carryforward period available under tax law. We evaluate, on a quarterly basis whether, based on all available evidence, if it is probable that the deferred income tax assets are realizable. Valuation allowances are established when it is more likely than not that the tax benefit of the deferred tax asset will not be realized. The evaluation, as prescribed by ASC 740-10, "*Income Taxes*," includes the consideration of all available evidence, both positive and negative, regarding historical operating results including recent years with reported losses, the estimated timing of future reversals of existing taxable temporary differences, estimated future taxable income exclusive of reversing temporary differences and carryforwards, and potential tax planning strategies which may be employed to prevent an operating loss or tax credit carryforward from expiring unused. Due to our historical performance and estimated future taxable income, a full valuation allowance has been established.

*5. Accounting for Stock-Based Compensation*

We account for share based compensation in accordance with the provisions of ASC 718-10, “*Compensation — Stock Compensation*,” which requires measurement of compensation cost for all stock awards at fair value on date of grant and recognition of compensation over the service period for awards expected to vest. The majority of our share-based compensation arrangements vest over either a three or four year vesting schedule. We expense our share-based compensation under the ratable method, which treats each vesting tranche as if it were an individual grant. The fair value of stock options is determined using the Black-Scholes valuation model, and requires the input of highly subjective assumptions. These assumptions include estimating the length of time employees will retain their vested stock options before exercising them (the “expected option term”), the estimated volatility of our common stock price over the option’s expected term, the risk-free interest rate over the option’s expected term, and our expected annual dividend yield. Changes in these subjective assumptions can materially affect the estimate of fair value of stock-based compensation and consequently, the related amount recognized as an expense in the consolidated statements of operations. As required under the accounting rules, we review our valuation assumptions at each grant date and, as a result, are likely to change our valuation assumptions used to value employee stock-based awards granted in future periods. The values derived from using the Black-Scholes model are recognized as expense over the service period, net of estimated forfeitures (the number of individuals that will ultimately not complete their vesting requirements). The estimation of stock awards that will ultimately vest requires significant judgment. We consider many factors when estimating expected forfeitures, including types of awards, employee class, and historical experience. Actual results, and future changes in estimates, may differ substantially from our current estimates.

## **BUSINESS**

### **Overview**

We were founded in 1993 to develop and market advanced fingerprint biometric technology and related security software solutions. First incorporated as BBG Engineering, we were renamed SAC Technologies in 1994 and, again, renamed BIO-key International, Inc. in 2002.

We develop and market advanced fingerprint biometric identification and identity verification technologies, cryptographic authentication-transaction security technologies, as well as related identity management and credentialing 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. Additionally, advanced BIO-key® technology has been and is used to improve both the accuracy and speed of competing finger-based biometrics.

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 and access control markets. Example primary markets include mobile payments & credentialing, online payments and credentialing, and healthcare record and payment data security, among others. Our secondary focus includes government markets, primarily law enforcement forensic investigation and the Department of Homeland Security. We continue to research and develop advancements in our capabilities, as well as exploring and developing potential strategic relationships, including potential business combinations and acquisitions, which could help us leverage our capability to deliver our solutions. We have built a direct sales force of professionals, and also team with resellers, integrators and partner networks with substantial experience in selling technology solutions to government and corporate customers.

### **Products**

#### *Finger-based Biometric Identification and Personal Identity Verification*

We are a leader in finger-based biometric identification and personal identity verification, as well as authentication-transaction security. Stand-alone, or in partnerships with OEMs, integrators, and solution providers, we provide biometric software solutions and authentication-transaction security solutions to private and public sector

customers. We help customers reduce risk by providing the ability to control access to facilities and services, in either the logical or physical domain. Our capabilities positively identify individuals and verify, or confirm, their identity before granting access to valuable corporate resources, privileged or subscribed data and services, web portals, applications, physical locations or assets, among other things. Our capabilities are software based and both hardware and operating-system agnostic.

We do not develop, manufacture or produce hardware components that are used in conjunction with our software. However, we do sell third-party hardware components with our software in various configurations required by our customers, as do our partners. Our products are interoperable with all major fingerprint reader and hardware manufacturers, enabling application developers, Value Added Resellers (“VARs”) and channel partners to integrate our fingerprint biometrics into their application, while dramatically reducing maintenance, upgrade and life-cycle costs. Our core technology supports interoperability on over 60 different commercially available fingerprint readers. The technology is also interoperable across Windows and Linux, as well as Apple iOS and Android mobile operating systems. This interoperability is unique in the industry and a key differentiator for our products in the biometric market and, in our opinion, makes our technology more viable than competing technologies and expands the size of the overall market for our products.

Our biometric identification technology improves both the accuracy and speed of screening individuals, for identification purposes or for personal identity verification, by extracting unique data from a fingerprint and comparing it to existing similar fingerprint data. These comparisons are conducted to identify an individual, either in a forensic investigation, or to screen the individual upon the application for a privilege, or to verify the individual’s identity upon such individuals request to access the previously entitled privilege. The technology has been built to be completely scalable and can handle databases containing millions of fingerprints. We achieve the highest levels of discrimination without requiring any other identifying data (multi-factor) such as a userID, smart ID cards, or tokens, although our technology can be used in conjunction with such additional factors.

We support industry standards, such as 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.

Our finger identification algorithm—Vector Segment Technology (VST™) is the core intellectual property behind our full suite of biometric products that include:

Vector Segment Technology SDK (VST)—Our biometric software development kit (“SDK”) that provides developers the ability to incorporate our biometric capabilities into their respective product offerings or infrastructure. VST is available as a low level SDK for incorporation into any application architecture to increase security while not sacrificing convenience. VST runs on Windows and Linux as well as within WEB-key on iOS and Android systems.

Intelligent Image Indexing®—Our biometric identification solution that offers both large-scale one-to-many user identification. This solution enables customers to perform false alias and fast entry checks, including preventing fraudulent access to systems and privileges. Intelligent Image Indexing scales identification capabilities from thousands to millions of users. The solution runs on commercially available hardware making it scalable for any size system.

Biometric Service Provider—We provide support for the BioAPI (a standards-based solution meeting worldwide needs) for a compliant interface to applications using biometrics for verification and identification. We enhance the traditional use of BioAPI by adding 64-bit support and other advanced features, supporting identification calls and also providing a single user interface for multiple fingerprint readers.

ID Director™—Our Single Sign On (SSO) is a suite of solutions for integration with CA Technologies SiteMinder, Oracle’s Fusion Middleware SSO, IBM Tivoli Access Manager and other solutions, utilizing the power and security of WEB-key. This solution provides a simple to implement, custom authentication scheme for companies looking to enhance authentication. ID Director is designed to add a level of security and convenience to the transaction level of any application.

#### *Authentication Transaction Security*

Our authentication-transaction security technology, WEB-key®, provides the ability to conduct identification and identity verification transactions in potentially insecure environments, including the World Wide Web or in off-site cloud environments.

WEB-key makes cloud-based biometric user-authentication viable and eliminates technology constraints on online service providers, who are otherwise held dependent on handset provider hardware and software platform decisions. It extends all features and functionalities of the VST algorithm to customers looking to add an enhanced level of security to their thin client and client/server applications. WEB-key is currently supported by both Windows and Linux operating systems. Clients are available on Windows, iOS and Android operating systems.

## **Intellectual Property Rights**

We develop and own significant intellectual property and believe that our intellectual property is fundamental to our biometric operation:

### *Patents*

We own patented technologies and trade secrets developed or acquired by us.

In May 2005, the U.S. Patent & Trademark Office issued patent 6,895,104 for our Vector Segment fingerprint technology (VST), BIO-key's core biometric analysis and identification technology.

