

APPLIED DNA SCIENCES INC
Form S-1/A
July 22, 2008

As filed with the Securities and Exchange Commission on July 21 , 2008
Registration No. 333-122848

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

Amendment No. 11 to Form SB-2 on
FORM S-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Applied DNA Sciences, Inc.
(Exact name of registrant as specified in its charter)

Nevada (State or other jurisdiction of incorporation or organization)	2836 (Primary Standard Industrial Classification Code Number) 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790 (631) 444-6862	59-2262718 (I.R.S. Employer Identification Number)
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(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)
James A. Hayward, Ph.D., Sc.D., Chief Executive Officer
APPLIED DNA SCIENCES, INC.
25 Health Sciences Drive, Suite 113
Stony Brook, New York 11790
(631) 444- 6370

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

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Approximate date of commencement of proposed sale to public: As soon as practicable after this Registration Statement becomes effective.

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, as amended (the "Securities Act"), 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, please 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 12b2 of the Exchange Act.

Large accelerated filer

Non-accelerated filer

Accelerated filer

Smaller reporting
company

CALCULATION OF REGISTRATION FEE

Title of each class of securities to be registered	Amount to be registered	Proposed maximum offering price per share (1)	Proposed maximum aggregate offering price	Amount of registration fee
Common stock, \$.001 par value	7,220,324	\$ 0.07	\$ 505,423	\$ 20
Common stock, \$.001 par value, issuable upon exercise of Warrants exercisable at \$0.60 per share	1,207,500	\$ 0.07	\$ 84,525	\$ 4
Common stock, \$.001 par value, issuable upon exercise of Warrants exercisable at \$0.75 per share	14,742,000	\$ 0.07	\$ 1,031,940	\$ 41
Total	23,169,824		\$ 1,621,888	\$ 65(2)

(1) Estimated solely for purposes of calculating the registration fee in accordance with Rule 457(c) and Rule 457(g) under the Securities Act of 1933, using the average of the high and low price as reported on The Over The Counter Bulletin Board on July 18 , 2008, which was \$ 0.07 per share.

(2) A filing fee of \$6,639.68 was previously paid by the Registrant.

The registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THIS PROSPECTUS IS INCLUDED IN THE REGISTRATION STATEMENT THAT WAS FILED BY APPLIED DNA SCIENCES, INC. WITH THE SECURITIES AND EXCHANGE COMMISSION. THE SELLING STOCKHOLDERS MAY NOT SELL THESE SECURITIES PURSUANT TO THIS REGISTRATION STATEMENT UNTIL THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY STATE WHERE THE SALE IS NOT PERMITTED.

PRELIMINARY PROSPECTUS SUBJECT TO COMPLETION, DATED JULY 21 , 2008

APPLIED DNA SCIENCES, INC.

23,169,824 SHARES OF

COMMON STOCK

This prospectus relates to the resale by the selling stockholders of up to 23,169,824 shares of our common stock, including up to 15,949,500 shares issuable upon the exercise of common stock purchase warrants and 7,220,324 shares of common stock. The selling stockholders may sell common stock from time to time in the principal market on which the stock is traded at the prevailing market price or in negotiated transactions. We will pay the expenses of registering these shares.

Our common stock is registered under Section 15(d) of the Securities Exchange Act of 1934, as amended, and is listed on The Over The Counter Bulletin Board under the symbol "APDN." The last reported sales price per share of our common stock as reported by The Over The Counter Bulletin Board on July 18 , 2008 was \$ 0.08 .

Investing in these securities involves significant risks. See "Risk Factors" beginning on page 3.

Neither the U.S. Securities and Exchange Commission ("SEC") nor any state securities commission has approved or disapproved of these securities or determined if this Prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is _____, 2008.

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You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of the common stock.

In this prospectus “Applied DNA,” “we,” “us” and “our” refer to Applied DNA Sciences, Inc. and its subsidiaries. Applied DNA and SigNature are the subject of our trademark applications pending registration with the United States Patent and Trademark Office. This prospectus contains other product names, trade names and trademarks of Applied DNA Sciences, Inc. and of other organizations.

PROSPECTUS SUMMARY

The following summary highlights selected information contained in this prospectus. This summary does not contain all the information you should consider before investing in the securities. Before making an investment decision, you should read the entire prospectus carefully, including the “risk factors” section, the financial statements and the notes to the financial statements.

APPLIED DNA SCIENCES, INC.

We provide botanical DNA encryption, embedment and authentication solutions that can help protect companies, governments and consumers from counterfeiting, fraud, piracy, product diversion, identity theft, and unauthorized intrusion into physical locations and databases. Our SigNature Program provides a secure, accurate and cost-effective means for our customers to incorporate our SigNature DNA Markers in, and then quickly and reliably authenticate and identify, a broad range of items such as artwork and collectibles, fine wine, consumer products, digital media, financial instruments, identity cards and other official documents. Having the ability to reliably authenticate and identify counterfeit versions of such items enables companies and governments to detect, deter, interdict and prosecute counterfeiting enterprises and individuals.

Our SigNature Program enables our customers to cost-effectively:

- give assurance to manufacturers, suppliers, distributors, retailers and end-users that their products are authentic and can be forensically authenticated;
- integrate our SigNature DNA Markers with existing security solutions such as barcodes, radio frequency identification (RFID) tags, holograms, microchips and other security measures; and
- add value to the “bottom-line” by helping to diminish product diversion and counterfeiting.

Counterfeit and diverted products continue to pose a significant and growing problem with consumer packaged goods, especially for prestige and established brands worldwide. Piracy, identity theft and forged documents and items are also highly prevalent in vertical markets such as digital media, fine art, luxury goods, and alcoholic beverages. Key aspects of our strategy include:

- continuing to improve and customize our solution to meet our current and potential customers’ needs;
- continuing to develop and enhance our existing DNA marker authentication technologies;
- expanding our customer base both domestically and abroad by targeting high volume markets; and
- augmenting our competitive position through strategic acquisitions and alliances.

We have also begun to develop and manufacture DermalRx, an ingredient for use in skin care products, which allows for exfoliation without the irritation or inflammation associated with chemical peeling.

For the year ended September 30, 2007, we generated revenues of \$121,920 and had net losses of \$13.3 million. Our registered independent certified public accountants have stated in their report dated January 14, 2008, that we have incurred operating losses in the last two years, and that we are dependent upon management's ability to develop profitable operations. These factors among others may raise substantial doubt about our ability to continue as a going concern.

Our principal offices are located at 25 Health Sciences Drive, Suite 113, Stony Brook, New York 11790, and our telephone number is (631) 444-6370. We are a Nevada corporation. We maintain a website at www.adnas.com. The information contained on that website is not deemed to be a part of this prospectus.

THE OFFERING

Common stock offered by selling
stockholders

Up to 23,169,824 shares, including the following:

- 7,220,324 shares of common stock issued upon the conversion of the promissory notes issued in connection with the January and February 2005 offering;
- up to 1,207,500 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of \$.60 per share;

- up to 14,742,000 shares of common stock issuable upon the exercise of common stock purchase warrants at an exercise price of \$.75 per share;

This number represents approximately 12% of our current outstanding stock.

Common stock to be outstanding after the offering

Up to 213,053,980 shares

Use of proceeds

We will not receive any proceeds from the sale of the common stock. However, we will receive the sale price of any common stock we sell to the selling stockholders upon exercise of the warrants. We expect to use the proceeds received from the exercise of the warrants, if any, for working capital, including general corporate purposes.

The Over The Counter Bulletin Board symbol

APDN

The above information regarding common stock to be outstanding after the offering is based on 197,104,480 shares of common stock outstanding as of July 18 , 2008, and assumes the subsequent exercise of warrants by our selling stockholders.

RISK FACTORS

This investment has a high degree of risk. Before you invest you should carefully consider the risks and uncertainties described below and the other information in this prospectus. If any of the following risks actually occur, our business, operating results and financial condition could be harmed and the value of our stock could go down. This means you could lose all or a part of your investment.

Risks Relating To Our Business:

We have a short operating history, a relatively new business model, and have not produced significant revenues. This makes it difficult to evaluate our future prospects and increases the risk that we will not be successful.

We have a short operating history with our current business model, which involves the marketing, sale and distribution of botanical DNA encryption, embedment and authentication products and services, which are based on technologies that we acquired in July 12, 2005 from Biowell Technology, Inc. ("Biowell"). We first derived revenue from this model in the second calendar quarter of 2006, which was insignificant. Prior to the July 12, 2005 acquisition, our operations consisted principally of providing marketing and business development services to Biowell. As a result, we have a very limited operating history for you to evaluate in assessing our future prospects. In fiscal 2007 we transitioned from a developmental stage to an operating company. Our operations since inception have not produced significant revenues, and may not produce significant revenues in the near term, or at all, which may harm our ability to obtain additional financing and may require us to reduce or discontinue our operations. If we create revenues in the future, prior to our introduction of any new products, we will derive all such revenues from the sale of botanical DNA encryption, encapsulation, embedment and authentication products and services, which is an immature industry. You must consider our business and prospects in light of the risks and difficulties we will encounter as an early-stage company in a new and rapidly evolving industry. We may not be able to successfully address these risks and difficulties, which could significantly harm our business, operating results, and financial condition.

We have a history of losses which may continue, and which may harm our ability to obtain financing and continue our operations.

We incurred net losses of \$13.3 million for the year ended September 30, 2007 and \$2.4 million for the year ended September 30, 2006. For the six months ended March 31, 2008, we incurred a net loss from operations of \$3,458,431. These net losses have principally been the result of the various costs associated with our selling, general and administrative expenses as we commenced operations, acquired, developed and validated technologies, began marketing activities, and our interest expense on notes and warrants we issued to obtain financing. Our operations are subject to the risks and competition inherent in a company that moved from the development stage to an operating company. We may not generate sufficient revenues from operations to achieve or sustain profitability on a quarterly, annual or any other basis in the future. Our revenues and profits, if any, will depend upon various factors, including whether our existing products and services or any new products and services we develop will achieve any level of market acceptance. If we continue to incur losses, our accumulated deficit will continue to increase, which might significantly impair our ability to obtain additional financing. As a result, our business, results of operations and financial condition would be significantly harmed, and we may be required to reduce or terminate our operations.

If we are unable to obtain additional financing our business operations will be harmed or discontinued, and if we do obtain additional financing our shareholders may suffer substantial dilution.

We believe that our existing capital resources will enable us to fund our operations until approximately September 2008. We believe we will be required to seek additional capital to sustain or expand our prototype and sample manufacturing, and sales and marketing activities, and to otherwise continue our business operations beyond that

date. We have no commitments for any future funding, and may not be able to obtain additional financing or grants on terms acceptable to us, if at all, in the future. If we are unable to obtain additional capital this would restrict our ability to grow and may require us to curtail or discontinue our business operations. Additionally, while a reduction in our business operations may prolong our ability to operate, that reduction would harm our ability to implement our business strategy. If we can obtain any equity financing, it may involve substantial dilution to our then existing shareholders.

Our independent auditors have expressed substantial doubt about our ability to continue as a going concern, which may hinder our ability to obtain future financing.

In their report dated January 14, 2008, our independent auditors stated that our financial statements for the year ended September 30, 2007 were prepared assuming that we would continue as a going concern, and that they have substantial doubt about our ability to continue as a going concern. Our auditors' doubts are based on our incurring net losses of \$13.3 million for the year ended September 30, 2007. We continue to experience net operating losses. Our ability to continue as a going concern is subject to our ability to generate a profit and/or obtain necessary funding from outside sources, including by the sale of our securities, obtaining loans from financial institutions, or obtaining grants from various organizations or governments, where possible. Our continued net operating losses and our auditors' doubts increase the difficulty of our meeting such goals and our efforts to continue as a going concern may not prove successful.

If our existing products and services are not accepted by potential customers or we fail to introduce new products and services, our business, results of operations and financial condition will be harmed.

There has been limited or no market acceptance of our botanical DNA encryption, encapsulation, embedment and authentication products and services to date. Some of the factors that will affect whether we achieve market acceptance of our solutions include:

- availability, quality and price relative to competitive solutions;
- customers' opinions of the solutions' utility;
- ease of use;
- consistency with prior practices;
- scientists' opinions of the solutions' usefulness;
- citation of the solutions in published research; and
- general trends in anti-counterfeit and security solutions' research.

The expenses or losses associated with the continued lack of market acceptance of our solutions will harm our business, operating results and financial condition.

Rapid technological changes and frequent new product introductions are typical for the markets we serve. Our future success may depend in part on continuous, timely development and introduction of new products that address evolving market requirements. We believe successful new product introductions may provide a significant competitive advantage because customers invest their time in selecting and learning to use new products, and are often reluctant to switch products. To the extent we fail to introduce new and innovative products, we may lose any market share we then have to our competitors, which will be difficult or impossible to regain. Any inability, for technological or other reasons, to successfully develop and introduce new products could reduce our growth rate or damage our business. We may experience delays in the development and introduction of products. We may not keep pace with the rapid rate of change in anti-counterfeiting and security products' research, and any new products acquired or developed by us may not meet the requirements of the marketplace or achieve market acceptance.

If we are unable to retain the services of Drs. Hayward or Liang we may not be able to continue our operations.

Our success depends to a significant extent upon the continued service of Dr. James A. Hayward, one of our directors, our President and Chief Executive Officer; and Dr. Benjamin Liang, our Secretary and Strategic Technology Development Officer. We do not have employment agreements with Drs. Hayward or Liang. Loss of the services of Drs. Hayward or Liang could significantly harm our business, results of operations and financial condition. We do not maintain key-man insurance on the lives of Drs. Hayward or Liang.

The markets for our SigNature program are very competitive, and we may be unable to continue to compete effectively in this industry in the future.

The principal markets for our SigNature Program are intensely competitive. We compete with many existing suppliers and new competitors continue to enter the market. Many of our competitors, both in the United States and elsewhere, are major pharmaceutical, chemical and biotechnology companies, or have strategic alliances with such companies, and many of them have substantially greater capital resources, marketing experience, research and development staff, and facilities than we do. Any of these companies could succeed in developing products that are more effective than the products that we have or may develop and may be more successful than us in producing and marketing their existing products. Some of our competitors that operate in the anti-counterfeiting and fraud prevention markets include: Authentix, Collectors Universe Inc., Data Dot Technology, Digimarc Corp., DNA Technologies, Inc., ID Global, Informium AG, Inksure Technologies, Kodak, L-1 Identity Solutions, Manakoa, OpSec Security Group, SmartWater Technology, Inc., Sun Chemical Corp, and Tracetag.

We expect this competition to continue and intensify in the future. Competition in our markets is primarily driven by:

- product performance, features and liability;
- price;
- timing of product introductions;
- ability to develop, maintain and protect proprietary products and technologies;
- sales and distribution capabilities;
- technical support and service;
- brand loyalty;
- applications support; and
- breadth of product line.

If a competitor develops superior technology or cost-effective alternatives to our products, our business, financial condition and results of operations could be significantly harmed.

We need to expand our sales, marketing and support organizations and our distribution arrangements to increase market acceptance of our products and services.

We currently have few sales, marketing, customer service and support personnel and will need to increase our staff to generate a greater volume of sales and to support any new customers or the expanding needs of existing customers. The employment market for sales, marketing, customer service and support personnel in our industry is very competitive, and we may not be able to hire the kind and number of sales, marketing, customer service and support personnel we are targeting. Our inability to hire qualified sales, marketing, customer service and support personnel may harm our business, operating results and financial condition. We do not currently have any arrangements with any distributors and we may not be able to enter into arrangements with qualified distributors on acceptable terms or at all. If we are not able to develop greater distribution capacity, we may not be able to generate sufficient revenue to support our operations.

A manufacturer's inability or willingness to produce our goods on time and to our specifications could result in lost revenue and net losses.

Though we manufacture prototypes, samples and some of our own products, we currently do not own or operate any significant manufacturing facilities and depend upon independent third parties for the manufacture of some of our products to our specifications. The inability of a manufacturer to ship orders of such products in a timely manner or to meet our quality standards could cause us to miss the delivery date requirements of our customers for those items, which could result in cancellation of orders, refusal to accept deliveries or a reduction in purchase prices, any of which could harm our business by resulting in decreased revenues or net losses upon sales of products, if any sales could be made.

If we need to replace manufacturers, our expenses could increase, resulting in smaller profit margins.