On October 3, 2006, we announced that our patent for a biometric authentication security framework had been granted by the U.S. Patent & Trademark Office. The patent No. 7,117,356 was issued to us for a biometric authentication security framework that enhances commercial and civil biometric use. Our authentication security framework protects privacy and security of cloud or network based authentications while also facilitates ease of use of biometric systems. The technology that this patent is based on is the foundation for the authentication security incorporated in our WEB-key® product line. WEB-key is a mature enterprise authentication solution that functions in a wide variety of application environments. The solution supports a variety of implementation alternatives including card technologies for “two-factor” authentication and also supports “single-factor” authentication. Partners and customers implementing our WEB-key software to provide convenient and secure user identity include a number of institutions including the Allscripts Healthcare Solutions, Computer Associates Site Minder, Oracle Access Manager and many other enterprise and solutions based systems. With the payment of all maintenance fees, this patent will expire on May 20, 2023.

On December 26, 2006, we were issued US patent No. 7,155,040 covering our unique image processing technology, which is critical for enhancing information used in the extraction of biometric minutiae. The issued patent protects a critical part of an innovative four-phase image enhancement process developed by us. With the payment of all maintenance fees, this patent will expire on January 29, 2025.

On April 15, 2008, we were issued US patent No. 7,359,553 covering our image enhancement and data extraction core algorithm components. The solution protected under this patent provides the capability to quickly and accurately transform a fingerprint image into a computer image that can be analyzed to determine the critical data elements. With the payment of all maintenance fees, this patent will expire on January 3, 2025.

On August 19, 2008, we were issued US patent No. 7,415,605 for our “Biometric Identification Network Security” method. The solution protected under this patent provides a defense against hackers and system attacks, while leveraging the industry standard Trusted Platform Module (TPM) specification for encryption key management. With the payment of all maintenance fees, this patent will expire on May 20, 2023.

On November 18, 2008, we were issued US patent No. 7,454,624 for our “Match Template Protection within a Biometric Security System” method. The solution protected under this patent limits the scope of enrollment templates usage and also eliminates the need for revocation or encryption processes, which can be expensive and time consuming. With the payment of all maintenance fees, this patent will expire on May 17, 2025.

On March 10, 2009, we were issued US patent No. 7,502,938 for our “Trusted Biometric Device” which covers a simple, yet secure method of protecting a user’s biometric information. It covers the transmission of information from the point the information is collected at the biometric reader until the data reaches the computer or device that is authenticating the user’s identity. With the payment of all maintenance fees, this patent will expire on October 25, 2025.

On May 26, 2009, we were issued US patent No. 7,539,331 for our “Image Identification System” method for improving the performance and reliability of image analysis within an image identification system. With the payment of all maintenance fees, this patent will expire on March 22, 2022.

On November 8, 2011, we were issued US Patent No 8,055,027 for our “Generation of Directional Information in the Context of Image Processing” method for image enhancement and processing. With the payment of all maintenance fees, this patent will expire on October 10, 2027.

On July 3, 2012, we were issued US Patent No 8,214,652 for our “Biometric Identification Network Security”, an expanded method of network and related network authentication security systems utilizing hardware based support for encryption and key management for authentication purposes. With the payment of all maintenance fees, this patent will expire on April 24, 2024.

We have also been granted parallel patents to the US Patent portfolio to certain of our patents in many foreign countries offering protection of our intellectual property rights around the world.

#### *Trademarks*

We have registered our trademarks “BIO-key”, “True User Identification”, “Intelligent Image Indexing” and “WEB-key” with the U.S. Patent & Trademark Office, as well as many foreign countries, protecting our companies name and key technology offering names world-wide.

#### *Copyrights and trade secrets*

We take measures to ensure copyright and license protection for our software releases prior to distribution. When possible, the software is licensed in an attempt to ensure that only licensed and activated software functions to its full potential. We also take measures to protect the confidentiality of our trade secrets.



## Markets

### *Identity Management, User Authentication, Privilege Entitlement and Access Control*

Our products reduce risk of theft, fraud, loss and attack by limiting access to valuable assets, privileges, data, services, networks and places, to only authorized individuals. Conversely, our products enhance the monetary value and/or viability of privileged assets, places and services by ensuring only subscribers and otherwise entitled holders can enjoy full access to their privileges. In effect, our products replace traditional credentialing systems, which utilize a physical or electronic credential document to represent the holder's privilege entitlement, and access control systems that guard access to such privileges. Examples of such privileges include, but are not limited to: international travel and immigration privileges; employment ID, campus ID and corporate ID privileges; healthcare service privileges; citizen Entitlement privileges such as Medicare, Medicaid and Social Security; and bank, credit account and financial transaction privileges such as checking accounts, debit and credit cards, payments, online services and subscription privileges. Examples of access points include doorways, gates, computers, point-of-sale terminals, smart-phones or web-portals and automobiles. In our opinion, the market for advanced user authentication, including fingerprint biometrics, is conceptually enormous, represented by virtually any doorway, gate, computer network or internet end-point like smart-phones, desktops and laptops PCs and tablets, and compounded by the number of individuals privileged to access something guarded by those access points. We believe the market opportunity for our products is a massive upgrade cycle of global privilege entitlement and access control systems.

Historically, our largest market has been access control within highly regulated industries like 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 other forms of fraud in the mobile or cellular based World Wide Web. As more services and payment functionalities, like mobile wallets and NFC, migrate to smart-phones, the value and potential risk associated with such systems should grow substantially and drive demand and mass adoption of advanced user authentication technologies, including fingerprint biometrics and our solutions.

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

Corporate network access control- Corporate campuses, computer networks and applications.

Consumer mobile credentialing, including mobile payments- Credit and payment card programs, data and application access and commercial loyalty programs.

Government services and highly regulated industry- Medicare, Medicaid, Social Security, Drivers Licenses, Campus and School ID, Passports/Visas.

## **Business Model**

We believe the most viable markets for our products involve various forms of computer network and Internet applications. The emergences of cloud computing and mobile computing are primary drivers of commercial and consumer adoption of advanced authentication applications, including our authentication capabilities. As the value of assets, services and transactions increases on such networks, we expect that security and user authentication demand will rise proportionately. We believe the nature of cloud and mobile computing requires technology interoperability across borders, jurisdictions and networks. Further, government and highly regulated service offerings must also interoperate across borders, jurisdictions and networks. In many cases, government and highly regulated service-related technologies are required to be interoperable and standards compliant. We have developed our technology and offerings to be software-based, standards compliant, universally interoperable, hardware and operating system agnostic, and scalable. Our technologies, products and platforms are designed to function on the Internet, in the cloud, in a traditional network environment, or stand-alone. We believe our model provides the strongest opportunity to penetrate the global biometric authentication market, leverage our partners' potentially large and resource rich sales channels, as well as produce the highest margin revenue.

We have built a two-tier sales channel to deliver our solutions. Channels include direct sales, integrator partners and VARs. We sell stand-alone software licenses for our products, as well as packaged configurations with "commercial-off-the-shelf" viable third-party hardware devices, like fingerprint readers and network technologies. We do not develop or produce proprietary hardware products. Our technologies also work with a variety of proprietary, sole-source technology offerings from third-party vendors. We believe our technologies can work within the constraints of any customer or partner system design. We are exploring a subscription or Software as a Service (SaaS) model for our software.

*Direct Sales, Licensing, Integrator and VAR Partnerships*

Our products are software based and we typically license our software to end users directly, or through integrator and VAR partners. Our primary sales and marketing focus is to integrate our software into the platform offerings of large technology infrastructure producers. We employ dedicated staff to develop relationships with end-users and integrator partners. We further employ technical support staff who help customers integrate our technology into their applications, as well as support new strategic development efforts.