We compete with other companies for the production capacity of our manufacturers and import quota capacity. Some of these competitors have greater financial and other resources than we have, and thus may have an advantage in the competition for production and import quota capacity. If we experience a significant increase in demand, or if our existing manufacturers must be replaced, we will need to establish new relationships with another or multiple manufacturers. We cannot assure you that this additional third party manufacturing capacity will be available when required on terms that are acceptable to us or terms similar to those we have with our existing manufacturers, either from a production standpoint or a financial standpoint. We do not have long-term contracts with our manufacturers, and our manufacturers do not produce our products exclusively. Should we be forced to replace our manufacturers, we may experience an adverse financial impact, or an adverse operational impact, such as being forced to pay

increased costs for such replacement manufacturing or delays upon distribution and delivery of our products to our customers, which could cause us to lose customers or lose revenues because of late shipments.

If a manufacturer fails to use acceptable labor practices, we might have delays in shipments or face joint liability for violations, resulting in decreased revenue and increased expenses.

While we require our independent manufacturers to operate in compliance with applicable laws and regulations, we have no control over their ultimate actions. While our internal and vendor operating guidelines promote ethical business practices and our staff and buying agents periodically visit and monitor the operations of our independent manufacturers, we do not control these manufacturers or their labor practices. The violation of labor or other laws by our independent manufacturers, or by one of our licensing partners, or the divergence of an independent manufacturer's or licensing partner's labor practices from those generally accepted as ethical in the United States, could interrupt, or otherwise disrupt the shipment of finished products to us or damage our reputation. Any of these, in turn, could have a material adverse effect on our financial condition and results of operations, such as the loss of potential revenue and incurring additional expenses.

Failure to license new technologies could impair sales of our existing products or any new product development we undertake in the future.

To generate broad product lines, it is advantageous to sometimes license technologies from third parties rather than depend exclusively on the development efforts of our own employees. As a result, we believe our ability to license new technologies from third parties is and will continue to be important to our ability to offer new products. In addition, from time to time we are notified or become aware of patents held by third parties that are related to technologies we are selling or may sell in the future. After a review of these patents, we may decide to seek a license for these technologies from these third parties. There can be no assurance that we will be able to successfully identify new technologies developed by others. Even if we are able to identify new technologies of interest, we may not be able to negotiate a license on favorable terms, or at all. If we lose the rights to patented technology, we may need to discontinue selling certain products or redesign our products, and we may lose a competitive advantage. Potential competitors could license technologies that we fail to license and potentially erode our market share for certain products. Intellectual property licenses would typically subject us to various commercialization, sublicensing, minimum payment, and other obligations. If we fail to comply with these requirements, we could lose important rights under a license. In addition, certain rights granted under the license could be lost for reasons beyond our control, and we may not receive significant indemnification from a licensor against third party claims of intellectual property infringement.

Our failure to manage our growth in operations and acquisitions of new product lines and new businesses could harm our business.

Any growth in our operations, if any, will place a significant strain on our current management resources. To manage such growth, we would need to improve our:

- operations and financial systems;
- procedures and controls; and
- training and management of our employees.

Our future growth, if any, may be attributable to acquisitions of new product lines and new businesses. Future acquisitions, if successfully consummated, would likely create increased working capital requirements, which would likely precede by several months any material contribution of an acquisition to our net income. Our failure to manage growth or future acquisitions successfully could seriously harm our operating results. Also, acquisition costs could cause our quarterly operating results to vary significantly. Furthermore, our stockholders would be diluted if we financed the acquisitions by incurring convertible debt or issuing securities.

Although we currently only have operations within the United States, if we were to acquire an international operation; we would face additional risks, including:

- difficulties in staffing, managing and integrating international operations due to language, cultural or other differences;
- different or conflicting regulatory or legal requirements;
- foreign currency fluctuations; and
- diversion of significant time and attention of our management.

Failure to attract and retain qualified scientific, production and managerial personnel could harm our business.

Recruiting and retaining qualified scientific and production personnel to perform and manage prototype, sample, and product manufacturing and business development personnel to conduct business development are critical to our success. In addition, our desired growth and expansion into areas and activities requiring additional expertise, such as

clinical testing, government approvals, production, and marketing will require the addition of new management personnel and the development of additional expertise by existing management personnel. Because the industry in which we compete is very competitive, we face significant challenges attracting and retaining a qualified personnel base. Although we believe we have been and will be able to attract and retain these personnel, we may not be able to continue to successfully attract qualified personnel. The failure to attract and retain these personnel or, alternatively, to develop this expertise internally would harm our business since our ability to conduct business development and manufacturing will be reduced or eliminated, resulting in lower revenues. We generally do not enter into employment agreements requiring our employees to continue in our employment for any period of time.

Our intellectual property rights are valuable, and any inability to protect them could reduce the value of our products, services and brand.

Our patents, trademarks, trade secrets, copyrights and all of our other intellectual property rights are important assets for us. There are events that are outside of our control that pose a threat to our intellectual property rights as well as to our products and services. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. The efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. There is always the possibility that the scope of the protection gained from one of our issued patents will be insufficient or deemed invalid or unenforceable. We also seek to maintain certain intellectual property as trade secrets. The secrecy could be compromised by third parties, or intentionally or accidentally by our employees, which would cause us to lose the competitive advantage resulting from these trade secrets.

Intellectual property litigation could harm our business.

Litigation regarding patents and other intellectual property rights is extensive in the biotechnology industry. In the event of an intellectual property dispute, we may be forced to litigate. This litigation could involve proceedings instituted by the U.S. Patent and Trademark Office or the International Trade Commission, as well as proceedings brought directly by affected third parties. Intellectual property litigation can be extremely expensive, and these expenses, as well as the consequences should we not prevail, could seriously harm our business.

If a third party claims an intellectual property right to technology we use, we might need to discontinue an important product or product line, alter our products and processes, pay license fees or cease our affected business activities. Although we might under these circumstances attempt to obtain a license to this intellectual property, we may not be able to do so on favorable terms, or at all. Furthermore, a third party may claim that we are using inventions covered by the third party's patent rights and may go to court to stop us from engaging in our normal operations and activities, including making or selling our product candidates. These lawsuits are costly and could affect our results of operations and divert the attention of managerial and technical personnel. A court may decide that we are infringing the third party's patents and would order us to stop the activities covered by the patents. In addition, a court may order us to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products or methods of use. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. If we are sued for patent infringement, we would need to demonstrate that our products or methods of use either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents.

Because some patent applications in the United States may be maintained in secrecy until the patents are issued, because patent applications in the United States and many foreign jurisdictions are typically not published until eighteen months after filing, and because publications in the scientific literature often lag behind actual discoveries, we cannot be certain that others have not filed patent applications for technology covered by our or our licensor's issued patents or pending applications or that we or our licensors were the first to invent the technology. Our competitors may have filed, and may in the future file, patent applications covering technology similar to ours. Any such patent application may have priority over our or our licensors' patent applications and could further require us to

obtain rights to issued patents covering such technologies. If another party has filed a United States patent application on inventions similar to ours, we may have to participate in an interference proceeding declared by the United States Patent and Trademark Office to determine priority of invention in the United States. The costs of these proceedings could be substantial, and it is possible that such efforts would be unsuccessful, resulting in a loss of our United States patent position with respect to such inventions.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise the funds necessary to continue our operations.

Accidents related to hazardous materials could adversely affect our business.

Some of our operations require the controlled use of hazardous materials. Although we believe our safety procedures comply with the standards prescribed by federal, state, local and foreign regulations, the risk of accidental contamination of property or injury to individuals from these materials cannot be completely eliminated. In the event of an accident, we could be liable for any damages that result, which could seriously damage our business and results of operations.

Potential product liability claims could affect our earnings and financial condition.

We face a potential risk of liability claims based on our products and services, and we have faced such claims in the past. Though we have product liability insurance coverage which we believe is adequate, we may not be able to maintain this insurance at reasonable cost and on reasonable terms. We also cannot assure that this insurance, if obtained, will be adequate to protect us against a product liability claim, should one arise. In the event that a product liability claim is successfully brought against us, it could result in a significant decrease in our liquidity or assets, which could result in the reduction or termination of our business.

Litigation generally could affect our financial condition and results of operations.

We generally may be subject to claims made by and required to respond to litigation brought by customers, former employees, former officers and directors, former distributors and sales representatives, and vendors and service providers. We have faced such claims and litigation in the past and we cannot assure that we will not be subject to claims in the future. In the event that a claim is successfully brought against us, considering our lack of material revenue and the losses our business has incurred for the period from our inception to March 31, 2008, this could result in a significant decrease in our liquidity or assets, which could result in the reduction or termination of our business.

Our failure to have our Registration Statement on Form S-1 declared effective by the SEC could harm our ability to seek financing.

On October 15, 2005 we filed a registration statement on Form SB-2 (now on Form S-1) with the SEC registering for resale common stock issued upon conversion of convertible promissory notes and underlying warrants. In response to the SEC's comment and review process we have filed eleven amendments to the registration statement to date. If the registration statement is declared effective, we are obligated to file additional registration statements with respect to subsequent private placements of common stock issued upon convertible promissory notes and underlying warrants. Our failure to have the registration statement declared effective on a timely basis may harm our ability to seek financing in the future.

We are obligated to pay liquidated damages as a result of our failure to have our registration statement declared effective prior to June 15, 2005, and any payment of liquidated damages will either result in depletion of our limited working capital or issuance of shares of common stock which would cause dilution to our existing shareholders.

Pursuant to the terms of a registration rights agreement with respect to common stock underlying convertible notes and warrants we issued in private placements in November and December, 2003, December, 2004, and January and February, 2005, if we did not have a registration statement registering the shares underlying these convertible notes and warrants declared effective on or before June 15, 2005, we are obligated to pay liquidated damages in the amount of 3.5% per month of the face amount of the notes, which equals \$367,885, until the registration statement is declared effective. At our option, these liquidated damages can be paid in cash or unregistered shares of our common stock. To date we have decided to pay certain of these liquidated damages in common stock, although any future payments of liquidated damages may, at our option, be made in cash. If we decide to pay such liquidated damages in cash, we would be required to use our limited working capital and potentially raise additional funds. If we decide to pay the liquidated damages in shares of common stock, the number of shares issued would depend on our stock price at the time that payment is due. Based on the closing market prices of \$0.66, \$0.58, \$0.70, \$0.49, \$0.32 and \$0.20 for our common stock on July 15, 2005, August 15, 2005, September 15, 2005, October 17, 2005, November 15, 2005 and December 15, 2005, respectively, we issued a total of 3,807,375 shares of common stock in liquidated damages from August, 2005 to January, 2006 to persons who invested in the January and February, 2005 private placements. The issuance of shares upon any payment by us of further liquidated damages will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering.

We paid liquidated damages in the form of common stock only for the period from June 15, 2005 to December 15, 2005, and only to persons who invested in the January and February, 2005 private placements. We believe that we have no enforceable obligation to pay liquidated damages to holders of any shares we agreed to register under the registration rights agreement for periods after the first anniversary of the date of issuance of such shares, since they were eligible for resale under Rule 144 of the Securities Act during such periods, and such liquidated damages are grossly inconsistent with actual damages to such persons. Nonetheless, as of March 31, 2008 we have accrued approximately \$11.8 million in penalties representing further liquidated damages associated with our failure to have the registration statement declared effective by the deadline, and have included this amount in accounts payable and accrued expenses.

We initially filed our registration statement on Form SB-2 with the SEC on February 15, 2005. We filed Amendment No. 11 to the Registration Statement on Form SB-2 on Form S-1 on July 21, 2008 and the SEC's review and comment process is continuing. Our failure to have the registration statement declared effective has and may continue to adversely impact our ability to secure financing.

Matter voluntarily reported to the Securities and Exchange Commission

During the months of March, May, July and August 2005, we issued a total of 8,550,000 shares of our common stock to certain employees and consultants pursuant to the 2005 Incentive Stock Plan. We engaged our outside counsel to conduct an investigation of the circumstances surrounding the issuance of these shares. On April 26, 2006, we voluntarily reported the findings from this investigation to the SEC, and agreed to provide the SEC with further information arising from the investigation. We believe that the issuance of 8,000,000 shares to employees in July 2005 was effectuated by both our former President and our former Chief Financial Officer/Chief Operating Officer without approval of our board of directors. These former officers received a total of 3,000,000 of these shares. In addition, it appears that the 8,000,000 shares issued in July 2005, as well as an additional 550,000 shares issued to employees and consultants in March, May and August 2005, were improperly issued without a restrictive legend stating that the shares could not be resold legally except in compliance with the Securities Act of 1933, as amended. The members of the Company's management who effectuated the stock issuances no longer work for the Company. These shares were not registered under the Securities Act of 1933, or the securities laws of any state, and we believe that certain of these shares may have been sold on the open market, though we have been unable to determine the magnitude of such sales. Since our voluntary report of the findings of our internal investigation to the SEC on April 26, 2006, we have received no communication from the SEC or any third party with respect to this matter. If violations of securities laws occurred in connection with the resale of certain of these shares, the employees and consultants or persons who purchased shares from them may have rights to have their purchase rescinded or other claims against us for violation of securities laws, which could harm our business, results of operations, and financial condition.

Risks Relating to Our Common Stock:

There are a large number of shares underlying our options and warrants that may be available for future sale and the sale of these shares may depress the market price of our common stock and will cause immediate and substantial dilution to our existing stockholders.

As of July 18, 2008, we had 197,104,480 shares of common stock issued and outstanding and outstanding options and warrants to purchase 81,464,464 shares of common stock. All of the shares issuable upon exercise of our options and warrants may be sold without restriction. The sale of these shares may adversely affect the market price of our common stock. The issuance of shares upon exercise of options and warrants will cause immediate and substantial dilution to the interests of other stockholders since the selling stockholders may convert and sell the full amount issuable on exercise.

If we fail to remain current on our reporting requirements, we could be removed from the OTC bulletin board which would limit the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market.

Companies trading on The Over The Counter Bulletin Board (the "OTC Bulletin Board"), such as us, must be reporting issuers under Section 12 or Section 15(d) of the Securities Exchange Act of 1934, as amended, and must be current in their reports under Section 13, in order to maintain price quotation privileges on the OTC Bulletin Board. If we fail to remain current on our reporting requirements, we could be removed from the OTC Bulletin Board. As a result, the market liquidity for our securities could be severely adversely affected by limiting the ability of broker-dealers to sell our securities and the ability of stockholders to sell their securities in the secondary market. Prior to May 2001, we were delinquent in our reporting requirements, having failed to file our quarterly and annual reports for the years ended 1998 – 2000 (except the quarterly reports for the first two quarters of 1999). We have been current in our reporting requirements for the last six years, however, there can be no assurance that in the future we will always be current in our reporting requirements.

We may not be able to implement section 404 of the Sarbanes Oxley act of 2002 on a timely basis.

The SEC, as directed by Section 404 of the Sarbanes-Oxley Act, adopted rules generally requiring each public company to include a report of management on the company's internal controls over financial reporting in its annual report on Form 10-K that contains an assessment by management of the effectiveness of the company's internal controls over financial reporting. This requirement will first apply to our annual report on Form 10-K for the fiscal year ending September 30, 2008. Under current rules, commencing with our annual report for the fiscal year ending September 30, 2010 our independent registered accounting firm must attest to and report on management's assessment of the effectiveness of our internal controls over financial reporting.

We have not yet developed a Section 404 implementation plan. We have in the past discovered, and may in the future discover, areas of our internal controls that need improvement. How companies should be implementing these new requirements including internal control reforms to comply with Section 404's requirements and how independent auditors will apply these requirements and test companies' internal controls, is still reasonably uncertain.

We expect that we will need to hire and/or engage additional personnel and incur incremental costs in order to complete the work required by Section 404. We may not be able to complete a Section 404 plan on a timely basis. Additionally, upon completion of a Section 404 plan, we may not be able to conclude that our internal controls are effective, or in the event that we conclude that our internal controls are effective, our independent accountants may disagree with our assessment and may issue a report that is qualified. Any failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm our operating results or cause us to fail to meet our reporting obligations.

Our common stock is subject to the “penny stock” rules of the SEC and the trading market in our securities is limited, which makes transactions in our stock cumbersome and may reduce the value of an investment in our stock.

The SEC has adopted Rule 15g-9 which establishes the definition of a “penny stock,” for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person’s account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person’s account for transactions in penny stocks, the broker or dealer must:

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Generally, brokers may be less willing to execute transactions in securities subject to the “penny stock” rules. This may make it more difficult for investors to dispose of our common stock and cause a decline in the market value of our stock.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

USE OF PROCEEDS

This prospectus relates to shares of our common stock and common stock underlying warrants that may be offered and sold from time to time by the selling stockholders. We will not receive any proceeds from the sale of shares of common stock in this offering.

MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS

Our Common Stock is traded over-the-counter on The Over The Counter Bulletin Board (the "OTC Bulletin Board") maintained by the National Association of Securities Dealers under the symbol "APDN." There is no certainty that the Common Stock will continue to be quoted or that any liquidity exists for our shareholders.

The following table sets forth the quarterly quotes of high and low prices for our Common Stock on the OTC Bulletin Board during the fiscal years ended September 30, 2006 and September 30, 2007 and the six months ended March 31, 2008. In February of 2003, we changed our year end to September 30. We changed our fiscal year end in connection with a reverse merger we entered into in December 2002, in which the acquirer for accounting purposes had a fiscal year end of September 30. For ease of fiscal reporting, we adopted the same fiscal year end.

Year ended 9/30/06	High	Low
December 31, 2005	\$ 0.58	\$ 0.16
March 31, 2006	\$ 0.37	\$ 0.15
June 30, 2006	\$ 0.27	\$ 0.10
September 30, 2006	\$ 0.17	\$ 0.07
Year ended 9/30/07	High	Low
December 31, 2006	\$ 0.12	\$ 0.07
March 31, 2007	\$ 0.28	\$ 0.09
June 30, 2007	\$ 0.23	\$ 0.10
September 30, 2007	\$ 0.15	\$ 0.08
Year ended 9/30/08	High	Low
December 31, 2007	\$ 0.17	\$ 0.09
March 31, 2008	\$ 0.22	\$ 0.09

HOLDERS

As of July 18, 2008, we had approximately 1,101 holders of our common stock. The number of record holders was determined from the records of our transfer agent and does not include beneficial owners of common stock whose shares are held in the names of various security brokers, dealers, and registered clearing agencies. The transfer agent of our common stock is American Stock Transfer & Trust Company, 6201 15th Avenue, Brooklyn, New York 11219.

DIVIDENDS

We have never declared or paid any cash dividends on our common stock. We do not anticipate paying any cash dividends to stockholders in the foreseeable future. In addition, any future determination to pay cash dividends will be at the discretion of the Board of Directors and will be dependent upon our financial condition, results of operations, capital requirements, and such other factors as the Board of Directors deem relevant.

EQUITY COMPENSATION PLAN INFORMATION

2002 Professional/Employee/Consultant Compensation Plan

In November of 2002, we created a special compensation plan to pay the founders, consultants and professionals that had been contributing valuable services to us during the previous nine months. This plan, under which 2,000,000 shares of our common stock were reserved for issuance, is called the Professional/Employee/Consultant Compensation Plan (the “Compensation Plan”). Share and option issuances from the Compensation Plan were to be staggered over the following six to eight months, and consultants that were to continue providing services thereafter either became employees or received renewed contracts from us in July of 2003, which contracts contained a more traditional cash compensation component. Each qualified and eligible recipient of shares and/or options under the Compensation Plan received securities in lieu of cash payment for services. Each recipient agreed, in his or her respective consulting contract with us, to sell a limited number of shares monthly. In December of 2004, we adjusted the exercise price of options under the Compensation Plan to \$0.60 per share. As of July 18, 2008, a total of 1,440,000 shares have been issued from, and options to purchase 560,000 shares have been issued under the Compensation Plan, and options to purchase 264,000 shares have been exercised as of that date.

2005 Incentive Stock Plan

On January 26, 2005, the Board of Directors, and on February 15, 2005, the holders of a majority of the outstanding common stock of the Company approved the 2005 Incentive Stock Plan and authorized the issuance of 16,000,000 shares of common stock as stock awards and stock options thereunder. On May 16, 2007, at the annual meeting of stockholders, the holders of a majority of the outstanding common stock of the Company approved an increase in the number of shares subject to the 2005 Incentive Stock Plan to 20,000,000 shares of common stock. On June 17, 2008, the Board of Directors unanimously adopted an amendment to the 2005 Incentive Stock Plan that will increase the total number of shares of common stock issuable pursuant to the 2005 Incentive Stock Plan from a total of 20,000,000 shares to a total of 100,000,000 shares, which is subject to approval by our stockholders at the 2008 annual meeting of stockholders.

The 2005 Incentive Stock Plan is designed to retain directors, executives, and selected employees and consultants by rewarding them for making contributions to our success with an award of shares of our common stock. As of July 18, 2008, a total of 8,550,000 shares have been issued and options to purchase 42,410,000 shares have been granted under the 2005 Incentive Stock Plan.

The Board of Directors, in their discretion, may award stock and stock options to executive officers and key employees as part of their compensation for employment or for retention purposes.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
(a)	(b)	(c)	(c)

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2005 Incentive Stock Plan approved on January 26, 2005	42,410,000	\$	0.47	5,790,000
Total	42,410,000	\$	0.47	5,790,000

Amendment to the 2005 Incentive Stock Plan and Recent Equity Award Grants

On June 17, 2008, the Board of Directors adopted an amendment to the 2005 Incentive Stock Plan that will increase the total number of shares of common stock issuable pursuant to the 2005 Incentive Stock Plan from a total of 20,000,000 shares to a total of 100,000,000 shares, which is subject to approval by our stockholders at the 2008 annual meeting of stockholders. In connection with the share increase amendment, the Board of Directors granted options to purchase a total of 37,750,000 shares to certain key employees and non-employee directors under the 2005 Incentive Stock Plan, including 17,000,000, 5,000,000 and 7,000,000 to James A. Hayward, Kurt H. Jensen and Ming-Hwa Liang, respectively. The options granted to our key employees and non-employee directors vested with respect to 25% of the underlying shares on the date of grant and the remaining will vest ratably each anniversary thereafter until fully vested on the third anniversary of the date of grant.

The effectiveness of the share increase amendment and the exercise of these stock options by the key employees and non-employee directors are subject to approval by our stockholders at the 2008 annual meeting of stockholders.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION
AND PLAN OF OPERATIONS

Forward-looking Information

This Registration Statement on Form S-1 (including the section regarding Management's Discussion and Analysis of Financial Condition and Results of Operations) contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), including statements using terminology such as "can", "may", "believe", "designate to", "will", "expect", "plan", "anticipate", "estimate", "potential" or "continue", or the negative thereof or other comparable terminology regarding beliefs, plans, expectations or intentions regarding the future. You should read statements that contain these words carefully because they:

- discuss our future expectations;
- contain projections of our future results of operations or of our financial condition; and
- state other "forward-looking" information.

We believe it is important to communicate our expectations. However, forward looking statements involve risks and uncertainties and our actual results and the timing of certain events could differ materially from those discussed in forward-looking statements as a result of certain factors, including those set forth under "Risk Factors," "Business" and elsewhere in this prospectus. All forward-looking statements and risk factors included in this document are made as of the date hereof, based on information available to us as of the date thereof, and we assume no obligations to update any forward-looking statement or risk factor, unless we are required to do so by law.

Introduction

We provide botanical DNA encryption, embedment and authentication solutions that can help protect companies, governments and consumers from counterfeiting, fraud, piracy, product diversion, identity theft, and unauthorized intrusion into physical locations and databases. Our SigNature Program provides a secure, accurate and cost-effective means for our customers to incorporate our SigNature DNA Markers in, and then quickly and reliably authenticate and identify, a broad range of items such as artwork and collectibles, fine wine, consumer products, digital media, financial instruments, identity cards and other official documents. Having the ability to reliably authenticate and identify counterfeit versions of such items enables companies and governments to detect, deter, interdict and prosecute counterfeiting enterprises and individuals.

Our SigNature Program enables our customers to cost-effectively:

- give assurance to manufacturers, suppliers, distributors, retailers and end-users that their products are authentic and can be forensically authenticated;
- integrate our SigNature DNA Markers with existing security solutions such as barcodes, radio frequency identification (RFID) tags, holograms, microchips and other securities measures; and
- add value to the "bottom-line" by helping to diminish product diversion and counterfeiting.

Counterfeit and diverted products continue to pose a significant and growing problem with consumer packaged goods, especially for prestige and established brands worldwide. Piracy, identity theft and forged documents and items are also highly prevalent in vertical markets such as digital media, fine art, luxury goods, and alcoholic beverages. Key aspects of our strategy include:

- continuing to improve and customize our solution to meet our current and potential customers' needs;
- continuing to develop and enhance our existing DNA marker authentication technologies;

- expanding our customer base both domestically and abroad by targeting high volume markets; and
- augmenting our competitive position through strategic acquisitions and alliances.

We have also begun to develop and manufacture DermalRx, an ingredient for use in skin care products, which allows for exfoliation without the irritation or inflammation associated with chemical peeling.

Plan of Operations

General

We expect to generate revenues principally from sales of our SigNature Program. We are currently attempting to develop business in six target markets: art and collectibles, fine wine, consumer products, digital recording media, pharmaceuticals, and homeland security driven programs. We intend to pursue both domestic and international sales opportunities in each of these vertical markets.

We believe that our existing capital resources will enable us to fund our operations until approximately November 2008. We believe we may be required to seek additional capital to sustain or expand our prototype and sample manufacturing, and sales and marketing activities, and to otherwise continue our business operations beyond that date. We have no commitments for any future funding, and may not be able to obtain additional financing or grants on terms acceptable to us, if at all, in the future. If we are unable to obtain additional capital this would restrict our ability to grow and may require us to curtail or discontinue our business operations. Additionally, while a reduction in our business operations may prolong our ability to operate, that reduction would harm our ability to implement our business strategy. If we can obtain any equity financing, it may involve substantial dilution to our then existing shareholders.

Product Research and Development

We anticipate spending approximately \$ 50,000 for product research and development activities during the next twelve (12) months.

Acquisition of Plant and Equipment and Other Assets

We do not anticipate the sale of any material property, plant or equipment during the next 12 months. We do anticipate spending approximately \$100,000 on the acquisition of leasehold improvements during the next 12 months. We believe our current leased space is adequate to manage our growth, if any, over the next 2 to 3 years.

Number of Employees

We currently have seven employees and three part-time employees. The company expects to increase its staffing dedicated to sales, product prototyping, manufacturing of DNA markers and forensic authentication services. Expenses related to travel, marketing, salaries, and general overhead will be increased as necessary to support our growth in revenue. In order for us to attract and retain quality personnel, we anticipate we will have to offer competitive salaries to future employees. We anticipate that it may become desirable to add additional full and or part time employees to discharge certain critical functions during the next 12 months. This projected increase in personnel is dependent upon our ability to generate revenues and obtain sources of financing. There is no guarantee that we will be successful in raising the funds required or generating revenues sufficient to fund the projected increase in the number of employees. As we continue to expand, we will incur additional costs for personnel.

Critical Accounting Policies

Financial Reporting Release No. 60, published by the SEC, recommends that all companies include a discussion of critical accounting policies used in the preparation of their financial statements. While all these significant accounting policies impact our financial condition and results of operations, we view certain of these policies as critical. Policies determined to be critical are those policies that have the most significant impact on our consolidated financial statements and require management to use a greater degree of judgment and estimates. Actual results may differ from those estimates.

We believe that given current facts and circumstances, it is unlikely that applying any other reasonable judgments or estimate methodologies would cause a material effect on our consolidated results of operations, financial position or liquidity for the periods presented in this prospectus.

The accounting policies identified as critical are as follows:

- Equity issued with registration rights;
- Revenue recognition;

- Allowance for Doubtful Accounts;
- Warrant liability; and
- Fair value of intangible assets.

Equity Issued with Registration Rights

In connection with the private placement of our convertible promissory notes and warrants to certain investors during the fiscal quarters ended December 31, 2003, December 31, 2004, March 31, 2005, March 31, 2006 and June 30, 2006, pursuant to a registration rights agreement we agreed to file a registration statement to register the common stock issuable upon the conversion of the promissory notes and the exercise of the warrants and to have the registration statement declared effective by the SEC. The registration rights agreement provided for the payment of liquidated damages if the registration statement was not declared effective by the SEC within 120 days of the private placement of the convertible promissory notes. The liquidated damages are equal to 3.5% per month of the aggregate proceeds, with no limitations. The liquidated damages may be paid in cash or our common stock, at our option. Although the promissory notes and warrants do not provide for net-cash settlement, the existence of liquidated damages provides for a defacto net-cash settlement option. Therefore, the common stock issuable upon the conversion of the promissory notes and the exercise of the warrants subject to the liquidated damages provisions of the registration rights agreement does not meet the tests required for shareholders' equity classification in the past, and accordingly has been reflected between liabilities and equity in our previous consolidated balance sheet.

As of September 30, 2007, we did not have a registration statement declared effective relating to the common stock issuable upon the conversion of the promissory notes and the exercise of the warrants. In accordance with EITF 00-19-2, we evaluated the likelihood of having the registration statement declared effective by the SEC. As of September 30, 2007, we determined it was probable that we will be required to remit payments to these investors because of our failure to have the registration statement declared effective and we estimated that the obligation to make additional payments would continue for nine months from September 30, 2007, at which time we estimated that the registration statement would have been declared effective. Although we were unable to estimate the exact amount of time needed to have the registration statement declared effective, we believed that an additional nine months would be required to complete the SEC's comment and review process and have the registration statement declared effective. In accordance with SFAS No. 5, Accounting For Contingencies, we accrued nine months of additional liquidated damages, or \$3,310,965, as a charge to operations during the year ended September 30, 2007.

As a result of not having our registration statement declared effective, we recorded an aggregate liability of \$11,750,941 as of September 30, 2007 and an increase of \$7,725,585 as compared to September 30, 2006, in order to account for the potential liquidated damages accruing until the registration statement is declared effective by the SEC. This increase, which was charged to operations as a selling, general and administrative expense, in fiscal 2007, is comprised of \$8,439,976 of current and prior years' stipulated contractual obligations, plus the additional accrual of \$3,310,965 described previously to account for the potential liquidated damages until the expected effectiveness of the registration statement is achieved.

In developing the best estimate for the accrual of additional liquidating damages, we took into account a number of factors and information, including, but not limited to, the following:

- advice of our legal counsel and other advisors;
- our experience in addressing comments raised by the SEC in past registration statements;
- the limited number of matters needed to be addressed by the Company to achieve effectiveness;
- our limited resources in connection with responding to SEC comments; and
- the intent to achieve effectiveness of the registration statement as soon as practicable.

Estimates of potential future damages are based on our assumptions and projections and actual results and outcomes could differ significantly.

In September 2007, we issued common stock upon conversion of the final convertible promissory note that contained embedded derivatives, such as certain conversion features, variable interest features, call options and default provisions.

As of September 30, 2007, we have an aggregate accrual of \$11,750,941 of liquidated damages in connection with certain previously outstanding convertible promissory notes and related warrants, which is included in accounts payable and accrued liabilities. Any increases to the accrued liabilities will be charged to operations as a selling, general and administrative expense. Any decreases will be included in other income (expenses).

Revenue Recognition

Revenues are derived from rendering professional, scientific and technical services to our customers in connection with authentication of raw materials used in certain commercial products, such as cotton. In addition, we sell our products, including Signature DNA Markers and DermalRx, to customers in the biotechnology, personal care and

consumer products industries.

Our contracts for services have different terms and depending on the scope, deliverables and complexity of the engagement, we are frequently required to make judgments and estimates with respect to recognizing revenues.

We examine each contract and consider the appropriate revenue recognition in accordance with SAB 104 and Emerging Issue Task Force, or EITF, 00-21, Revenue Recognition with Multiple Deliverables, or EITF 00-21. Revenue from fixed price single task consulting contracts is generally recorded upon completion of the contracts, which are generally short-term, or upon completion of identifiable contractual tasks. We consider amounts to be earned once evidence of an arrangement has been obtained, services are delivered, fees are fixed or determinable, and collectibility is reasonably assured.

At the time we enter into a contract that includes multiple tasks, we estimate the amount of actual labor and other costs that will be required to complete each task based on historical experience. Since we have limited operating history, we have based our estimates of labor and other costs upon the following factors:

- results of previous services rendered in connection with providing potential customers with a proof of concept in connection with the specific application of our products and services;
- time records of personnel and contractors assigned to the identifiable contractual tasks; and
- specific identification of other direct costs (e.g. supplies, materials etc.) consumed in connection with completing the identifiable tasks.

We believe these estimates are reasonable, reliable and dependable as they are based on our expertise in extracting DNA, applying our SigNature DNA Marker to various products as well as recovering our SigNature DNA Marker after it has been applied.