We have formed strategic relationships with large Internet and network infrastructure providers, including IBM, Oracle, Microsoft, CA Technologies and Indigo, to provide enterprise-ready systems to large enterprise customers and stakeholders. We have also established partnerships with leading technology integrators, including MorphoTrak, McKesson, LexisNexis, Allscripts, Epic, Caradigm, Identimetrix and HealthCast.

On February 26, 2013, we entered into a strategic partnership with Interdigital Corporation to jointly develop and market biometric authentication solutions for the mobile credentialing & payments markets.

**Competition**

In addition to companies that provide existing commonplace methods of restricting access to facilities and logical access points such as pass cards, PIN numbers, passwords, locks and keys, there are numerous companies involved in the development, manufacturing and marketing of fingerprint biometrics products to commercial, government, law enforcement and prison markets. These companies include, but are not limited to, 3M (Cogent), NEC, and MorphoTrak.

The majority of sales for automated fingerprint identification products in the market to date have been deployed for government agencies, healthcare facilities and law enforcement applications. The consumer and commercial markets represent areas of significant growth potential for biometrics, led by the use of mobile devices.

The epidemic of security and data breaches reported over the past few years is one of the driving factors for identifying new methods of protecting valuable data. After attempting to create a more sophisticated password or more efficient token or PIN, it's become apparent that each of these methods is easily compromised and the downside risks are significant.

With respect to competing biometrics technologies, each has its strengths and weaknesses and none has emerged as a market leader:

*Fingerprint identification* is generally viewed as very accurate, inexpensive and non-intrusive;

*Palmvein scanning* is expensive, technique-sensitive, and offers mobility challenges;

*Iris scanning* is viewed as accurate, but the hardware is significantly more expensive; and

*Facial recognition* can have accuracy limitations and is typically highly dependent on ambient lighting conditions, angle of view, and other factors.

## **Research and Development**

We concentrate our research and development efforts on enhancing the functionality, reliability and integration of our current products as well as developing new and innovative products for biometrics. Although we believe that our identification technology is one of the most advanced and discriminating fingerprint technologies available today, the markets in which we compete are characterized by rapid technological change and evolving standards. In order to maintain our position in the market, we will continue to upgrade and refine our existing technologies.

On February 26, 2013, we announced that we entered into a Research and Development Collaboration Agreement (the “R&D Collaboration”) with InterDigital Communications, Inc., a subsidiary of InterDigital, Inc. (“InterDigital”), a wireless research and development company, InterDigital is also the parent company of DRNC, which provided debt and equity financing to us in February 2013. The R&D Collaboration will target advanced cloud security and identity and access management solutions for the mobile market. The R&D Collaboration will bring together our innovative research and product development capabilities in fingerprint biometrics with InterDigital’s research efforts in developing identity and access management solutions for the mobile market.

During the nine months ended September 30, 2013 and 2012, we spent approximately \$903,000 and \$720,603 respectively, on our biometric segment's research, development and engineering. During the fiscal years ended December 31, 2012 and 2011, we spent approximately \$947,000 and \$1,117,000 respectively, on our biometric segment's research, development and engineering. Our limited customer base during that time did not directly bear these costs, which were principally funded through outside sources of equity and debt financing.

### **Government Regulations**

We are not currently subject to direct regulation by any government agency, other than regulations generally applicable to businesses or related to specific project requirements. In the event of any international sales, we would be subject to various domestic and foreign laws regulating such exports and export activities.

### **Environmental Regulations**

As of the date of this prospectus, we have not incurred any material expenses relating to our compliance with federal, state, or local environmental laws and do not expect to incur any material expenses in the foreseeable future.

### **Employees and Consultants**

As of December 26, 2013, we employed sixteen individuals on a full-time basis as follows: five in engineering, customer support, research and development; three in finance and administration; and eight in sales and marketing. We also use the services of one full-time consultant, who provides engineering and technical services, one part-time contracts administrator, and one part-time sales support person.

### **Properties**

We do not own any real estate. We conduct operations from leased premises in Eagan, Minnesota (5,544 square feet), Wall, New Jersey (4,517 square feet) and North Billerica, Massachusetts (shared services center). We believe our current facilities are adequate for the foreseeable future.

**Legal Proceedings**

In the normal course of business, we periodically become involved in litigation. Currently, we are not a party to any pending litigation that would have a material adverse effect on our financial position, results of operations or cash flows.

**MANAGEMENT**

The following chart sets forth certain information about each of our directors and executive officers.

<u>Name</u>	<u>Age</u>	<u>Positions Held</u>
Thomas J. Colatosti	65	Chairman of the Board of Directors
Michael W. DePasquale	58	Chief Executive Officer and Director
Jeffrey J. May	53	Director
Charles P. Romeo	71	Director
John Schoenherr	60	Director
Cecilia Welch	53	Chief Financial Officer
Mira K. LaCous	51	Vice President of Technology & Development
Renat Zhdanov	50	Vice President, Chief Scientist
Scott Mahnken	53	Vice President of Marketing

**Directors**

We believe that our board of directors should be composed of individuals with sophistication and experience in many substantive areas that impact our business. We believe that experience, qualifications, or skills in the following areas are most important: legal/regulatory and government affairs; accounting and finance; design, innovation and engineering; strategic planning; and human resources and development practices; and board practices of other corporations. These areas are in addition to the personal qualifications described in this section. We believe that our current board member possesses the professional and personal qualifications necessary for board service, and have highlighted particularly noteworthy attributes for this board member below. The principal occupation and business experience, for at least the past five years, of our current director is as follows:

*Thomas J. Colatosti* has served as a Director since September 2002, as Chairman of the Board since January 3, 2003, and as Chief Financial Officer from November 17, 2008 to December 21, 2009. Mr. Colatosti also served as Co-Chief Executive Officer of the Company from July 2005 to August 2006. Mr. Colatosti also currently serves as the Chief Executive Officer of American Security Ventures, a Lexington, Massachusetts-based consulting firm he founded which specializes in providing strategic management consulting services to emerging and developing companies in the homeland security industry. Since November 2010, Mr. Colatosti has been serving as a President and CEO of Oasis Systems LLC, a privately held IT services company. From August 2009 to December 2012, Mr. Colatosti served as Chairman of Commodore Advanced Sciences Corporation an environmental services and remediation company. From August 18, 2005 until August 18, 2008 Mr. Colatosti served as Director and President of Good Harbor Partners Acquisition Corp., a publicly-traded special purpose acquisition company formed to acquire businesses in the security sectors. From 1997 through June 2002, Mr. Colatosti served as the Chief Executive Officer of Viisage Technology, Inc., a publicly traded biometric technology company. Between 1995 and 1997, Mr. Colatosti served as President and Chief Executive Officer of CIS Corporation. Prior to CIS, Mr. Colatosti had a 21 year career with Digital Equipment Corporation (now HP Corporation). Among his executive positions, he was Vice President and General Manager of the company's \$1.2 billion Government Systems Division. Mr. Colatosti is a seasoned technology executive with global experience in operating both private and public corporations in the technology sector.

*Michael W. DePasquale* has served as our Chief Executive Officer and a Director since January 3, 2003. He served as Co-Chief Executive Officer of the Company from July 2005 to August 2006. Mr. DePasquale brings more than 27 years of executive management, sales and marketing experience to the Company. Prior to joining us, Mr. DePasquale served as the President and Chief Executive Officer of Prism eSolutions, Inc., a Pennsylvania-based provider of professional consulting services and online solutions for ISO-9001/14000 certification for customers in manufacturing, healthcare and government markets, since February 2001. From December 1999 through December 2000, Mr. DePasquale served as Group Vice President for WRC Media, a New York-based distributor of supplemental education products and software. From January 1996 until December 1999, Mr. DePasquale served as Senior Vice President of Jostens Learning Corp., a California-based provider of multimedia curriculum. Prior to Jostens, Mr. DePasquale held sales and marketing management positions with McGraw-Hill and Digital Equipment Corporation. Mr. DePasquale earned a Bachelor of Science degree from the New Jersey Institute of Technology. He serves on the Board of Directors and as Treasurer of the International Biometrics and Identification Industry Association. Mr. DePasquale has extensive general management experience in the technology sector and has served as a Director for number of non-profit organizations and private companies.

*Jeffrey J. May* has served as a Director since October 29, 2001. Since 1997, Mr. May has served as the President of Gideons Point Capital, a Minnesota-based investment and consulting firm focusing on assisting start-up technology companies. Mr. May served as the CEO and Director of MagnaLynx, a semiconductor company specializing in high speed chip level communications from December 2006 until the company was sold in March 2010. In 1983, Mr. May co-founded Advantek, Inc., a manufacturer of equipment and materials for the semiconductor industry, which was sold in 1993. Mr. May continued to serve as a director and Vice-President of Operations of Advantek until 1997, when it had over 600 employees and sales in excess of \$100 million. Mr. May earned a Bachelor of Science degree in Electrical Engineering from the University of Minnesota in 1983. Mr. May is an entrepreneur who brings extensive international technical and general business management experience to our Board of Directors.

*Charles P. Romeo* has served as a Director since February 28, 2005 and from January 29, 2003 to April 19, 2004. From April 2004 until February 2005, he served as our Vice President of Sales, Public Safety Division. From November 2005 to November 2007, Mr. Romeo served as the Vice President of Sales and Marketing for UNICOM, a Rhode Island systems integrator. From September 2002 until April 2004, Mr. Romeo was the President and Chief Executive Officer of FreedomBridge Technologies, Inc., a Rhode Island-based consulting firm to technology companies in the homeland security industry specializing in implementing direct and channel selling programs, strategic alliances and partnerships in the law enforcement market. Prior to founding FreedomBridge, Mr. Romeo had a 33 year sales and marketing management career with Digital Equipment Corporation, Compaq Computer Corporation and Hewlett Packard. During his career, Mr. Romeo served as Vice President of Service Sales for a \$500 million business unit, and Director of Public Sector Sales for a \$275 million division of Hewlett Packard. Mr. Romeo authored *The Sales Manager's Troubleshooter*, Prentice Hall 1998, which was named as one of the "top 10 must reads" by *Sales and Marketing Magazine*. Mr. Romeo earned a Bachelor of Science degree in Mathematics and Economics from the University of Massachusetts and an Executive MBA from Babson College. Mr. Romeo has significant sales and marketing management experience in the infrastructure and computer hardware and software industries.



*John Schoenherr* has served as a Director since December 30, 2004. Mr. Schoenherr served as Vice President of Corporate Performance Management for Oracle Corporation from 1995 through 2006. Prior to Oracle he served as Senior Vice President of Business Intelligence and Analytics at Information Resources, Inc. Mr. Schoenherr has over 25 years of experience in the area of business intelligence and strategic planning. His career includes a number of product development and management positions. Mr. Schoenherr has extensive product management and information services experience in both the large and small enterprise sectors.

## **Executive Officers**

*Cecilia Welch* has served as our Chief Financial Officer of the Company since December 21, 2009. Ms. Welch joined us in 2007 as our Corporate Controller. Prior to joining us, from January 2006 to December 2006, she was the Controller for Savaje Technologies (acquired by Sun Microsystems), a developer of advanced mobile telephone software. From October 2004 to January 2006, she was Controller for Crystal Systems, a manufacturer of sapphire crystals used for industrial, semiconductor, defense and medical applications. From December 1988 to July 2004, she was the Controller for ATN Microwave (acquired by Agilent Technologies), a manufacturer of automated test equipment. Ms. Welch has a Bachelor's degree in Accounting from Franklin Pierce University.

*Mira K. Lacous* has served as our Vice President of Technology & Development since May 15, 2000. In 2012, Ms. LaCous was promoted to Senior Vice President of Technology and Development. Ms. LaCous has over 28 years of product/project management, solution architecture, software development, team leadership and customer relations experience with a background that includes successfully bringing numerous technologies to market, including automated voice response systems, automated building control systems, software piracy protection, intranet training materials and testing, page layout and design software, image scanning software and systems, biometric security, biometric algorithms and more. Ms. LaCous is also the author of six US patented technologies, multiple international patents, and other patent pending solutions. She has been an officer or director of two other companies; National Computer Systems (NCS), and TEL-Line Systems. Ms. LaCous has a Bachelor's in Computer Science from North Dakota State University. Ms. LaCous also served on the Board of Directors of the Minnesota Sinfonia, a not-for-profit arts and education organization, as well as its chairperson for two years.

*Renat Z. Zhdanov* has served as our Chief Scientist since November 2001. He has over fifteen years of academic experience in various fields of mathematics and physics; fifteen years of image processing, pattern recognition, and big data analysis algorithm development experience and more than ten years of software development experience ranging from database programming to statistical and analytical programming. Dr. Zhdanov is a recognized expert in mathematical physics and is the author of two books and more than 130 papers published in leading mathematics and physics journals. Before joining us, he worked as Chief Mathematician and Visiting Scientist in universities in Ukraine, Germany, Great Britain, Sweden and Spain. Dr. Zhdanov has two PhD degrees in Mathematical Physics and Differential Equations from the Institute of Mathematics in Kiev, Ukraine. He serves as the member of the Editorial Board of the "Journal of Applied Mathematics".

*Scott Mahnken* has served as our Vice President of Marketing since February 2011. He brings over 20 years of marketing experience and success through strategic marketing and building dynamic relationships with channel partners. Prior to joining us, from August 2009 until February 2011, he was President of Edge Marketing, a leading marketing consulting firm in the dental and medical devices industries. From February 2008 until August 2009, Mr. Mahnken served as Director of Marketing at Milestone Scientific Inc., a manufacturer of computer controlled anesthetic delivery medical devices. From August 2002 until January 2008, he served as Director of Partnership Relations at ArcMesa Educators, an organization dedicated to providing accredited continuing education to medical and dental providers. Prior to ArcMesa, Mr. Mahnken held a number of marketing roles with the Lanmark Group a leading healthcare advertising agency. Mr. Mahnken is a graduate of the University of New Orleans, where he earned a Bachelor's of Art degree in Marketing.

## EXECUTIVE COMPENSATION

The following table provides certain summary information concerning compensation earned by the executive officers named below during the fiscal year ended December 31, 2012.

### *Summary Compensation Table*

Name and Principal Position	Year	Salary (\$)	Option Awards (\$) <sup>(1)</sup>	All Other Compensation (\$)	Total (\$)
<i>Michael W. DePasquale</i> <i>Chief Executive Officer</i>	2012	259,324	-0-	739	260,063
	2011	226,504	-0-	449	226,953
<i>Mira K. LaCous</i> <i>Vice President Technology &amp; Development</i>	2012	142,092	-0-	545	142,637
	2011	134,018	8,340	266	142,624
<i>Scott Mahnken</i> <i>Vice President — Marketing</i>	2012	124,680	-0-	499	125,179
	2011	102,527	11,120	154	113,801

<sup>(1)</sup> Represents the grant date fair value of the award, calculated in accordance with FASB Accounting Standard Codification 718, "*Compensation-Stock Compensation*," or ASC 718. A summary of the assumptions made in the valuation of these awards is provided in our notes to consolidated financial statements beginning on page F-8 of this prospectus.