Revenues from the achievement of contractual milestones, if deemed substantive, are recognized as revenue when the milestones are achieved, and milestone payments are due and collectible. Revenue relative to each task and from contracts which are time and materials based is recorded as effort is expended. Billings in excess of amounts earned are deferred. Any anticipated losses on contracts are charged to income when identified. Milestones are based upon contractually agreed upon terms between us and our customers. To the extent we do not accurately forecast the level of effort required to complete a contract, or individual tasks within a contract, and we are unable to negotiate additional billings with a customer for cost over-runs, we may incur losses on individual contracts. All selling, general and administrative costs are treated as period costs and expensed as incurred.

While each contract is different, we generally provide the following general deliverables:

- written or oral reports as to the authenticity of the product;
- written or oral reports as to the presence of our SigNature DNA Marker;
- written or oral reports as to the status of a particular feasibility study; and
- delivery of our Signature DNA Markers.

Since our transition to an operating company in fiscal 2007, we have earned and received \$452,825 in payments from various contracts and purchase orders with an average gross profit margin of \$355,747.

Allowance for Uncollectible Receivables

The Company maintains an allowance for doubtful accounts for estimated losses resulting from the inability of customers to make required payments. The Company uses a combination of write-off history, aging analysis and any specific known troubled accounts in determining the allowance. If the financial condition of customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances could be required.

Warrant Liability

In connection with the placement of certain debt instruments, as described above, we issued freestanding warrants. Although the terms of the warrants do not provide for net-cash settlement, in certain circumstances, physical or net-share settlement is deemed to not be within our control and, accordingly, we were required to account for these freestanding warrants as a derivative financial instrument liability, rather than as shareholders' equity.

The warrant liability is initially measured and recorded at its fair value, and is then re-valued at each reporting date, with changes in the fair value reported as non-cash charges or credits to earnings. For warrant-based derivative financial instruments, the Black-Scholes option pricing model is used to value the warrant liability.

The classification of derivative instruments, including whether such instruments should be recorded as liabilities or as equity, is re-assessed at the end of each reporting period. Derivative instrument liabilities are classified in the balance sheet as current or non-current based on whether or not net-cash settlement of the derivative instrument could be required within 12 months of the balance sheet date.

In December 2006, the FASB issued FSP EITF 00-19-2, Accounting for Registration Payment Arrangements ("FSP 00-19-2") which addresses accounting for registration payment arrangements. FSP 00-19-2 specifies that the contingent obligation to make future payments or otherwise transfer consideration under a registration payment arrangement, whether issued as a separate agreement or included as a provision of a financial instrument or other agreement, should be separately recognized and measured in accordance with FASB Statement No. 5, Accounting for Contingencies. FSP 00-19-2 further clarifies that a financial instrument subject to a registration payment arrangement should be accounted for in accordance with other applicable generally accepted accounting principles without regard to the contingent obligation to transfer consideration pursuant to the registration payment arrangement. For registration payment arrangements and financial instruments subject to those arrangements that were entered into prior to the issuance of EITF 00-19-2, this guidance shall be effective for financial statements issued for fiscal years beginning after December 15, 2006 and interim periods within those fiscal years.

As described above, as of September 30, 2007, we exchanged common stock for the previously issued Convertible Promissory Notes that contained certain embedded derivative financial instruments. As a result, the Company reclassified the warrant liabilities recorded in conjunction with the convertible promissory notes to equity as of the conversion date of the remaining note. We do not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks.

We do not use derivative instruments to hedge exposures to cash flow, market, or foreign currency risks.

Fair Value of Intangible Assets

We have adopted SFAS No. 142, Goodwill and Other Intangible Assets, whereby we periodically test our intangible assets for impairment. On an annual basis, and when there is reason to suspect that their values have been diminished or impaired, these assets are tested for impairment, and write-downs will be included in results from operations. During the years ended September 30, 2007 and 2006, our management performed an evaluation of the Company's intangible assets (intellectual property) for purposes of determining the implied fair value of the assets at September 30, 2007 and 2006, respectively. The test indicated that the recorded remaining book value of its intellectual property exceeded its fair value for the year ended September 30, 2006, as determined by discounted cash flows. As a result, upon completion of the assessment, management recorded a non-cash impairment charge of \$5,655,011, net of tax, or \$0.05 per share during the year ended September 30, 2006 to reduce the carrying value of the patents to \$2,091,800. Considerable management judgment is necessary to estimate the fair value. Accordingly, actual results could vary significantly from management's estimates

The identifiable intangible assets acquired and their carrying value at March 31, 2008 is:

Trade secrets and developed technologies (Weighted average life of 7 years)	\$ 9,430,900
Patents (Weighted average life of 5 years)	34,257
Total Amortized identifiable intangible assets-Gross carrying value:	\$ 9,465,157
Less:	
Accumulated Amortization	(2,257,630)
Impairment (See below)	(5,655,011)
Net:	\$ 1,552,516
Residual value:	\$ 0

Total amortization expense charged to operations for the three months ended March 31, 2008 was \$92,661. Amortization expense charged to operations for the three months ended March 31, 2007 was \$92,661.

Estimated amortization expense as of March 31, 2008 is as follows:

2008	\$ 186,338
2009	365,842
2010	363,792
2011	363,792
2012 and thereafter	272,752
Total	\$ 1,552,516

Use of Estimates

In preparing financial statements in conformity with accounting principles generally accepted in the United States of America, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and revenue and expenses during the reporting period. The most significant estimates relate to the estimation of percentage of completion on uncompleted contracts, valuation of inventory, allowance for doubtful accounts and estimated life of customer lists. Actual results could differ from those estimates.

Comparison of the year Ended September 30, 2007 to the year ended September 30, 2006

Revenues

During the year ended September 30, 2007, we transitioned from a development stage enterprise to an operating company. For the years ended September 30, 2007 and 2006, we generated \$121,920 and \$18,900 in revenues from operations, respectively. Our cost of sales for the year ended September 30, 2007 was \$23,073, netting us a gross profit of \$98,847. For September 30, 2006, our cost of sales was \$15,639, netting us a gross profit of \$3,261.

Costs and Expenses

Selling, General and Administrative

Selling, general and administrative expenses for the twelve months ended September 30, 2007 increased 41.9% to \$12.1 million from \$8.53 million in the same period in 2006. See a discussion of non cash items below in the Liquidity & Capital Resources section. Included within the selling, general and administrative expenses for the years ended September 30, 2007 and 2006 was expensed relating to fund raising and consultant costs of \$7.9 million and \$3.6 million, respectively.

Research and Development

Research and development expenses decreased \$42,346 for the twelve months ended September 30, 2007 compared to the same period in 2006 from \$153,191 to \$110,845 primarily due to reduced activity in research and development and a change in focus to marketing activities.

Depreciation and Amortization

In the twelve months ended September 30, 2007, depreciation and amortization decreased \$937,717 for the period compared to 2006 from \$1,370,299 to \$432,582. The decrease is attributable to the decrease in intangible amortization due to the impairment write off in the year ended September 30, 2006.

Impairment of intangible asset(s)

During the year ended September 30, 2007 and 2006, we performed an evaluation of our intangible assets (intellectual property) and determined that the implied fair carrying value exceeded its fair value at September 30, 2006. Accordingly, we recorded a non cash impairment charge to operations of \$5.7 million in the year ended September 30, 2006 as compared to \$0.00 for the year ended September 30, 2007.

Total Operating Expenses

During the year ended September 30, 2007, total operating expenses decreased to \$12.6 million from \$15.7 million in the prior year, or a decrease of \$3.1 million primarily due to the impairment in intangible assets charged to operation in the year ended September 30, 2006.

Other Income/Loss

Other income for the twelve months ended September 30, 2007 decreased from a gain of \$16.9 million in the comparable period to \$1.4 million due to a smaller increase in fair value of warrant liabilities and debt derivatives.

Interest Expenses

Interest expenses for the twelve months ended September 30, 2007, decreased to \$2.2 million from \$3.6 million in the same period of 2006, a decrease of \$1.4 million as a result of conversion of our debt instruments to common stock.

Net Income (loss)

Net loss for the twelve months ended September 30, 2007 increased to a loss of \$13.3 million from a loss of \$2.4 million in the prior period as a result of the combination of factors described above.

Three Months Ended March 31, 2008 Compared With Three Months Ended March 31, 2007

Revenues

During the year ended September 30, 2007, we transitioned from a development stage enterprise to an operating company. For the three months ended March 31, 2008, we generated \$207,737 in revenues from operations and our cost of sales for the three months ended March 31, 2008 was \$46,114, netting us a gross profit of \$161,623. For the three months ended March 31, 2007, we had no revenues or cost of sales.

Costs and Expenses

Selling, General and Administrative

Selling, general and administrative expenses decreased from \$1,988,931 for the three months ended March 31, 2007 to \$715,783 for the three months ended March 31, 2008. The decrease of \$1,273,148, or 64%, is primarily attributable to a decrease in cost incurred in connection with professional services.

Research and Development

Research and development expenses increased to \$55,900 for the three months ended March 31, 2008 from \$39,479 for the same period in 2007. The increase of \$16,421 is attributed to more research and development activity related to the recent development and feasibility study agreements than during the prior period.

Depreciation and Amortization

In the three months ended March 31, 2008, depreciation and amortization decreased by \$1,114 from \$108,358 to \$107,244 for the period compared to the same period in 2007. The decrease is attributable to the reduced depreciation of our property and equipment.

Total Operating Expenses

Total operating expenses decreased to \$878,927 from \$2,136,768, or a decrease of \$1,257,841 primarily attributable to a decrease in costs incurred in connection with professional services.

Other Income/Loss

Loss on reevaluation of debt derivative and warrant liability decreased by \$6,387,761 from a loss of \$6,387,761 for the three months ended March 31, 2007 to \$0 for the three months ended March 31, 2008. In September 2007, we exchanged common stock for the remaining Secured Convertible Promissory Notes that contained embedded derivatives. As a result, we reclassified the warrant liabilities recorded in conjunction with the convertible promissory notes to equity as of the conversion date of the related debt.

Interest Expenses

Interest expense for the three months ended March 31, 2008 decreased by \$237,326 to \$608,383 from \$845,709 in the same period of 2007. The decrease in interest expense was due to a reduction in outstanding debt.

Net Income (loss)

Net loss for the three months ended March 31, 2008 decreased to \$1,325,687 from a net loss of \$9,370,238 in the prior period primarily attributable to the factors above.

Six Months Ended March 31, 2008 Compared With Six Months Ended March 31, 2007

Revenues

For the six months ended March 31, 2008, we generated \$330,904 in revenues from operations and our cost of sales for the six months ended March 31, 2008 was \$74,004, netting us a gross profit of \$256,900. For the six months ended March 31, 2007, we had no revenues or cost of sales.

Costs and Expenses

Selling, General and Administrative

Selling, general and administrative expenses decreased from \$4,043,386 for the six months ended March 31, 2007 to \$2,414,052 for the six months ended March 31, 2008. The decrease of \$1,629,334, or 40.3 %, is primarily attributable to a decrease in cost incurred in connection with professional services.

Research and Development

Research and development expenses increased to \$92,226 for the six months ended March 31, 2008 from \$68,785 for the same period in 2007. The increase of \$23,441 is attributed to more research and development activity related to the recent development and feasibility study agreements than during the prior period.

Depreciation and Amortization

In the six months ended March 31, 2008, depreciation and amortization decreased by \$1,189 from \$216,237 to \$215,048 for the period compared to the same period in 2007. The decrease is attributable to the reduced depreciation of our property and equipment.

Total Operating Expenses

Total operating expenses decreased to \$ 2,721,326 from \$ 4,328,408 , or a decrease of \$ 1,607,082 , primarily attributable to a decrease in costs incurred in connection with professional services.

Other Income/Loss

Loss on reevaluation of debt derivative and warrant liability decreased by \$4,289,290 from a loss of \$4,289,290 for the six months ended March 31, 2007 to \$0 for the six months ended March 31, 2008. In September 2007, we exchanged common stock for the remaining Secured Convertible Promissory Notes that contained embedded derivatives. As a result, we reclassified the warrant liabilities recorded in conjunction with the convertible promissory notes to equity as of the conversion date of the related debt.

Interest Expenses

Interest expense for the six months ended March 31, 2008 decreased by \$430,734 to \$994,005 from \$1,424,739 in the same period of 2007. The decrease in interest expense was due to a reduction in outstanding debt.

Net Income (loss)

Net loss for the six months ended March 31, 2008 decreased to \$3,458,431 from a net loss of \$10,041,460 in the prior period primarily attributable to a combination of the factors described above.

Liquidity and Capital Resources

Our liquidity needs consist of our working capital requirements, indebtedness payments and research and development expenditure funding. Historically, we have financed our operations through the sale of equity and convertible debt as well as borrowings from various credit sources.

Debt and Equity Financing Transactions

Fiscal 2006

In fiscal 2006, we completed three private placements of convertible debt and associated warrants. On November 3, 2005, we issued and sold a promissory note in the principal amount of \$550,000 to Allied International Fund, Inc. ("Allied"). Allied in turn financed a portion of the making of this loan by borrowing \$450,000 from certain persons, including \$100,000 from Dr. Hayward, a director, our President and Chief Executive Officer. The terms of the promissory note provided that we issue upon the funding of the note warrants to purchase 5,000,000 shares of our common stock at an exercise price of \$0.50 per share to certain persons designated by Allied. On November 9, 2005, we issued nine warrants to Allied and eight other persons to purchase an aggregate of 5,500,000 shares of our common stock at an exercise price of \$0.50 per share. These warrants included a warrant to purchase 1,100,000 shares that was issued to Dr. Hayward, a director, our President and Chief Executive Officer. We paid \$55,000 in cash to VC Arjent, Ltd. for its services as the placement agent with respect to this placement. All principal and accrued but unpaid interest under the promissory note was paid in full shortly after the closing of and from the proceeds of a private placement we completed on March 8, 2006. On March 8, 2006, we issued and sold an aggregate of 30 units consisting of (i) a \$50,000 principal amount secured convertible promissory note bearing interest at 10% per annum and convertible at \$0.50 per share, and (ii) a warrant to purchase 100,000 shares of our common stock at an exercise price of \$0.50 per share, for aggregate gross proceeds of \$1.5 million. The units were sold pursuant to subscription agreements by and between each of the purchasers and Applied DNA Operations Management, Inc., a Nevada corporation and our wholly owned subsidiary (our "Subsidiary"). The \$2.050 million in gross proceeds from these first two offerings were held by our Subsidiary for our benefit and used to fund commissions, fees and expenses associated with the placements, to repay the outstanding promissory note described above plus accrued interest thereunder, to fund financing fees, consultants and public reporting costs, salaries and wages, research and development, facility costs as well as general working capital needs. On March 24, 2006, we commenced an offering (the "Offshore Offering") of up to 140 units, at a price of \$50,000 per unit, for a maximum offering of \$7 million for sale to "accredited investors" who are not "U.S. persons." The units being sold as part of the Offshore Offering consisted of (i) a \$50,000 principal amount secured convertible promissory note, and (ii) a warrant to purchase 100,000 shares of our common stock at a price of \$0.50 per share. On May 2, 2006, we closed on the first tranche of the Offshore Offering in which we sold 20 units for aggregate gross proceeds of \$1,000,000. We paid Arjent Limited \$375,000 in commissions, fees and expenses from these gross proceeds. On June 15, 2006, we completed the second tranche of the Offshore Offering in which we sold 59 units for aggregate gross proceeds of \$2,950,000. We paid Arjent Limited \$442,500 in commissions, fees and expenses from these gross proceeds. Additionally, on July 10, 2006 we issued 2.4 million shares of our common stock to Arjent Limited at \$0.001 per share as partial consideration for its services in connection with the Offshore Offering.

Fiscal 2007

During fiscal 2007, we issued sold an aggregate principal amount of \$850,000 in secured convertible promissory notes bearing interest at 10% per annum and warrants to purchase an aggregate of 1,700,000 shares of our common stock to Dr. James A. Hayward, a director, the Chairman of the Board of Directors, our President and Chief Executive Officer, as follows:

- On April 23, 2007, we issued and sold a \$100,000 principal amount secured promissory note bearing interest at a rate of 10% per annum and a warrant to purchase 200,000 shares of our common stock. The promissory note and accrued but unpaid interest thereon converted on April 22, 2008 at a conversion price of \$ 0.15 into 733,334 shares of our common stock. The warrant is exercisable for a four-year period commencing on April 23, 2008, and expiring on April 22, 2012, at a price of \$0.50 per share. The warrant may be redeemed at our option at a redemption price of \$0.001 upon the earlier of (i) April 22, 2010, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20

consecutive trading days.