## **Termination Arrangements and Change of Control Provisions**

Compensation for our executives is comprised of three main components: base salary, annual performance-based cash bonus and long-term equity awards. We do not target a specific weighting of these three components or use a prescribed formula to establish pay levels. Rather, the Board of Directors and Compensation Committee considers changes in the business, external market factors and our financial position each year when determining pay levels and allocating between long-term and current compensation for the named executive officers.

Cash compensation is comprised of base salary and an annual performance-based cash bonus opportunity. The committee generally seeks to set a named executive officer's targeted total cash compensation opportunity within a range that is the average of the applicable peer company and/or general industry compensation survey data, adjusted as appropriate for individual performance and internal pay equity and labor market conditions.

In setting cash compensation levels, we favor a balance in which base salaries are generally targeted at slightly below the peer average and a bonus opportunity that is targeted at slightly above the average. The committee believes that this higher emphasis on performance-based cash bonuses places an appropriate linkage between a named executive officer's pay, his or her individual performance and the achievement of specific business goals by placing a higher proportion of annual cash compensation at risk, thereby aligning executive opportunity with the interests of stockholders.

We include an equity component as part of our compensation package because we believe that equity-based compensation aligns the long-term interests of our named executive officers with those of stockholders.

These cash and equity compensation components of pay are supplemented by various benefit plans that provide health, life, accident, disability and severance benefits, most of which are the same as the benefits provided to all of our US based employees.

### *Employment Agreements*

On March 26, 2010, we entered into an employment agreement, effective as of March 25, 2010, with Michael W. DePasquale to serve as our Chief Executive Officer until March 24, 2011. The agreement automatically renews for subsequent one-year terms, unless the employment relationship is terminated by either party, or modified in accordance with the terms and conditions of the agreement. Under the agreement, Mr. DePasquale will be paid an annual base salary of \$250,000, subject to adjustment by the Board or Compensation Committee. In addition to the

base salary, a performance bonus may be awarded to Mr. DePasquale if we achieve certain corporate and strategic performance goals, as determined by the Board in its sole discretion. The employment agreement contains standard and customary confidentiality, non-solicitation and “work made for hire” provisions as well as a covenant not to compete which prohibits Mr. DePasquale from doing business with any of our current or prospective customers or engaging in a business competitive with us during the term of his employment and for the one year period thereafter. This agreement also contains a number of termination and change in control provisions as described in “*Termination Arrangements*” and “*Change in Control Provisions*” below.

On November 20, 2012, we renewed our one-year employment agreement with Mira K. LaCous to serve as our Vice President of Technology & Development at an annual base salary of \$147,420, subject to adjustment by the Board or Compensation Committee. The employment agreement contains standard and customary confidentiality, technical invention provisions, as well as a covenant not to compete which prohibits Ms. LaCous from doing business with any of our current or prospective customers or engaging in a business competitive with us during the term of her employment and for the one year period thereafter. This agreement also contains a number of termination provisions as described in “*Termination Arrangements*” below.

*Stock Option Grants*

In the event of any change in the outstanding shares of our common stock by reason of a stock dividend, stock split, combination of shares, recapitalization, merger, consolidation, transfer of assets, reorganization, conversion or what the Board deems to be similar circumstances, the number and kind of shares subject to outstanding options, and the exercise price of such options shall be appropriately adjusted in a manner to be determined in the sole discretion of the board. Furthermore, these option agreements contain a change of control provision as described in “*Change in Control Provisions*” in below.

*Outstanding Equity Awards at Fiscal Year End*

The following table sets forth, for each named executive officer, information regarding outstanding equity awards as at December 31, 2012:

Name	Option Awards Number of		Option Exercise Price (\$)	Option Expiration Date
	Underlying Unexercised Options (#) Exercisable	Number of Underlying Unexercised Options (#) Unexercisable		
Michael W. DePasquale	500,000	-0-	0.087	2/27/16
Mira LaCous	75,000	-0-	0.18	8/13/15
	340,000	-0-	0.46	1/7/17
	25,000	50,000 (1)	0.14	5/11/18
Scott Mahnken	33,333	66,667 (1)	0.14	5/11/18

<sup>(1)</sup> These options vest in three equal annual installments commencing on May 11, 2012.

## **Narrative Disclosure to Outstanding Equity Awards at Fiscal Year End Table**

The following are the material terms of each agreement, contract, plan or arrangement that provide for payments to one or more of our named executive officers at, following or pursuant to their resignation, retirement or termination, or in connection with a change in control of the Company.

### *Termination Arrangements*

Our employment agreement with Mr. DePasquale automatically renews for subsequent one-year terms, unless the employment relationship is terminated by either party, or modified in accordance with the terms and conditions of the Agreement. We may terminate the Agreement at any time with or without cause. In the event of termination by us without cause, we will continue to pay Mr. DePasquale his then current base salary for the greater of nine months from the date of such termination or the number of months remaining until the end of the term of the Agreement.

We may terminate our employment agreement with Ms. LaCous at any time with or without cause. In the event of termination by us without cause, we will continue to pay Ms. LaCous her then current base salary for six months from the date of such termination.

### *Change in Control Provisions*

Our 1999 Stock Option Plan and 2004 Stock Incentive Plan (the “1999 Plan” and together with the 2004 Plan, the “Plans”) provide for the acceleration of the vesting of unvested options upon a “Change in Control.” A Change in Control is defined in the Plans to include (i) a sale or transfer of substantially all of our assets; (ii) our dissolution or liquidation; (iii) a merger or consolidation to which we are a party and after which our prior stockholders hold less than 50% of the combined voting power of the surviving corporation’s outstanding securities; (iv) the incumbent directors cease to constitute at least a majority of the Board of Directors; or (v) a change in control which would otherwise be reportable under Section 13 or 15(d) of the Exchange Act.

In the event of a Change in Control, each Plan provides for the immediate vesting of all options issued thereunder. The 1999 Plan provides for us to deliver written notice to each optionee fifteen (15) days prior to the occurrence of a Change in Control during which all options issued under the 1999 Plan may be exercised. Thereafter, all options issued under the 1999 Plan which are neither assumed or substituted in connection with such transaction, automatically expire unless otherwise determined by the Board. The 2004 Plan enables the Board to provide that all outstanding options be assumed, or equivalent options be substituted by the acquiring or succeeding corporation upon the occurrence of a "Reorganization Event" as defined in such Plan. If such Reorganization Event also constitutes a Change in Control, then such assumed or substituted options shall be immediately exercisable in full. If the acquiring or succeeding corporation does not agree to assume, or substitute for such options, then the Board, upon written notice to the Participants, may provide that all unexercised options become exercisable in full as of a specified time prior to the Reorganization Event and terminate prior to the consummation of the Reorganization Event. Alternatively, if under the terms and conditions of the Reorganization Event, holders of common stock will receive a cash payment for their shares, then the Board may provide that all Participants receive a cash payment equal to the difference between the Acquisition Price and the Option Price multiplied by the number of options held by such Participants.

Options issued to executive officers outside of the Plans contain change in control provisions substantially similar to those contained in the 1999 Plan.

Our employment agreement with Mr. DePasquale contains a change in control provision that is triggered if Mr. DePasquale is not offered continued employment with us or any successor, or within five years following such Change of Control, we or any successor terminates Mr. DePasquale's employment without cause. If this occurs, then we will pay Mr. DePasquale his base salary and benefits earned but unpaid through the date of termination, and any prorated bonus earned during the then current bonus year, plus two times his then current base salary.

### **Director Compensation**

We did not provide any compensation to our directors in 2012. We reimburse each of our non-employee directors for their reasonable expenses incurred in connection with attending meetings of the board of directors and related committees.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth, as of December 26, 2013, information with respect to the securities holdings of all persons that we have reason to believe, pursuant to filings with the SEC, may be deemed the beneficial owner of more than 5% of our outstanding common stock. The following table also sets forth, as of such date, the beneficial ownership of our common stock by all executive officers and directors, individually and as a group.

The beneficial owners and amount of securities beneficially owned have been determined in accordance with Rule 13d-3 under the Exchange Act and, in accordance therewith, includes all shares of our common stock that may be acquired by such beneficial owners within 60 days of December 26, 2013 upon the exercise or conversion of any options, warrants or other convertible securities. Unless otherwise indicated, each person or entity named below has sole voting and investment power with respect to all common stock beneficially owned by that person or entity, subject to the matters set forth in the footnotes to the table below, and has an address of c/o BIO-Key International, Inc., 3349 Highway 138, Building A, Suite E, Wall, NJ 07719.

Name and Address of Beneficial Owner	Amount and Nature of Beneficial Ownership (1)	Percentage of Class <sup>(1)</sup>
Thomas J. Colatosti	500,241 (2)	*
Michael W. DePasquale	550,000 (3)	*
Mira LaCous	465,000 (4)	*
Jeffrey May	305,481 (5)	*
John Schoenherr	198,930 (5)	*
Renat Zhdanov	153,333 (6)	*
Charles P. Romeo	132,620 (5)	*
Cecilia Welch	120,000 (7)	*
Scott Mahnken	66,666 (8)	*
All officers and directors as a group (9 persons)	2,492,271 (9)	2.15 %

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\* Less than 1%.



(1) This table has been prepared based on 115,842,315 shares of our common stock outstanding on December 26, 2013.

(2) Includes 165,241 shares issuable on exercise of options. Does not include 50,000 shares issuable upon exercise of options subject to vesting.

(3) Includes 500,000 shares issuable upon exercise of options. Does not include 1,000,000 shares issuable upon exercise of options subject to vesting.

(4) Consists of shares issuable upon exercise of options. Does not include 150,000 shares issuable upon exercise of options subject to vesting.

(5) Consists of shares issuable upon exercise of options. Does not include 50,000 shares issuable upon exercise of options subject to vesting.

(6) Consists of shares issuable upon exercise of options. Does not include 116,667 shares issuable upon exercise of options subject to vesting.

(7) Consists of shares issuable upon exercise of options. Does not include 200,000 shares issuable upon exercise of options subject to vesting.

(8) Consists of shares issuable upon exercise of options. Does not include 108,334 shares issuable upon exercise of options subject to vesting.

(9) Includes 2,107,271 shares issuable upon exercise of options. Does not include 1,775,001 shares issuable upon exercise of options subject to vesting.

## **CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS**

### **Employment Arrangements**

We have entered into employment agreements with Michael W. DePasquale, and Mira LaCous. See “*Employment Agreements*” above.

### **Consulting Arrangement with Thomas J. Colatosti**

In connection with his appointment to the Board of Directors in September 2002, and as acting Chief Financial Officer from November 2008 to December 2009, the Company had entered into a number of consulting arrangements with Mr. Colatosti. Under the most recent arrangement, which expired on December 31, 2011, Mr. Colatosti provided services to the Company and its subsidiary for the two-year term at a rate of \$5,000 per month. At both September 30, 2013 and December 31, 2012, Mr. Colatosti is owed \$50,000. The balance owed to Colatosti is included in accounts payable.

### **Repayment of Note Payable to Thomas J. Colatosti**

Effective as of December 31, 2010, we entered into a Securities Exchange Agreement with Thomas J. Colatosti, pursuant to which Mr. Colatosti agreed to exchange all of his outstanding shares of Series D Convertible Preferred Stock, including all accrued and unpaid dividends thereon, and the 7% Convertible Promissory Note dated as of December 28, 2009 issued to Mr. Colatosti in the original principal amount of \$64,878 for a new non-convertible 7% Secured Promissory Note in the original principal amount of \$350,804. The 7% Secured Promissory Note was due on December 31, 2012. Pursuant to a Note Amendment and Extension Agreement effective as of December 31, 2012, the maturity date of the 7% Convertible Promissory Note was extended to March 31, 2013. In February 2013, the principal balance and accrued interest owing under the 7% Convertible Promissory Note was repaid from the proceeds of our February 2013 private offering with InterDigital.

### **Director Independence**

The Board applies the definition of independent director as set forth in NASDAQ Stock Market Rule 5605 (a)(2), as well as Rule 10A-3 under the Securities Exchange Act of 1934, as amended.

In accordance with this rule, the Board has determined that Messrs. May, Schoenherr and Romeo are independent. Messrs. May and Schoenherr are the members of our Audit Committee, while Messrs. Schoenherr and Romeo are the members of our Compensation Committee.

## **DESCRIPTION OF SECURITIES**

*The following summary of our capital stock, our certificate of incorporation, our bylaws and the DGCL is intended as a summary only and is subject to and qualified in its entirety by reference to our certificate of incorporation and bylaws, and the applicable provisions of the DGCL.*

### **Common Stock**

We are authorized to issue 170,000,000 shares of common stock, \$.0001 par value per share, of which 115,842,315 shares were outstanding on the date of this prospectus. Holders of shares of our common stock are entitled to one vote per share on all matters submitted to a vote of the stockholders and are not entitled to cumulative voting rights. Our shares of our common stock do not carry any preemptive, conversion or subscription rights, and there are no sinking fund or redemption provisions applicable to the shares of our common stock. Holders of our common stock are entitled to receive dividends and other distributions in cash, stock or property as may be declared by our Board of Directors from time to time out of our assets or funds legally available for dividends or other distributions, subject to dividend or distribution preferences that may be applicable to any then outstanding shares of preferred stock. In the event of our voluntary or involuntary liquidation, dissolution or winding up, holders of shares of our common stock are entitled to share ratably in the assets legally available for distribution to stockholders after payment of all debts and other liabilities and satisfaction of the liquidation preference, if any, granted to the holders of any preferred stock then outstanding. All outstanding shares of our common stock are fully paid and nonassessable.

## Preferred Stock

We are authorized to issue 5,000,000 shares of preferred stock, \$.0001 par value per share, of which no shares are outstanding on the date of this prospectus. Our certificate of incorporation authorizes our Board of Directors to establish one or more series of preferred stock (including convertible preferred stock). Unless required by law, the authorized shares of preferred stock will be available for issuance without further action by you. Our Board of Directors is able to determine, with respect to any series of preferred stock, the powers (including voting powers), preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, including, without limitation:

the designation of the series;

the number of shares of the series, which our Board of Directors may, except where otherwise provided in the preferred stock designation, increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares then outstanding);

whether dividends, if any, will be cumulative or non-cumulative and the dividend rate of the series;

the dates at which dividends, if any, will be payable;

the redemption rights and price or prices, if any, for shares of the series;

the terms and amounts of any sinking fund provided for the purchase or redemption of shares of the series;

the amounts payable on shares of the series in the event of any voluntary or involuntary liquidation, dissolution or winding-up of our affairs;

whether the shares of the series will be convertible into shares of any other class or series, or any other security, of the Company or any other corporation, and, if so, the specification of the other class or series or other security, the conversion price or prices or rate or rates, any rate adjustments, the date or dates as of which the shares will be convertible and all other terms and conditions upon which the conversion may be made;

restrictions on the issuance of shares of the same series or of any other class or series; and

the voting rights, if any, of the holders of the series.