- On June 30, 2007, we issued and sold a \$250,000 principal amount secured promissory note bearing interest at a rate of 10% per annum and a warrant to purchase 500,000 shares of our common stock. The promissory note and accrued but unpaid interest thereon converted on June 30, 2008 at a conversion price of \$0.087732076 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance, into 3,134,543 shares of our common stock. The warrant is exercisable for a four-year period commencing on June 30, 2008, and expiring on June 29, 2012, at a price of \$0.50 per share.
- On July 30, 2007, we issued and sold a \$200,000 principal amount secured promissory note bearing interest at a rate of 10% per annum and a warrant to purchase 400,000 shares of our common stock. The promissory note and accrued but unpaid interest thereon are convertible into shares of our common stock at a price of \$0.50 per share by the holder of the promissory note at any time from July 30, 2007 through July 29, 2008, and shall automatically convert on July 30, 2008 at a conversion price of \$0.102568072 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance. The warrant is exercisable for a four-year period commencing on July 30, 2008, and expiring on July 29, 2012, at a price of \$0.50 per share.

- On September 28, 2007, we issued and sold a \$300,000 principal amount secured promissory note bearing interest at a rate of 10% per annum and a warrant to purchase 600,000 shares of our common stock. The promissory note and accrued but unpaid interest thereon are convertible into shares of our common stock at a price of \$0.50 per share by the holder of the promissory note at any time from September 28, 2007 through September 27, 2008, and shall automatically convert on September 28, 2008 at a conversion price of \$0.066429851 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance. The warrant is exercisable for a four-year period commencing on September 28, 2008, and expiring on September 27, 2012, at a price of \$0.50 per share.

In addition, on June 27, 2007, we completed private placement offerings of convertible debt and associated warrants in which we issued and sold to certain investors an aggregate of 3 units of our securities, each unit consisting of (i) a \$50,000 Principal Amount of 10% Secured Convertible Promissory Note and (ii) warrants to purchase 100,000 shares of our common stock. The notes and accrued but unpaid interest thereon converted on June 27, 2008 at a conversion price of \$0.15 into 1,100,000 shares of our common stock. The warrants are exercisable for a four year period commencing on June 27, 2008, and expiring on June 26, 2012, at a price of \$0.50 per share. On August 8, 2007, we issued and sold a \$100,000 principal amount secured promissory note bearing interest at a rate of 10% per annum and a warrant to purchase 200,000 shares of our common stock. The promissory note and accrued but unpaid interest thereon are convertible into shares of our common stock at a price of \$0.50 per share by the holder of the promissory note at any time from August 8, 2007, through August 7, 2008, and shall automatically convert on August 8, 2008 at a conversion price of \$0.096274883 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance. The warrant is exercisable for a four-year period commencing on August 8, 2008, and expiring on August 7, 2012, at a price of \$0.50 per share.

Fiscal 2008

In the fiscal quarter ended December 31, 2007, we sold twenty-six and a half units at a price of \$100,000 per unit for sale to “accredited investors,” as defined in regulations promulgated under the Securities Act, for aggregate gross proceeds of \$2,650,000. Each unit consists of (i) a \$100,000 Principal Amount 10% Secured Convertible Promissory Note and (ii) a warrant to purchase 200,000 shares of our common stock. The promissory notes and accrued but unpaid interest thereon automatically convert one year after issuance at a conversion price equal to a discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance, and are convertible into shares of our common stock at the option of the holder at any time prior to such automatic conversion at a price equal to the greater of (i) 50% of the average price of our common stock for the ten trading days prior to the date of the notice of conversion and (ii) the automatic conversion price. In addition, any time prior to conversion, we have the irrevocable right to repay the unpaid principal and accrued but unpaid interest under the notes on three days notice. The promissory notes bear interest at the rate of 10% per annum and are due and payable in full on the one year anniversary of their issuance. The warrants are exercisable for cash or on a cashless basis for a period of four years commencing one year after issuance at a price of \$0.50 per share. Each warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) three years after the issuance, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

From January 1, 2008 through the end of May 2008, we sold eight units at a price of \$100,000 per unit for sale to “accredited investors,” as defined in regulations promulgated under the Securities Act, for aggregate gross proceeds of \$800,000. Each unit consists of (i) a \$100,000 Principal Amount 10% Secured Convertible Promissory Note and (ii) a warrant to purchase 200,000 shares of our common stock. The promissory notes and accrued but unpaid interest thereon automatically convert one year after issuance at a conversion price equal to a discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance, and are convertible into shares of our common stock at the option of the holder at any time prior to such automatic conversion at a price equal to the greater of (i) 50% of the average price of our common stock for the ten trading days prior to the date of the notice of

conversion and (ii) the automatic conversion price. In addition, any time prior to conversion, we have the irrevocable right to repay the unpaid principal and accrued but unpaid interest under the notes on three days notice. The promissory notes bear interest at the rate of 10% per annum and are due and payable in full on the one year anniversary of their issuance. The warrants are exercisable for cash or on a cashless basis for a period of four years commencing one year after issuance at a price of \$0.50 per share. Each warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) three years after the issuance, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

We claim an exemption from the registration requirements of the Securities Act for the private placement of the units described above pursuant to Section 4(2) of the Securities Act because each of the units was made in a sale by the issuer not involving a public offering.

As of September 30, 2007, we had a working capital deficit of \$13.8 million. For the year ended September 30, 2007, we generated a net cash flow deficit from operating activities of \$2.3 million consisting primarily of year to date losses of \$13.3 million. Non cash adjustments included \$.4 million in depreciation and amortization charges, \$.9 million for options, warrants and common stock issued in exchange for services, \$2.7 million in financing costs and debt discounts attributable to convertible debentures and net change in net increase in current liabilities of \$8.3 million net with a non cash adjustment of \$1.4 million for income attributable to re-pricing of warrants and debt derivatives. Cash used in investing activities totaled \$0.4 million, which was utilized for acquisition of property and equipment and funds held in escrow. Cash provided by financing activities for the year ended September 30, 2007 totaled \$1.5 million consisting of proceeds from issuance of convertible debt.

As of December 31, 2007, we had a working capital deficit of approximately \$13.674 million. For the three period ended December 31, 2007, we generated a net cash flow deficit from operating activities of \$1.427 million consisting primarily of year to date losses of \$2.133 million. Non-cash adjustments included \$492,443 in depreciation and amortization charges and common stock issued for services provided of \$1,040,000. Additionally, we had a net decrease in current assets of \$29,368 and a net decrease in current liabilities of \$855,607. Cash used in investing activities totaled \$94,508, which was utilized for acquisition of property and equipment of \$5,492 and reduction in cash held in escrow of \$100,000. We met our cash flow needs by issuance of convertible notes of \$2,152,500, net, for the three months ended December 31, 2007.

As of March 31, 2008, we had a working capital deficit of approximately \$14.5 million. For the six month period ended March 31, 2008, we generated a net cash flow deficit from operating activities of approximately \$2.0 million consisting primarily of year to date losses of approximately \$3.5 million. Non-cash adjustments included \$1,233,441 in depreciation and amortization charges and common stock issued for services provided of \$1,040,000. Additionally, we had a net increase in current assets of \$8,735 and a net increase in current liabilities of \$794,669. Cash provided in investing activities totaled \$394,428, primarily from release of escrow funds of \$399,920 net with acquisition of property and equipment of \$5,492. We met our cash flow needs by issuance of convertible notes of \$2,447,580, net, for the six months ended March 31, 2008.

We expect capital expenditures to be less than \$200,000 in fiscal 2008. Our primary investments will be in laboratory equipment to support prototyping and our authentication services.

Exploitation of potential revenue sources will be financed primarily through the sale of securities and convertible debt, exercise of outstanding warrants, issuance of notes payable and other debt or a combination thereof, depending upon the transaction size, market conditions and other factors.

While we have raised capital to meet our working capital and financing needs in the past, additional financing is required within the next 12 months in order to meet our current and projected cash flow deficits from operations and development. We have sufficient funds to conduct our operations for approximately three months. Our financing through a private placement offering since our year end is discussed below. There can be no assurance that financing will be available in amounts or on terms acceptable to us, if at all.

By adjusting our operations and development to the level of capitalization, we believe we have sufficient capital resources to meet projected cash flow deficits. However, if during that period or thereafter, we are not successful in generating sufficient liquidity from operations or in raising sufficient capital resources, on terms acceptable to us, this could have a material adverse effect on our business, results of operations liquidity and financial condition.

Our registered independent certified public accountants have stated in their report dated January 14, 2008, that we have incurred operating losses in the last two years, and that we are dependent upon management's ability to develop profitable operations. These factors among others may raise substantial doubt about our ability to continue as a going concern.

Matter Voluntarily Reported to the SEC and Securities Act Violations

During the months of March, May, July and August 2005, we issued a total of 8,550,000 shares of our common stock to certain employees and consultants pursuant to the 2005 Incentive Stock Plan. We engaged our outside counsel to conduct an investigation of the circumstances surrounding the issuance of these shares. On April 26, 2006, we voluntarily reported the findings from this investigation to the SEC, and agreed to provide the SEC with further information arising from the investigation. We believe that the issuance of 8,000,000 shares to employees in July 2005 was effectuated by both our former President and our former Chief Financial Officer/Chief Operating Officer without approval of our board of directors. These former officers received a total of 3,000,000 of these shares. In

addition, it appears that the 8,000,000 shares issued in July 2005, as well as an additional 550,000 shares issued to employees and consultants in March, May and August 2005, were improperly issued without a restrictive legend stating that the shares could not be resold legally except in compliance with the Securities Act. The members of our management who effectuated the stock issuances no longer work for us. These shares were not registered under the Securities Act, or the securities laws of any state, and we believe that certain of these shares may have been sold on the open market, though we have been unable to determine the magnitude of such sales. If violations of securities laws occurred in connection with the resale of certain of these shares, the employees and consultants or persons who purchased shares from them may have rights to have their purchase rescinded or other claims against us for violation of securities laws, which could harm our business, results of operations, and financial condition.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Going Concern

The accompanying audited and unaudited condensed consolidated financial statements included in this filing have been prepared in conformity with generally accepted accounting principles that contemplate our continuance as a going concern. Our auditors, in their report dated January 14, 2008, have expressed substantial doubt about our ability to continue as going concern. Our cash position may be inadequate to pay all of the costs associated with the testing, production and marketing of our products. Management intends to use borrowings and the sale of equity or convertible debt to mitigate the effects of its cash position, however no assurance can be given that debt or equity financing, if and when required will be available. The accompanying audited and unaudited condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets and classification of liabilities that might be necessary should we be unable to continue existence.

BUSINESS

Corporate History

We are a Nevada corporation, which was initially formed under the laws of the State of Florida as Datalink Systems, Inc. in 1983. In 1998, we reincorporated in Nevada, and in November of 2002, we changed our name to our current name, Applied DNA Sciences, Inc. In November 2005, our corporate headquarters were relocated from Los Angeles, California to the Long Island High Technology Incubator at Stony Brook University in Stony Brook, New York, where we established laboratories for the manufacture of DNA markers and product prototypes, and DNA authentication. To date, the company has a very limited operating history, and as a result, the company's operations have produced insignificant revenues.

Overview

We provide botanical DNA encryption, embedment and authentication solutions that can help protect companies, governments and consumers from counterfeiting, fraud, piracy, product diversion, identity theft, and unauthorized intrusion into physical locations and databases. Our SigNature Program provides a secure, accurate and cost-effective means for our customers to incorporate our SigNature DNA Markers in, and then quickly and reliably authenticate and identify, a broad range of items such as artwork and collectibles, fine wine, consumer products, digital media, financial instruments, identity cards and other official documents. Having the ability to reliably authenticate and identify counterfeit versions of such items enables companies and governments to detect, deter, interdict and prosecute counterfeiting enterprises and individuals.

Our SigNature Program enables our customers to cost-effectively:

- assure manufacturers, suppliers, distributors, retailers and end-users that their products are authentic and can be forensically authenticated;
- integrate our SigNature DNA Markers with existing security solutions such as barcodes, radio frequency identification (RFID) tags, holograms, microchips and other securities measures; and
- add value to the "bottom-line" by helping to diminish product diversion and counterfeiting.

Counterfeit and diverted products continue to pose a significant and growing problem with consumer packaged goods, especially for prestige and established brands worldwide. Piracy, identity theft and forged documents and items are also highly prevalent in vertical markets such as digital media, fine art, luxury goods, and alcoholic beverages. Key aspects of our strategy include:

- continuing to improve and customize our solution to meet our current and potential customers' needs;
- continuing to develop and enhance our existing DNA marker authentication technologies;
- expanding our customer base both domestically and abroad by targeting high volume markets; and
- augmenting our competitive position through strategic acquisitions and alliances.

We have also begun to develop and manufacture DermalRx, an ingredient for use in skin care products, which allows for exfoliation without the irritation or inflammation associated with chemical peeling.

Industry Background

Counterfeiting, product diversion, piracy, forgery, identity theft, and unauthorized intrusion into physical locations and databases create significant and growing problems to companies in a wide range of industries as well as governments and individuals worldwide. The U.S. Chamber of Commerce reported in 2006 that counterfeiting and piracy cost the U.S. economy between \$200-\$250 billion per year, or an estimated 750,000 American jobs, and pose a

real threat to consumer health and safety. The World Customs Organization and Interpol estimate that annual global trade in illegitimate goods increased from \$5.5 billion in 1982 to roughly \$600 billion in 2004.

Product counterfeiting and diversion particularly harms manufacturers of consumer products, especially for prestige and established brands, and the consumers who purchase them. For instance, according to the Gieschen Consultancy's 2005 Document, Product and Intellectual Property Security Report, or DOPIP, consumer products associated with worldwide counterfeit enforcement arrests, charges, convictions, sentences and civil litigation in 2005 amounted to around \$1.5 billion. This total includes:

- \$695 million of entertainment and software products;
- \$283 million of clothing and accessories;
- \$193 million of cigarettes and tobacco products ;
- \$61 million of drugs and other medical supplies;

- \$36 million of toys and sports equipment;
- \$35 million of electronic equipment and supplies;
- \$12 million in perfume and cosmetics;
- \$11 million of food and alcohol products;
- \$11 million in jewelry and watches;
- \$10 million of computer equipment and supplies;
- \$123 million of other goods.

According to this report, the value of seizures and losses associated with counterfeit documents, products and intellectual property in the United States alone was \$1.29 billion in 2005.

The artworks and collectibles markets are also particularly vulnerable to counterfeiting, forgery and fraud. New works are produced and then passed off as originating from a particular artistic period or source, authentic fragments are pieced together to simulate an original work, and existing works are modified in order to increase their purported value. Such phony artwork and collectibles are then often sold with fake or questionable signatures and "provenance," or documented ownership histories that confirm authenticity.

Governments are increasingly vulnerable to counterfeiting, terrorism and other security threats at least in part because currencies, identity and security cards and other official documents can be counterfeited with relative ease. For instance, the DOPIP valued 2005 seizures and losses associated with counterfeit currency at around \$609 billion, and counterfeit identification at \$124 million. Governments must also enforce the various anti-counterfeiting and anti-piracy regimes of their respective jurisdictions which becomes increasingly difficult with the continued expansion of global trade.

The digital and recording media industry, including the segment that records computer software on compact discs, has long been a victim of piracy, or the production of illegal copies of genuine media or software, and the counterfeiting and distribution of imitation media or software. Compact discs, DVDs, videotapes, computer software and other digital and recording media that appears identical to genuine products are sold at substantial discounts by vendors at street and night markets, via mail order catalogs and on the internet at direct retail websites or at auction sites. In 2006 the Business Software Alliance ("BSA") reported that in 2005, the United States lost \$6.9 billion as a result of software piracy. The BSA also estimated that 21 percent of software programs in the U.S. are unlicensed and that since January 1, 2000, the BSA has settled with 1,668 companies for a total of \$81,821,895. In a white paper published in December 2005, the BSA and the IDC also reported that they found in a 2004 study that the world spent more than \$59 billion for commercial packaged software. Yet, software worth over \$90 billion was actually installed. In other words, for every two dollars worth of software purchased legitimately, one dollar was likely obtained illegally.

The pharmaceutical industry also faces major problems relative to counterfeit, diluted, or falsely labeled drugs that make their way through healthcare systems worldwide, posing a health threat to patients and a financial threat to drugmakers and distributors. In 2006 the Center for Medicine in the Public Interest predicted that counterfeit drug sales will reach \$75 billion globally in 2010, an increase of more than 90% from 2005. In February, 2006, the World Health Organization ("WHO") estimated that counterfeits account for more than 10% of the global pharmaceuticals market, and 25% of pharmaceuticals consumed in developing countries and that as much as 50% in some countries, are counterfeit. According to the WHO, counterfeiting can apply to both branded and generic products and counterfeit pharmaceuticals may include products with the correct ingredients but fake packaging, with the wrong ingredients, without active ingredients or with insufficient active ingredients. The challenges presented by traditional counterfeiters have recently been supplemented by the many websites, from direct retailers to auction sites, that offer counterfeit prescription drugs online. As a result, the pharmaceutical industry and regulators are examining emerging anti-counterfeit technologies, including radio-frequency identification tags and electronic product codes, known as EPCs, to help stem the wave of counterfeit drugs and better track legitimate drugs from manufacturing through the

supply chain.

As more and more companies in each of these markets begin to address the problem of counterfeiting, we expect that different systems will compete to be the leading standards by which products can be tracked across world markets. Historically, counterfeiting, product diversion and other types of fraud have been combatted by embedding various authentication systems and rare and easily distinguishable materials into products, such as radio frequency identification ("RFID") devices and banknote threads in packaging, integrated circuit chips and magnetic strips in automatic teller machine cards, holograms on currency, elemental taggants in explosives, and radioactivity and rare molecules in crude oil. These techniques are effective but have generally been reverse-engineered and replicated by counterfeiters, which limits their usefulness as forensic methods for authentication of the sources of products and other items.

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The Applied DNA Solution

We believe our solution, which we call the SigNature Program, is as broadly applicable, convenient and inexpensive as existing authentication systems, while highly resistant to reverse-engineering or replication, so that it can either be applied independently or supplement existing systems in order to allow for a forensic level of authentication of the sources of a broad range of items, such as artwork and collectibles, fine wine, consumer products, digital and recording media, pharmaceuticals, financial instruments, identity cards and official documents. The SigNature Program first involves our design and manufacture of a highly customized and encrypted botanical DNA marker, or SigNature DNA Marker. The SigNature DNA Marker is then encapsulated and stabilized so that it is resistant to heat, organic solvents, chemicals and most importantly, ultraviolet, or UV radiation. Once it has been encapsulated, our SigNature DNA Embedment system can be used to embed the SigNature DNA Marker directly onto products or other items or into special inks, threads and other media, which in turn can be incorporated into packaging or products. Once it is embedded, our SigNature DNA Encryption Detector pen can instantly show the presence or absence of any of our SigNature DNA Markers, and our SigNature polymerase chain reaction (PCR) Kits can provide rapid forensic level authentication of specific SigNature DNA Markers.

We believe that the key characteristics and benefits of the SigNature Program are as follows:

We Believe Our SigNature DNA Markers Are Virtually Impossible to Copy

In creating unique SigNature DNA Markers, we use DNA segments from one or more botanical sources, rearrange them into unique encrypted sequences, and then implement one or more layers of anti-counterfeit techniques. Because the portion of DNA in a SigNature DNA Marker used to identify the marker is so minute, it cannot be detected unless it is replicated billions of times over, or amplified. This amplification can only be achieved by applying matching strands of DNA, or a primer, and PCR techniques to the SigNature DNA Marker. The sequence of the relevant DNA in a SigNature DNA Marker must be known in order to manufacture the primer for that DNA. As a result, we believe the effort required to find, amplify, select and clone the relevant DNA in a SigNature DNA Marker would involve such enormous effort and expense that SigNature DNA Markers are virtually impossible to copy without our proprietary systems.

Simple and Rapid Authentication

With our advanced SigNature DNA Marker detection devices and PCR testing kits, any of our customers can quickly complete an on-site verification. When our SigNature DNA Encryption Detector pen comes in contact with our proprietary overt ink on a label or product package, a biochemical reaction triggers a reversible color change from blue to pink and back to blue. Testing of this color change can be repeated between 30 to 50 times. For forensic level authentication, our SigNature PCR testing kits can produce absolute authentication in less than 30 minutes using portable PCR machines.

Low Cost and High Accuracy

The costs associated with the DNA required to manufacture our SigNature DNA Markers are not significant since the amount of DNA required for each marker is so minute (for instance, only 3-5 parts per million when incorporated in an ink). We manufacture the identifying segment of DNA to be used in a SigNature DNA Marker by cloning them inside microorganisms such as yeast or bacteria, which are highly productive and inexpensive to grow. As a result, SigNature DNA Markers are relatively inexpensive when compared to other anti-counterfeiting devices such as RFIDs, EPCs, integrated circuit chips, and holograms. Our SigNature DNA Encryption Detectors, which use color changing dyes and molecular "triggers" to instantly detect SigNature DNA Markers, are also relatively inexpensive. At the same time, the probability of mistakenly identifying a SigNature DNA Marker is less than 1 in 1 trillion, so our authentication systems are highly accurate, and in fact, our SigNature PCR Kits can authenticate to a

forensic level.

Easily Integrated with Other Anti-Counterfeit Technologies

Our DNA Markers can be embedded onto RFID devices, banknote threads, labels, serial numbers, holograms, and other marking systems using inks, threads and other media. We believe that combined with other traditional methods, our SigNature Program provides a significant deterrent against counterfeiting, product diversion, piracy, fraud and identity theft.

Broad Applicability and Ingestible

Our SigNature DNA Markers can be embedded into almost any consumer product, and virtually any other item. For instance, the indelible SigNature DNA Ink we produce is safe to consume and can be used in pharmaceutical drug tablets and capsules. Use of our SigNature DNA in ingestible products and drugs will require approval of the U.S. Food and Drug Administration (FDA). We have initiated a strategy to approach the FDA during 2008.

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Our Strategy

We expect to generate revenues principally from sales of our SigNature Program. Key aspects of our strategy include:

Customize and Refine the SigNature Program to Meet Potential Customers' Needs

We are continuously attempting to improve our SigNature Program by testing the incorporation of our DNA Markers into different media, such as newly configured labels, inks or packing elements, for use in new applications. Each prospective customer has specific needs and employs varying levels of existing security technologies with which our solution must be integrated. Our goal is to develop a secure and cost-effective system for each potential customer that can be incorporated into that potential customer's products or items themselves or their packaging so that they can, for instance, be tracked throughout the entire supply chain and distribution system.

Continue to Enhance Detection Technologies for Authentication of our SigNature DNA Markers

We have also identified and are further examining opportunities to collaborate with companies and universities to develop a new line of detection technologies that will provide faster and more convenient ways to authenticate our SigNature DNA Markers.

Target Potential High-Volume Markets

We will continue to focus our efforts on target vertical markets that are characterized by a high level of vulnerability to counterfeiting, product diversion, piracy, fraud, identity theft, and unauthorized intrusion into physical locations and databases. Today our target markets include art and collectibles, fine wine, consumer products, digital and recording media, pharmaceuticals, and homeland security. If and when we have significantly penetrated these markets, we intend to expand into additional related high volume markets.

Pursue Strategic Acquisitions and Alliances

We intend to pursue strategic acquisitions of companies and technologies that strengthen and complement our core technologies, improve our competitive positioning, allow us to penetrate new markets, and grow our customer base. We also intend to work in collaboration with potential strategic partners in order to continue to market and sell new product lines derived from, but not limited to, DNA technology.

Target Markets

We have begun offering our products and services in Europe and the United States and are targeting the following six principal markets:

Art & Collectibles

The fine art and collectibles markets are particularly vulnerable to counterfeiting, forgeries and fraud. Phony artwork and collectibles are often sold with fake or questionable signatures or attributions. We believe our SigNature DNA Markers can safely be embedded directly in, and so can be used to designate and then authenticate all forms of artwork and collectibles, including paintings, books, porcelain, marble, stone, bronzes, tapestries, glass and fine woodwork, including frames. They can also be embedded in any original supporting documentation related to the artwork or collectible, the signature of the artist and any other relevant material that would provide provenance, such as:

- A signed certificate or statement of authenticity from a respected authority or expert on the artist;

- An exhibition or gallery sticker attached to the art or collectible;
- An original sales receipt;
- A film or recording of the artist talking about the art or collectible;
- An appraisal from a recognized authority or expert on the art or collectible; and
- Letters or papers from recognized experts or authorities discussing the art or collectible.

Fine Wine

Vintners and purveyors of fine wine are also vulnerable to counterfeiting or product diversion. We believe our SigNature Program can provide vintners, purveyors of fine wines and organizations within the wine community several benefits:

- Verified authenticity increases potential customers' confidence in the product and their purchase decision;
- For the vintner, the SigNature Program can strengthen brand support and recognition, and offers the potential for improved marketability and sales; and
- SigNature DNA Markers can be embedded in bottles, labels, or both at the winery, and easily authenticated at the location of the wine distributor or auctioneer.

Consumer Products

Counterfeit items are a significant and growing problem with all kinds of consumer packaged goods, especially in the retail and apparel industries. According to the 2005 DOPIP, up to \$283 million worth of clothing and accessories worldwide are fake, as well as \$12 million worth of fragrances and cosmetics are counterfeit each year. In the United States, \$1.29 billion dollars worth of seizures and losses were incurred resulting from counterfeit of apparel and other consumer products. We have developed and are currently marketing a number of solutions aimed at brand protection and authentication for the retail and apparel industries, including the clothing, accessories, fragrances and cosmetics segments. Our SigNature Program can be used by manufacturers in these industries to combat counterfeiting and piracy of primary, secondary and tertiary packaging, as well as the product itself, and to track products that have been lost in transit, whether misplaced or stolen.

Digital and Recording Media

The digital and recording media industry, including the segment that records computer software on compact discs, faces significant threats from piracy and the counterfeiting and distribution of imitation media or software. In 2007 the Business Software Alliance ("BSA") reported that in 2006, the United States software industry lost \$7.3 billion as a result of software piracy, an increase of \$400 million over the previous year. An independent study conducted by IDC for the BSA reported that 21 percent of software in the United States is unlicensed. Our SigNature DNA Markers can be embedded onto digital and recording media products, such as CDs, DVDs, videotapes and computer software, as well as the packaging of these products.

Pharmaceuticals

The pharmaceutical industry also faces major problems relative to counterfeit, diluted, or falsely labeled drugs that make their way through healthcare systems worldwide, posing a health threat to patients and a financial threat to drugmakers and distributors. As a result, the pharmaceutical industry and regulators are examining emerging anti-counterfeit technologies, including RFID tags and EPCs to help stem the wave of counterfeit drugs and better track legitimate drugs from manufacturing through the supply chain. Our SigNature DNA Markers can easily be embedded directly into pharmaceutical packaging or into RFID tags or EPCs attached to packaging, and since they are ingestible, may be applied as part of a unit dose. In its 2004 report "Combating Counterfeit Drugs," the Food and Drug Administration ("FDA") noted that authentication technologies for pharmaceuticals (such as color-shifting inks, holograms, taggants, or chemical markers embedded in a drug or its label) have been sufficiently perfected that they can now serve as a critical component of a layered approach to control counterfeit drugs. FDA's 2004 Report acknowledged the importance of using one or more authentication technologies for drug products.

Homeland Security

Governments worldwide are increasingly faced with the problems of counterfeit currencies, official documents, and identity and security cards, as well as terrorism and other security threats. Governments must also enforce the various anti-counterfeiting and anti-piracy regimes of their respective jurisdictions which becomes increasingly difficult with the continued expansion of global trade. Our SigNature Program can provide secure, forensic, and cost-effective anti-counterfeiting, anti-piracy and identification solutions to local, state, and federal governments as well as the defense contractors and the other companies that do business with them. Our SigNature Program can be used for all types of identification and official documents, such as:

- passports;
- lawful permanent resident, or "green" cards;
- visas;
- drivers' licenses;

- Social Security cards;
- military identification cards;
- national transportation cards;
- security cards for access to sensitive physical locations; and
- other important identity cards, official documents and security-related cards.

Our Technology

Every living organism has a unique DNA code that determines the character and composition of its cells. The core technologies of our business allow us to use the DNA of everyday plants to mark objects in a unique manner that we believe can only be replicated at great expense, and then identify these objects by detecting the absence or presence of the DNA.

SigNature DNA Encryption

Our patent pending encryption system allows us to isolate strands of botanical DNA and then fragment and reconstitute them to form unique “DNA chimers”, or encrypted DNA segments, whose sequences are known only to us.

SigNature DNA Encapsulation

Our patented encapsulation system allows us to apply a protective coating to encrypted DNA chimers, creating a SigNature DNA Marker that is resistant to heat, organic solvents, chemicals and UV radiation, and so can be identified for hundreds of years after being embedded directly, or into media applied or attached to the item to be marked.

SigNature DNA Embedment

Our patented embedment system allows us to incorporate our SigNature DNA Markers into a broad variety of media, such as petroleum and petroleum derivatives, inks, dyes, laminates, glues, threads, and textiles.

SigNature DNA Authentication

Our patent pending forensic level authentication methods allow us to unlock the encrypted DNA chimers by using PCR techniques and proprietary primers that were specifically designed by us to detect the DNA sequences we encrypted and embedded into the product or other item. Detection of the DNA chimers unique to a particular item or series of items allows us to authenticate its or their origin.

Products and Services

SigNature Program. Our SigNature Program consists of three steps: creating and encapsulating a specific encrypted DNA segment, applying it to a product or other item, and detecting the presence or absence of the specific segment. We plan for the first two steps to be controlled exclusively by Applied DNA and its certified agents to ensure the security of SigNature DNA Markers. Once applied, the presence of any of our SigNature DNA Markers can be detected by us or a customer in a simple spot test, or a sample taken from the product or other item can be analyzed forensically to obtain definitive proof of the presence or absence of a specific type of SigNature DNA Marker (e.g., one designed to mark a particular product).

Creating a Customer or Product-Specific SigNature DNA Marker

Our SigNature DNA Markers are botanical DNA segments custom manufactured by us to identify a particular class of or individual products or items. During this manufacturing process, we scramble and encrypt a naturally occurring botanical DNA code segment or segments, and then encapsulate the resulting DNA segment utilizing our proprietary SigNature DNA Encapsulation system. We then record and store the sequence of the DNA segment in a secure database in order that we can later detect it.

Embedding the SigNature DNA Marker

Our SigNature DNA Markers may be directly embedded in products or other items, or otherwise attached by embedding them into media that is incorporated in or attached to the product or item. For example, we can embed SigNature DNA Markers directly in paper, metal, plastics, stone, ceramic, and other materials. Media in which we can embed SigNature DNA Markers include:

SigNature DNA Ink: Our SigNature DNA Ink can be applied directly or on a label that is then affixed to the product or item. SigNature DNA Ink is highly durable and degradation resistant. SigNature DNA Ink can be visible (colored) or invisible. This makes it possible to mark products with a visible, or overt, and/or invisible, or covert, SigNature DNA Marker on any tangible surface such as a label. The location of covert Signature DNA Markers on a product are recorded and stored in a secure database. Similar media like varnish and paints can also be used instead of ink. Examples of products and other items onto which SigNature DNA Ink can be applied include:

- artwork and collectibles (paintings, artifacts, antiques, stamps, coins, documents, collectibles and memorabilia);
- corporate documents: (confidential, date and time dependent documents or security clearance documents);
- financial instruments (currency, stock certificates, checks, bonds and debentures);
- retail items (event tickets, VIP tickets, clothing labels, luxury products);
- pharmaceuticals (tablet, capsule and pill surface printing); and
- other miscellaneous items (lottery tickets, inspection stamps, custom seals, passports and visas, etc.).

SigNature DNA Thread: Our SigNature DNA Thread, which can consist of any fabric from cotton to wool, is embedded with SigNature DNA Markers and can be used to mark and authenticate products and other items incorporating textiles. For example, SigNature DNA Thread can be incorporated in a finished garment, bag, purse, shoe or other product or item. SigNature DNA Thread can help textile vendors, clothing and accessory manufacturers and governments authenticate thread, yarn and fabric at any stage in the supply chain. We can also embed our SigNature DNA markers into raw cotton fiber before manufacture of a finished cotton textile product (e.g., a t-shirt) and authenticate a finished cotton product.

Other Security Devices: Our SigNature DNA Markers can also be embedded onto printed barcodes, RFID tags, optical memory strips, holograms, tamper proof labels and other security devices incorporated into products and other items for various security-related purposes.