We could issue a series of preferred stock that could, depending on the terms of the series, impede or discourage an acquisition attempt or other transaction that some, or a majority, of the holders of our common stock might believe to be in their best interests or in which the holders of our common stock might receive a premium for your common stock over the market price of the common stock. Additionally, the issuance of preferred stock may adversely affect the holders of our common stock by restricting dividends on the common stock, diluting the voting power of the common stock or subordinating the liquidation rights of the common stock. As a result of these or other factors, the issuance of preferred stock could have an adverse impact on the market price of our common stock.

### **Anti-Takeover Effects of Certain Provisions of Our Certificate of Incorporation, Our Bylaws and the DGCL**

The following provisions of our certificate of incorporation, our bylaws and the DGCL may discourage takeover attempts of us that may be considered by some stockholders to be in their best interest. The effect of such provisions could delay or frustrate a merger, tender offer or proxy contest, the removal of incumbent directors, or the assumption of control by stockholders, even if such proposed actions would be beneficial to our stockholders. Such effect could cause the market price of our common stock to decrease or could cause temporary fluctuations in the market price of our common stock that otherwise would not have resulted from actual or rumored takeover attempts.

#### *Authorized but Unissued Capital Stock*

Delaware law does not require stockholder approval for any issuance of authorized shares. Additional shares that may be used in the future may be used for a variety of corporate purposes, including future public offerings, to raise additional capital, to facilitate acquisitions and employee benefit plans.

Our Board of Directors may generally issue preferred shares on terms calculated to discourage, delay or prevent a change of control or the removal of our management. Moreover, our authorized but unissued shares of preferred stock will be available for future issuances without stockholder approval and could be utilized for a variety of corporate purposes.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our Board of Directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.



### *Special Meetings of Stockholders*

Our bylaws provide that special meetings of our stockholders may be called only by our Board of Directors. This provision may have the effect of deferring, delaying or discouraging hostile takeovers, or changes in control or management of the Company.

### *Director Vacancies*

Our certificate of incorporation provides that any vacancies in our Board of Directors, however occurring, will be filled by a majority of the remaining members of the Board of Directors, even if less than a quorum. This provision may discourage a third party from making a tender offer or otherwise attempting to obtain control of us because the provision effectively limits stockholder election of Directors to annual and special meetings of the stockholders.

### *Requirements for Advance Notification of Director Nominations and Stockholder Proposals*

Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of the Board of Directors or a committee of the Board of Directors. In order for any matter to be “properly brought” before a meeting, a stockholder will have to comply with advance notice requirements and provide us with certain information. Generally, to be timely, a stockholder’s notice must be received at our principal executive offices not less than 60 days nor more than 90 days prior to the first anniversary date of the immediately preceding annual meeting of stockholders. Our bylaws also specify requirements as to the form and content of a stockholder’s notice. These provisions may defer, delay or discourage a potential acquirer from conducting a solicitation of proxies to elect the acquirer’s own slate of directors or otherwise attempting to influence or obtain control of the Company.

### *No Cumulative Voting*

Under Delaware law, the right to vote cumulatively does not exist unless the certificate of incorporation specifically authorizes cumulative voting. Our certificate of incorporation does not authorize cumulative voting. Therefore, stockholders holding a majority in voting power of the shares of our stock entitled to vote generally in the election of directors will be able to elect all our directors.

**MARKET FOR COMMON EQUITY  
AND RELATED STOCKHOLDER MATTERS**

**Market Information**

Our common stock currently trades on the OTCQB Marketplace under the symbol "BKYY". The following table sets forth the range of high and low bid prices for shares of our common stock on the OTCQB for the periods indicated, as reported by the OTCQB Marketplace. Quotations represent inter-dealer prices, without retail mark-up, markdown or commission, and may not represent actual transactions.

Fiscal Year Ended December 31, 2011	High	Low
Quarter ended March 31, 2011	\$0.19	\$0.14
Quarter ended June 30, 2011	\$0.16	\$0.13
Quarter ended September 30, 2011	\$0.14	\$0.10
Quarter ended December 31, 2011	\$0.14	\$0.06

Fiscal Year Ended December 31, 2012	High	Low
Quarter ended March 31, 2012	\$0.09	\$0.06
Quarter ended June 30, 2012	\$0.11	\$0.06
Quarter ended September 30, 2012	\$0.10	\$0.06
Quarter ended December 31, 2012	\$0.09	\$0.06

Fiscal Year Ending December 31, 2013	High	Low
Quarter ended March 31, 2013	\$0.185	\$0.06
Quarter ending June 30, 2013	\$0.41	\$0.16
Quarter ending September 30, 2013	\$0.40	\$0.21
Quarter ending December 31, 2013 (through December 26, 2013)	\$0.28	\$0.12



The last reported trading price of our common stock as reported on the OTCQB Marketplace on December 26, 2013 was \$0.15 per share.

## **Holdings**

As of December 26, 2013, the number of stockholders of record of our common stock was 175.

## **Dividends**

We have not paid any cash dividends on our common stock to date, and have no intention of paying any cash dividends on our common stock in the foreseeable future. The declaration and payment of dividends on our common stock is also subject to the discretion of our Board of Directors and certain limitations imposed under the Delaware General Corporation Law. The timing, amount and form of dividends, if any, will depend on, among other things, our results of operations, financial condition, cash requirements and other factors deemed relevant by our Board of Directors.

## **Transfer Agent**

The transfer agent for our common stock is Broadridge Corporate Issuer Solutions, Inc., 1717 Arch Street, Suite 1300, Philadelphia, Pennsylvania 19103.

## **THE OFFERING**

This prospectus covers the public sale of 65,733,688 shares of common stock to be sold by the selling security holders identified in this prospectus. This prospectus also covers any additional shares of our common stock that we may issue or that may be issuable by reason of any stock split, stock dividend or similar transaction involving our common stock.

The selling security holders may sell the shares covered by this prospectus through public or private transactions at prevailing market prices or at privately negotiated prices. We will not receive any proceeds from this offering.

Set forth below is a description of the shares of our common stock being registered for resale hereby.

*October 2013 Private Offering of Common Stock and Warrants to Private Investors*

Between October 25, 2013 and November 8, 2013, we issued to certain private investors 24,647,337 units consisting of 24,647,337 shares of our common stock and warrants to purchase an additional 24,647,337 shares of our common stock for an aggregate purchase price of \$3,697,100. Each unit had a purchase price of \$0.15 and consisted of one share of common stock and one warrant. This prospectus covers the public resale of the 24,647,337 shares of common stock and 24,647,337 shares of common stock underlying the warrants issued to these private investors.

The warrants are immediately exercisable at an exercise price of \$0.25 per share for a term of three years. The exercise price and the number of shares issuable upon exercise of the warrants are subject to adjustment upon the occurrence of certain events, including stock dividends, stock splits, combinations, and reclassifications of our capital stock, and the warrants immediately terminate upon the sale of all or substantially all of our assets or the acquisition of more than 50% of our voting securities by any person in one or a series of related transactions. The warrants do not confer upon the holders thereof any voting, dividend or other rights as stockholders of our company. As of the date of this prospectus, no warrants have been exercised.

Investors in this private offering have been granted anti-dilution rights which require us to issue additional shares of common stock to such investors if, within the nine month period after November 8, 2013, we issue additional shares of common stock (other than to employees, officers, directors or consultants or pursuant to stock dividends) at a purchase price less than \$0.15 per share. The number of additional shares issuable is determined pursuant to a formula based on the number of shares issued at such lower price and the total number of shares outstanding at the time of such issuance calculated on a fully-diluted basis.