SigNature DNA Detection and Product Authentication

Level 1 “Spot Test” Detection: Level one marker detection utilizes non-DNA based mechanisms such as optical reporter markers and color shifting ink. Adding optical reporter markers to our SigNature DNA affords the ability to quickly screen for the presence or absence of our SigNature DNA Markers using the portable hand held detectors. Our SigNature DNA Encryption Detector pens, which are custom manufactured to identify our SigNature DNA Markers, allow us or our customers to determine the presence or absence of these markers in around one second when they have been embedded in a special overt DNA Ink. When the SigNature DNA Encryption Detector is swiped over matching overt DNA Ink, the color of the ink temporarily changes from blue to pink, indicating the presence of the markers, and validating the product or other item. Though this detection process cannot distinguish between different types of SigNature DNA Markers, such as markers we have designed for one customer or product versus another, it allows for instant sampling at any point in the supply chain.

Level 2 Forensic DNA Authentication: Our SigNature PCR Kits allow us or our customers to use a sample taken from the product or other item to be authenticated, and using our proprietary primers and PCR technology, determine the sequences of DNA included in the sample, and conclude whether it includes a specific SigNature DNA Marker. This more elaborate test generally requires about 30 minutes to complete. This authentication process provides absolute certainty about the presence or absence of specific types of a SigNature DNA Marker.

DermalRx Business. In November, 2007, we began developing and manufacturing DermalRx, an ingredient for skin care products. We believe that our DermalRx helps skin care products exfoliate without the irritation or inflammation associated with chemical peeling. We are continuing to pursue our DermalRx business.

Sales and Marketing

We have since inception only had sales of our products in Europe through direct sales. As of January 14, 2008, we had 2 employees devoted to and 3 employees engaged in direct sales. We expect to hire additional sales directors and/or consultants to assist us with sales and marketing efforts with respect to our 6 target vertical markets.

Research and Development

Our research and development efforts are primarily focused on the development of prototypes of new versions of our products using our existing technologies for review by prospective customers, such as different types of SigNature DNA Ink and SigNature DNA Thread. Nonetheless, we believe that our development of new and enhanced technologies relating to our business may be important to our future success, and we continue to examine whether investments in the research and development of such technologies is merited.

Manufacturing

We have the capability to manufacture SigNature DNA Markers, covert DNA Ink, and SigNature PCR Kits at our laboratories in Stony Brook. We rely upon other companies to manufacture our overt color-changing DNA Ink and our SigNature DNA Encryption Detector pens.

Commercial Agreements and Distribution of our Products

HPT Agreement. On March 19, 2007, we entered into a Technology Reseller Agreement (the “HPT Agreement”) with HPT International, LLC (“HPT”). In the HPT Agreement we agreed to supply our SigNature DNA Markers to HPT to be affixed onto HPT's holograms, Nylon 6 tags and other plastic or metal food tags. HPT has been granted exclusive rights to affix our SigNature DNA Markers onto its tagging products for distribution to its customers in the United States in the poultry and kosher foods markets, and non-exclusive rights to attach our SigNature DNA Markers onto its tagging products for distribution to its customers worldwide. We will receive a fee for each SigNature DNA Marker that is attached to an HPT product and distributed to a third party, and for each forensic authentication test that we perform at HPT's request. HPT has been granted exclusive rights in the U.S. poultry and kosher foods markets with respect to new customers through March 18, 2008. After that date, HPT will lose its exclusive rights if it does not realize certain sales goals or does not agree to certain minimum purchases during the subsequent year of the agreement. Under the HPT Agreement, HPT has the right to permanent exclusivity in the U.S. poultry and kosher foods markets if realizes its sales goals for the first two years under the HPT Agreement and achieves an additional milestone to be agreed by us and HPT prior to March 18, 2009.

IIMAK Agreement. On April 18, 2007, we entered into a Joint Development and Marketing Agreement with International Imaging Materials, Inc., or IIMAK. In this agreement with IIMAK, the parties agreed to jointly develop thermal transfer ribbons incorporating our SigNature DNA Markers to help prevent counterfeiting and product diversion for an initial six (6) month period. This period may be extended by mutual written agreement. Upon the successful development of commercially feasible ribbons incorporating SigNature DNA Markers, we will be paid royalties based on a calculation of net receipts by IIMAK from sales of such products. We will receive the exclusive right to supply DNA taggants to IIMAK and IIMAK will receive the exclusive right to manufacture and sell such products worldwide. In February 2008, we completed the joint development stage of this agreement and initiated pilot manufacturing of IIMAK thermal transfer ribbons embedded with SigNature DNA.

Champion Thread Company Agreement. On May 8, 2007, we entered into a Joint Development and Marketing Agreement with Champion Thread Company, or Champion. We agreed to jointly develop, commercialize and distribute SigNature DNA marked products to the textile industry. Champion has been granted exclusive rights to be the reseller for the thread, yarn, woven labels and printed labels for textiles markets for an initial period of four years with automatic renewals thereafter, subject to either party's right not to renew. We will be paid royalties on all sales made by Champion.

Printcolor Screen Ltd. Agreement. On May 30, 2007, we entered into a Technology Reseller Agreement with Printcolor Screen Ltd., or Printcolor. Under the terms of the agreement, we have been granted the exclusive right to supply our SigNature DNA Markers to Printcolor and Printcolor has been granted rights to affix our SigNature DNA Markers onto Printcolor products for distribution to its customers for an initial period of three years. This initial period will automatically renew for successive one year periods unless terminated earlier. We will be paid certain fees based on purchase orders received from Printcolor. In October 2007, Printcolor committed to using our SigNature DNA as a central component of its spectraCRYPT security product line.

Supima Cotton Agreement. On June 27, 2007, we entered into a Feasibility Study Agreement with Supima, a non-profit organization for the promotion of U.S. pima cotton growers. In connection with the agreement we undertook a study of the feasibility of establishing a method or methods to authenticate and identify U.S. produced pima cotton fibers. We received payments from Supima upon signing of the agreement and in installments beginning on July 6, 2007 through completion of the feasibility study. The feasibility study was successfully completed in the first quarter of 2008. We plan to begin a preliminary launch of authentication services in 2008 and we may in the future offer authentication services to member companies of Supima (as well as non-member companies) to confirm the Supima cotton content of textile items such as apparel and home fashion products. We are obligated to pay Supima a percentage of any fees that we receive from such companies for authentication services we provide them. We are also obligated to pay Supima fifty percent of the aggregate amount of payments that we received from Supima for the feasibility study out of any fees we receive from providing authentication services. In addition, until the earlier of either (i) five years or (ii) the repayment to Supima of fifty percent of the aggregate amount of payments that we received from Supima for the feasibility study, we are obligated to pay Supima a fee for each authentication service that we provide. The agreement may be terminated by us or Supima after sixty (60) days upon fourteen (14) days prior written notice.

Cash-In-Transit Industry. In February 2008, we shipped our first order of SigNature DNA markers to a UK distributor to the Cash-in-Transit industry. In March 2008, we shipped our second order to the same customer.

DermalRx. As of April 2008, we have shipped three orders of DermalRx to a consumer products company for testing in their skin care products.

Competition

The principal markets for our SigNature Program are intensely competitive. We compete with many existing suppliers and new competitors continue to enter the market. Many of our competitors, both in the United States and elsewhere, are major pharmaceutical, chemical and biotechnology companies, or have strategic alliances with such companies, and many of them have substantially greater capital resources, marketing experience, research and development staff, and facilities than we do. Any of these companies could succeed in developing products that are more effective than the products that we have or may develop and may be more successful than us in producing and marketing their existing products. Some of our competitors that operate in the anti-counterfeiting and fraud prevention markets include: Authentix, Collectors Universe Inc., Data Dot Technology, Digimarc Corp., DNA Technologies, Inc., ID Global, Informium AG, Inksure Technologies, Kodak, L-1 Identity Solutions, Manakoa, OpSec Security Group, SmartWater Technology, Inc., Sun Chemical Corp, and Tracetag.

Some examples of competing security products include:

- fingerprint scanner (a system that scans fingerprints before granting access to secure information or facilities);
- voice recognition software (software that authenticates users based on individual vocal patterns);
- cornea scanner (a scanner that scan the iris of a user's eye to compare with data in a computer database);
- face scanner (a scanning system that use complex algorithms to distinguish one face from another);
- integrated circuit chip & magnetic strips (integrated circuit chips that receive and, if authentic, send a correct electric signal back to the reader, and magnetic strips that contain information, both of which are common components of debit and credit cards);
- optically variable microstructures (these include holograms, which display images in three dimensions and are generally difficult to reproduce using advanced color photocopiers and printing techniques, along with other devices with similar features);
- elemental taggants and fluorescence (elemental taggants are various unique substances that can be used to mark products and other items, are revealed by techniques such as x-ray fluorescence); and
- radioactivity & rare molecules (radioactive substances or rare molecules which are uncommon and readily detected).

We expect competition with our products and services to continue and intensify in the future. We believe competition in our principal markets is primarily driven by:

- product performance, features and liability;
- price;
- timing of product introductions;
- ability to develop, maintain and protect proprietary products and technologies;
- sales and distribution capabilities;
- technical support and service;
- brand loyalty;
- applications support; and
- breadth of product line.

If a competitor develops superior technology or cost-effective alternatives to our products, our business, financial condition and results of operations could be significantly harmed.

Proprietary Rights

We believe that our 7 patents, 23 patents pending, 2 registered trademarks, and 2 registered trademarks pending, which are described in the table below, and our trademarks, trade secrets, copyrights and other intellectual property rights are important assets for us.

Patents Issued:

Patent Name	Patent No:	Assignee of Record	Dated Issued	Jurisdiction
Nucleic Acid as Marker for Product Anticounterfeiting and Identification	89108443	APDN (B.V.I.) Inc.	March 17,2000	Taiwan
Method of using ribonucleic acid as product antifake mark and for verification	00107580.2	Rixflex Holdings Limited (2)	February 2, 2005	China
	89204158	APDN (B.V.I.) Inc.	March 10, 2000	Taiwan

EppenLocker (A Leakage-Prevention Apparatus of Microcentrifuge)				
Multiple Tube Structure for Multiple PCR in a Closed Container	89210575	APDN (B.V.I.) Inc.	June 20, 2000	Taiwan
A Device for Multiple Polymerase Chain Reactions In a Closed Container and a Method of Using Thereof	89111477	APDN (B.V.I.) Inc.	June 12, 2000	Taiwan
Method for Mixing Nucleic Acid in Water Insoluble Media and Application Thereof	921221973	APDN (B.V.I.) Inc.	August 11, 2003	Taiwan
A Method of Utilizing Nucleic Acids as Markers for Product Anti-Counterfeit Labeling and Verification	US 7,115,301 B2	Rixflex Holdings Limited (2)	October 3, 2006	United States

Patents Pending:

Patent Name	Application No.	Filed in the Name of	Dated Filed	Jurisdiction
Method for Mixing Nucleic Acid in Water Insoluble Media and Application Thereof	2002-294229	Biowell (1)	August 31, 2002	Japan
	03007023.9	Rixflex Holdings Limited (2)	March 27, 2003	EU
	10/645,602	Rixflex Holdings Limited (2)	August 22, 2003	United States
Method of dissolving nucleic acid in water insoluble medium and its application	03155949.2	Rixflex Holdings Limited (2)	August 27, 2003	China
Novel nucleic acid based steganography system and application thereof	10/909,431	Rixflex Holdings Limited (2)	August 3, 2004	United States
Cryptic method of secret information carried in DNA molecule and its deencryption method	921221490	APDN (B.V.I.) Inc.	August 6, 2003	Taiwan
A novel nucleic acid based steganography system and application thereof	03127517.6	Biowell (1)	August 6, 2003	China
	61387/2004	Rixflex Holdings Limited (2)	August 4, 2004	Korea
A novel method for coding based on nucleic acids and utility thereof	04018374.1	Rixflex Holdings Limited (2)	August 3, 2004	EU
	1-2004-00742	Rixflex Holdings Limited (2)	August 4, 2004	Vietnam
A novel nucleic acid based steganography system and applications thereof	092819	Rixflex Holdings Limited (2)	August 4, 2004	Thailand
	PI20043145	Biowell (1)	August 4, 2004	Malaysia
	2004-225987	Rixflex Holdings Limited (2)	August 2, 2004	Japan
Method for classifying group ID of shoppers and transferring the shopping discount to group development funds development	P-00200400374	Rixflex Holdings Limited (2)	August 4, 2004	Indonesia
	764/CHE/2004	Rixflex Holdings Limited (2)	August 4, 2004	India
	92119302	APDN (B.V.I.) Inc.	July 15, 2003	Taiwan
Method for transferring feedback foundation capable of identifying	03150071.4	Rixflex Holdings Limited (2)	July 31, 2003	China

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multiple objects				
Method of Classifying Group ID of Shoppers and Transferring the Shopping Discount to Group Development Funds	PI20042889	Rixflex Holdings Limited (2)	August 4, 2004	Malaysia
	092217	Rixflex Holdings Limited (2)	July 12, 2004	Thailand
	2004-200730	Biowell (1)	July 7, 2004	Japan
System and Method for authenticating multiple components associated with a particular product.	11/437,265	APDN (B.V.I.) Inc.	May 19, 2005	US
	PCT/US2006/019660	APDN (B.V.I.) Inc.	May 19, 2006	PCT
System and Method for Marking Textiles with Nucleic Acid	10/825,968	APDN (B.V.I.) Inc.	April 15, 2004	US
System and Method for Marking Textiles with Nucleic Acids	Publication #20050112610	APDN (B.V.I.) Inc	4/16/2003	US

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System and Method for Authenticating Multiple Components Associated with a Particular Good	Publication # 22070048761	APDN (B.V.I.) Inc	5/20/2005	US
System and Method for Secure Document Printing and Detection	Application # 60/874,425	APDN (B.V.I.) Inc	12/12/2006	US
System and Method for Authenticating Tablets	Application #60/877,875	APDN (B.V.I.) Inc	12/26/2006	US
System and Method for Authenticating Sports Identification Goods	Application # 60/877,869	APDN (B.V.I.) Inc.	12/29/2006	US
Optical Reporter Compositions	11/954,030	APDN (B.V.I.) Inc.	2007/12/11	US
Methods for Covalent Linking of Optical Reporters	11/954,009			
Method For Authenticating Articles with Optical Reporters	11/954,038	APDN (B.V.I.) Inc.	2007/12/11	US
Method for Secure Document Printing and Detection	11/954,044	APDN (B.V.I.) Inc.	2007/12/11	US
Method for Authenticating Sports Identification Goods	11/954,051	APDN (B.V.I.) Inc.	2007/12/11	US
Method for Authenticating Tablets	11/954,055	APDN (B.V.I.) Inc.	2007/12/11	US

(1) All patents in the name of and patent applications filed in the name of Biowell have been assigned to our wholly-owned subsidiary APDN (B.V.I.) Inc., and we are making efforts to ensure APDN (B.V.I.) is the assignee or filer of record, as the case may be.

(2) All patents in the name of and patent applications filed in the name of Rixflex Holdings Limited, which merged into APDN (B.V.I.) Inc. on July 12, 2005, have been assigned to APDN (B.V.I.) Inc., and we are making efforts to ensure APDN (B.V.I.) is the assignee or filer of record, as the case may be.

Trademarks Issued:

Trademark	Registration No:	Registered Owner	Registration Date	Jurisdiction
APPLIED DNA and model molecule design	846354	Applied DNA Sciences Inc.	August 13, 2004	Mexico
APPLIED DNA and model molecule design	846711	Applied DNA Sciences Inc.	August 16, 2004	Mexico
APPLIED DNA and model molecule design	3392818	Applied DNA Sciences Inc.	March 21, 2005	European Community
BIOWELL and Design	3,155,578	Rixflex Holdings Limited (1)	October 17, 2006	United States
BIOWELL and Design	2,675,941	Rixflex Holdings Limited (1)	January 21, 2003	United States
BIOWELL and Design	2,611,291	Rixflex Holdings Limited (1)	August 27, 2002	United States

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BIOWELL and Design	4101159010000	Biowell (2)	May 4, 2005	South Korea
BIOWELL and Design	4,819,252	Rixflex Holdings Limited (1)	November 19, 2004	Japan

(1) All registered trademarks in the name of Rixflex Holdings Limited have been assigned to APDN (B.V.I.) Inc., and we are making efforts to ensure APDN (B.V.I.) Inc. is the registered owner.