In connection with our October 2013 private offering, we also issued an aggregate of 412,067 shares of our common stock as a result of certain anti-dilution rights held by investors in our July 2013 private offering. This prospectus covers the public resale of the 412,067 shares of common stock issued to these private investors.

*February 2013 Private Offering of Common Stock to DRNC*

On February 26, 2013, we issued to DRNC 4,026,935 shares of our common stock at a purchase price \$0.10 per share, for an aggregate purchase price of \$402,693.50. This prospectus covers the public resale of the 4,026,935 shares of common stock issued to DRNC.

DRNC had anti-dilution rights which required us to issue additional shares of common stock to such investors if within the nine (9) month period after February 26, 2013 we issued additional shares of common stock (other than to employees, officers, directors or consultants or pursuant to stock dividends) at a purchase price less than \$0.10 per share. The number of additional shares issuable is determined on a full ratchet and has the effect of lowering the purchase price in this offering to such lower price. We were not required to issue any additional shares of common stock as a result of the anti-dilution rights held by DRNC.

*February 2013 Private Offering of Common Stock to Private Investors*

On February 26, 2013, we to certain private investors 5,000,000 shares of our common stock at a purchase price \$0.10 per share, for an aggregate purchase price of \$500,000. This prospectus covers the public resale of the 5,000,000 shares of common stock issued to these private investors.

Investors in the February 2013 private offering had anti-dilution rights which required us to issue additional shares of common stock to such investors if within the six (6) month period after February 26, 2013 we issued additional shares of common stock (other than to employees, officers, directors or consultants or pursuant to stock dividends) at a purchase price less than \$0.10 per share. The number of additional shares issuable is determined pursuant to a formula based on the number of shares issued at such lower price and the total number of shares outstanding at the time of such issuance calculated on a fully- diluted basis. We were not required to issue any additional shares of common stock as a result of the anti-dilution rights held by the investors in our February 2013 private offering.

*July 2013 Private Offering of Common Stock and Warrants to Private Investors*

On July 23, 2013, we issued to certain private investors 3,500,006 units consisting of 3,500,006 shares of our common stock and warrants to purchase an additional 3,500,006 shares of our common stock for an aggregate purchase price of \$1,050,000. Each unit had a purchase price of \$0.30 and consisted of one share of common stock and one warrant. This prospectus covers the public resale of the 3,500,006 shares of common stock and 3,500,006 shares of common stock underlying the warrants issued to these private investors.

The warrants were initially exercisable at an exercise price of \$0.40 per share at any time prior to July 22, 2018. On December 2, 2013, we agreed to reduce the exercise price of the warrants to \$0.25 per share. The exercise price and the number of shares issuable upon exercise of the warrants are subject to adjustment upon the occurrence of certain events, including stock dividends, stock splits, combinations, and reclassifications of our capital stock, and the warrants immediately terminate upon the sale of all or substantially all of our assets or the acquisition of more than 50% of our voting securities by any person in one or a series of related transactions. The warrants do not confer upon the holders thereof any voting, dividend or other rights as stockholders of our company. As of the date of this prospectus, no warrants have been exercised.

Investors in the July 2013 private offering have anti-dilution rights which require us to issue additional shares of common stock to such investors if within the six (6) month period after July 23, 2013 we issue additional shares of common stock (other than to employees, officers, directors or consultants or pursuant to stock dividends) at a purchase price less than \$0.30 per share. The number of additional shares issuable is determined pursuant to a formula based on the number of shares issued at such lower price and the total number of shares outstanding at the time of such issuance calculated on a fully- diluted basis.

## **SELLING SECURITY HOLDERS**

The selling security holders identified in the following table are offering for resale 65,733,688 shares of our common stock. All of the securities were previously issued to the selling security holders in private placement transactions. A description of these transactions is set forth above under “**The Offering**”.

The following table sets forth as of December 26, 2013:

The name of each selling security holder and any material relationship between us and such selling security holder based upon information currently available to us;

The number of shares owned beneficially by each selling security holder before the offering;

The percentage ownership of each selling security holder prior to the offering;

The number of shares offered hereunder by each selling security holder;

The number of shares owned beneficially by each selling security holder after the offering; and

The percentage ownership of each selling security holder after the offering.

The information presented in this table has been calculated based on the assumption that all options and warrants will be exercised prior to completion of the offering, that all shares offered hereby will be sold, and that no other shares of our common stock will be acquired or disposed of by the selling security holder prior to the termination of this offering. The beneficial ownership set forth below has been determined in accordance with Rule 13d-3 under the Exchange Act based on 115,842,315 shares of our common stock outstanding on December 26, 2013. Except as indicated by footnote, and subject to applicable community property laws, we believe that the beneficial owners of the common stock listed below have sole voting power and investments power with respect to their shares. None of the selling security holders are affiliated with a broker-dealer registered under the Exchange Act of 1934, as amended.

Name of Selling Security Holder	Beneficial Ownership of			Beneficial Ownership of		
	Selling Security Holders Prior			Selling Security Holders		
	to the Offering			After the Offering		
	Number	Percent	Number of Shares Offered Hereby	Number	Percent	
AIGH Investment Partners LLC <sup>(1)</sup>	5,400,000 <sup>(2)</sup>	4.8 %	800,000 <sup>(3)</sup>	-0-	*	
AIGH Investment Partners LP <sup>(3)</sup>	5,400,000 <sup>(4)</sup>	4.8 %	10,000,000 <sup>(5)</sup>	-0-	*	
Betty Benjamin	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
Daniel S. & Patrice M. Perkins JTWR0S	400,000 <sup>(7)</sup>	*	400,000 <sup>(7)</sup>	-0-	*	
Dougherty Absolute Equity Fund LLC <sup>(8)</sup>	2,800,000 <sup>(9)</sup>	2.5 %	2,800,000 <sup>(9)</sup>	-0-	*	
Edmund Agresta	666,666 <sup>(10)</sup>	*	666,666 <sup>(10)</sup>	-0-	*	
Michael J. Salmen	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
John C. Morgan	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
Jeffrey Jacobson	66,666 <sup>(11)</sup>	*	66,666 <sup>(11)</sup>	-0-	*	
James Bruce Nelson	2,000,000 <sup>(12)</sup>	1.8 %	2,000,000 <sup>(12)</sup>	-0-	*	
Leap Tide Partners L.P. <sup>(13)</sup>	5,333,334 <sup>(14)</sup>	4.8 %	5,333,334 <sup>(14)</sup>	-0-	*	
George Thomas Ahern	320,000 <sup>(15)</sup>	*	320,000 <sup>(15)</sup>	-0-	*	
Sun Investments, LLC <sup>(16)</sup>	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
Jerome A. Tabolich	268,000 <sup>(17)</sup>	*	268,000 <sup>(17)</sup>	-0-	*	
Norman S. Smith Trust <sup>(18)</sup>	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
Hershel Berkovitz	200,000 <sup>(19)</sup>	*	200,000 <sup>(19)</sup>	-0-	*	
Michael & Michelle Noble	400,000 <sup>(7)</sup>	*	400,000 <sup>(7)</sup>	-0-	*	
Mary Elizabeth Weingart	266,666 <sup>(20)</sup>	*	266,666 <sup>(20)</sup>	-0-	*	
William I. Salmen	266,666 <sup>(20)</sup>	*	266,666 <sup>(20)</sup>	-0-	*	
Steve Kellogg	333,334 <sup>(6)</sup>	*	333,334 <sup>(6)</sup>	-0-	*	
E. Terry Skone TTEE Terry Skone Rev Trust u/a dtd 11/30/2005	400,000 <sup>(7)</sup>	*				