(2) All registered trademarks in the name of Biowell have been assigned to APDN (B.V.I.) Inc., and we are making efforts to ensure APDN (B.V.I.) Inc. is the registered owner.

Trademarks Pending:

Trademark	Application No:	Owner	Filing Date	Jurisdiction
APPLIED DNA	76/549,861	APDN (B.V.I.) Inc.	September 22, 2003	United States
SIGNATURE	78/871,967	APDN (B.V.I.) Inc.	April 28, 2006	United States

However, there are events that are outside of our control that pose a threat to our intellectual property rights as well as to our products and services. For example, effective intellectual property protection may not be available in every country in which our products and services are distributed. The efforts we have taken to protect our proprietary rights may not be sufficient or effective. Any significant impairment of our intellectual property rights could harm our business or our ability to compete. Protecting our intellectual property rights is costly and time consuming. Any increase in the unauthorized use of our intellectual property could make it more expensive to do business and harm our operating results. Although we seek to obtain patent protection for our innovations, it is possible we may not be able to protect some of these innovations. Given the costs of obtaining patent protection, we may choose not to protect certain innovations that later turn out to be important. There is always the possibility that the scope of the protection gained from one of our issued patents will be insufficient or deemed invalid or unenforceable. We also seek to maintain certain intellectual property as trade secrets. This secrecy could be compromised by third parties, or intentionally or accidentally by our employees, which would cause us to lose the competitive advantage resulting from these trade secrets.

Additionally, litigation regarding patents and other intellectual property rights is extensive in the biotechnology industry. In the event of an intellectual property dispute, we may be forced to litigate. This litigation could involve proceedings instituted by the U.S. Patent and Trademark Office or the International Trade Commission, as well as proceedings brought directly by affected third parties. Intellectual property litigation can be extremely expensive, and these expenses, as well as the consequences should we not prevail, could seriously harm our business. If a third party claims an intellectual property right to technology we use, we might need to discontinue an important product or product line, alter our products and processes, pay license fees or cease our affected business activities. Although we might under these circumstances attempt to obtain a license to this intellectual property, we may not be able to do so on favorable terms, or at all.

Purchase of Intellectual Property and License Agreement with Biowell

In the first half of 2005, Biowell Technology, Inc. ("Biowell") transferred substantially all of its intellectual property to Rixflex Holdings Limited, a British Virgin Islands company, and on July 12, 2005, Rixflex Holdings Limited merged with and into our wholly-owned subsidiary APDN (B.V.I.) Inc., a British Virgin Islands company. The shareholders of Rixflex Holdings Limited received 36 million shares of our common stock in consideration of this merger. In connection with the acquisition of this Biowell intellectual property, we terminated our existing license agreement and, on July 12, 2005, we entered into a license agreement with Biowell, under which we granted Biowell an exclusive license to sell, market, and sub-license certain of our products in Australia, certain countries in Asia and certain Middle Eastern countries. By letter dated November 1, 2007, we terminated Biowell's rights as licensee with respect to Australia, China and certain other countries in Asia because of Biowell's failure to pay us certain fees, payments or consideration in connection with the grant of the license. In addition, we terminated the exclusivity of the license with respect to certain Middle Eastern and other Asian countries because of Biowell's failure to meet certain minimum annual net sales in each of the various countries covered by the license.

Employees

Presently, we employ a total of 7 full-time employees and 3 part-time employees, including 2 in management, 4 in operations, 3 in sales and marketing and 1 in investor relations. None of our employees are covered by collective

bargaining agreements, and we believe our relations with our employees are favorable.

Description of Properties

We maintain our principal office at 25 Health Sciences Drive, Suite 113, Stony Brook, New York 11790. We moved our principal office to the Long Island High Technology Incubator, which is located on the campus of Stony Brook University, in December 2005. We believe that our current office space and facilities are sufficient to meet our present needs and do not anticipate any difficulty securing alternative or additional space, as needed, on terms acceptable to us.

Legal Proceedings

From time to time, we may become involved in various lawsuits and legal proceedings which arise in the ordinary course of business. However, litigation is subject to inherent uncertainties, and an adverse result in these or other matters may arise from time to time that may harm our business. Except as described below, we are currently not aware of any such legal proceedings that we believe will have, individually or in the aggregate, a material adverse affect on our business, financial condition or operating results.

Paul Reep v. Applied DNA Sciences, Inc. et al. (Los Angeles Superior Court Case No. BC345702):

Plaintiff Paul Reep, a former employee, commenced this action against us on January 10, 2006. Mr. Reep asserted causes of action for breach of contract, breach of an oral agreement, negligent misrepresentation, interference with prospective business advantages, defamation, fraud, accounting and constructive trust, and unjust enrichment. The relief sought includes declaratory relief, unspecified compensatory damages, unpaid salary, unspecified penalties under the California Labor Code, interest, punitive damages and attorneys' fees. We successfully moved the court to indefinitely stay all proceedings in this matter in light of a forum selection clause designating Nevada state courts as the proper forum. We then agreed with Reep to consolidate this action with another matter pending in Los Angeles County Superior Court, captioned Applied DNA Sciences, Inc. v. Paul Reep, Case No. BC367661. Once this matter was consolidated with our affirmative lawsuit against Reep, we filed a demurrer to the first amended complaint. That demurrer resulted in several causes of action being dismissed. Reep then filed a Second Amended Complaint which asserts claims for breach of written and oral contracts, fraud, declaratory relief, violation of California's Labor Code and defamation. We answered the Second Amended Complaint in November 2007 and denied all of the material allegations. Since that time, we have deposed Reep on two occasions and propounded various written discovery. Based on the information obtained through the discovery process, we moved for summary judgment regarding all of Reep's remaining claims. The motion for summary judgment came on for hearing on June 19, 2008 before Judge Solner, and was granted in its entirety. We are now waiting for the Court to enter the proposed order that disposes of Reep's claims. We have also had communications with Reep's counsel whereby the parties have provisionally agreed for Reep to waive any appellate rights he may have relating to this lawsuit in exchange for our agreement to dismiss our affirmative lawsuit against Reep (see below). A written agreement setting forth the final resolution of both matters is expected to be executed shortly.

Applied DNA Sciences, Inc. v. Paul Reep et al. (Los Angeles County Superior Court Case No. BC 367661):

We filed this action against the defendants, Paul Reep, Adrian Butash, John Barnett, Chanty Cheang, Jaime Cardona, Peter Brocklesby, Cheri Lu Brocklesby and Angela Wiggins on or about March 9, 2007. In this matter, we have asked the court to make a judicial determination that the defendants were unjustly enriched and breached fiduciary duties owed to the company. We resolved our claims against all of the defendants except Reep and Peter and Cheri Lu Brocklesby. Default was entered against Peter and Cheri Lu Brocklesby for failing to respond to the complaint, and the company has since submitted documentation requesting that a default judgment be issued against both of these individuals. That request is still being considered by the Court. After the resolution of the claims involving the other defendants, we agreed with Reep that this case should be consolidated with Paul Reep v. Applied DNA Sciences, Inc. et al, Los Angeles Superior Court Case No. BC345702. The trial in the consolidated matter was set for July 22, 2008; however, on June 19, 2008, we prevailed in our motion for summary judgment in the matter captioned Paul Reep v. Applied DNA Sciences, Inc. et al, Los Angeles Superior Court Case No. BC345702 (see above). After the decision granting our motion for summary judgment was announced, we had communications with Reep's counsel whereby the parties provisionally agreed for Reep to waive any appellate rights he may have relating to Case No. BC 345702 in exchange for our agreement to dismiss our affirmative lawsuit against Mr. Reep. A written agreement setting forth the final resolution of both matters is expected to be executed shortly. The Court has set a status conference for August 27, 2008 at 9:00 a.m. in the event this case is not resolved. We intend to vigorously prosecute our claims

against Reep should the case not be resolved upon the terms provisionally agreed upon.

Douglas A. Falkner v. Applied DNA Sciences, Inc./N.C. Industrial Commission File No. 585698

Plaintiff Douglas Falkner ("Falkner") filed a worker's compensation claim in North Carolina for an alleged work-related neck injury that he alleges occurred on January 14, 2004. Falkner worked as Business Development and Operations Manager at our sole East Coast office at the time of the alleged injury. Plaintiff Falkner was the only employee employed by us in North Carolina at the time of the alleged injury and we have employed no other employees in North Carolina at any other time. The claim has been denied and is being defended on several grounds, including the lack of both personal and subject matter jurisdiction. Specifically, we contend that we did not employ the requisite minimum number of employees in North Carolina at the time of the alleged injury and that the company is therefore not subject to the North Carolina Workers' Compensation Act. The claim was originally set for hearing in January 2007, but was continued to allow the parties to engage in further discovery.

Douglas A. Falkner v. Applied DNA Sciences, Inc. (Los Angeles County Superior Court Case No. BC 386557):

Falkner commenced this action asserting counts for breach of contract under his employment agreements dated March 10, 2003 and June 16, 2003 and wrongful discharge in violation of public policy. The relief sought includes unspecified compensatory damages, unspecified exemplary and punitive damages, and attorneys' fees. This matter is in the early stages of discovery. We intend to vigorously defend against the claims asserted against us.

Intervex, Inc. v. Applied DNA Sciences, Inc. (Supreme Court of the State of New York Index No.08-601219) :

Intervex, Inc., or Intervex, the plaintiff, filed a complaint on or about April 23, 2008 related to a claim for breach of contract. In March 2005, we entered into a consulting agreement with Intervex, which provided for, among other things, a payment of \$6,000 per month for a period of 24 months, or an aggregate of \$144,000. In addition, the consulting agreement provided for the issuance by us to Intervex of a five-year warrant to purchase 250,000 shares of our common stock with an exercise price of \$.75. Intervex asserts that we owe it 17 payments of \$6,000, or an aggregate of \$102,000, plus accrued interest thereon, and a warrant to purchase 250,000 shares of our common stock. We have counterclaimed for compensatory and punitive damages, restitution, attorneys' fees and costs, interest and other relief the court deems proper. This matter is in the early stages of discovery. We intend to vigorously defend against the claims asserted against us.

Available Information

We are subject to the informational requirements of the Exchange Act, which requires us to file our Annual Reports on Form 10-KSB, Quarterly Reports on Form 10-QSB, Current Reports on Form 8-K, amendments to such reports and other information with the Securities and Exchange Commission (“SEC”). This information is available at the SEC’s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Information on the operation of the Public Reference Room can be obtained by calling the SEC at 1-800-SEC-0330. Because we file documents electronically with the SEC, you may also obtain this information by visiting the SEC’s website at www.sec.gov. Our web site is located at www.adnas.com.

MANAGEMENT

DIRECTORS AND EXECUTIVE OFFICERS

The following is a list of our directors, executive officers and significant employees.

Name	Age	Title	Board of Directors
James A. Hayward	55	Chief Executive Officer, President, and Chairman of the Board	Director
Kurt Jensen	51	Chief Financial Officer	
Ming-Hwa Benjamin Liang	45	Secretary and Strategic Technology Development Officer	
Sanford R. Simon	65		Director
Yacov Shamash	58		Director

Directors are elected to serve until the next annual meeting of stockholders and until their successors are elected and qualified. Currently there are three seats on our board of directors.

Currently, the members of our board of directors do not receive any fees for being a director or attending meetings. Our directors are reimbursed for out-of-pocket expenses relating to attendance at meetings. Officers are elected by the Board of Directors and serve until their successors are appointed by the Board of Directors. Biographical resumes of each officer and director are set forth below.

James A. Hayward - Chief Executive Officer

Dr. James A. Hayward has been our Chief Executive Officer since March 17, 2006, prior to which he was acting Chief Executive Officer since October 5, 2005. Since January 2006, Dr. Hayward has served as the part-time President of Dr. Suwelack Skin and Healthcare, a private company that manufactures biological matrices for wound care and skin care in Billerbeck, Germany. Since June 2004, Dr. Hayward has been the Chairman of Evotope Biosciences, Inc., a drug development company based in Stony Brook, New York. Since 2001, Dr. Hayward has been a director of Q-RNA, Inc., a biotech company based in New York, New York. Since 2000, Dr. Hayward has been a General Partner of Double D Venture Fund, a venture capital firm based in New York, New York. Between 1990 and July 2004, Dr. Hayward was the Chairman, President and CEO of The Collaborative Group, Ltd., a provider of products and services to the biotechnology, pharmaceutical and consumer-product industries based in Stony Brook, New York. Dr. Hayward received his bachelor's degree in Biology and Chemistry from the State University of New York at Oneonta in 1976, his Ph.D. in Molecular Biology from the State University of New York at Stony Brook in 1983, and an honorary Doctor of Science from Stony Brook in 2000. Dr. Hayward has served on the boards of the Council on Biotechnology, the Long Island Association, the Stony Brook Foundation, The Research Foundation of State University of New York Board of Directors, the New York Biotechnology Association, the Long Island Life Sciences Initiative and the Ward Melville Heritage Organization.

Kurt Jensen - Chief Financial Officer

Kurt H. Jensen, M.Sc.(Cand. Merc.) has been our Chief Financial Officer since December 21, 2007, taking over the position from Dr. Hayward. Mr. Jensen has been our Controller since February 2006. Prior to that date, for a period of more than 23 years, he was employed by Point of Woods Homes, Inc. Mr. Jensen was awarded a M.Sc. in Economics and Business Administration from the Copenhagen Business School in 1983.

Ming-Hwa Benjamin Liang - Secretary and Strategic Technology Development Officer

Ming-Hwa Benjamin Liang has been our Secretary and Strategic Technology Development Officer since October 2005. Between May 1999 and September 2005, Mr. Liang has been the director of research and development at Biowell Technology Inc. Mr. Liang received a B.S. in Bio-Agriculture from Colorado State University in 1989, a M.S. in Horticulture from the University of Missouri at Columbia in 1991, his Ph.D. in Plant Science from the University of Missouri at Columbia in 1997 and his LL.M. in Intellectual Property Law from Shih Hsin University, Taiwan in 2004.

Yacov Shamash - Director

Dr. Yacov Shamash has been a member of the board of directors since March 17, 2006. Dr. Shamash is Vice President of Economic Development at the State University of New York at Stony Brook. Since 1992, he has been the Dean of Engineering and Applied Sciences and the Harriman School for Management and Policy at the University, and Founder of the New York State Center for Excellence in Wireless Technologies at the University. Dr. Shamash developed and directed the NSF Industry/University Cooperative Research Center for the Design of Analog/Digital Integrated Circuits from 1989 to 1992 and also served as Chairman of the Electrical and Computer Engineering Department at Washington State University from 1985 until 1992. Dr. Shamash also serves on the Board of Directors of Keytronic Corp., Netsmart Technologies, Inc., American Medical Alert Corp., and Softheon Corp.

Sanford R. Simon - Director

Dr. Sanford R. Simon has been a member of the board of directors since March 17, 2006. Dr. Simon has been a Professor of Biochemistry, Cell Biology and Pathology at Stony Brook since 1997. He joined the faculty at Stony Brook as an Assistant Professor in 1969 and was promoted to Associate Professor with tenure in 1975. Dr. Simon was a member of the Board of Directors of The Collaborative Group from 1995 to 2004. From 1967 to 1969 Dr. Simon was a Guest Investigator at Rockefeller University. Dr. Simon received a B.A. in Zoology and Chemistry from Columbia University in 1963, a Ph.D. in Biochemistry from Rockefeller University in 1967, and studied as a postdoctoral fellow with Nobel Prize winner Max Perutz in Cambridge, England.

EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by us during the fiscal years ended September 30, 2007 and 2006 to our Chief Executive Officer and the two highest paid employees whose total compensation exceeded \$100,000 during the fiscal year ended September 30, 2007. These key employees are referred to herein as the “named executive officers.”

Name and Principal Position	Fiscal Year	Annual Salary (\$)	Total (\$)
James A. Hayward (1) Chief Executive Officer, President, and Chairman of the Board	2007	0	0
	2006	0	0
Kurt Jensen (2) Chief Financial Officer	2007	108,077	108,077
	2006	59,295	59,295
Ben Liang Secretary and Strategic Technology Development Officer	2007	103,027	103,027
	2006	85,756	85,756

(1) James A. Hayward was appointed as Chief Executive Officer on October 5, 2005.

(2) Kurt Jensen was appointed Chief Financial Officer on December 21, 2007.

The Board of Directors, in their discretion, may award stock and stock options to key executives for achieving financing or expenditure guidelines, meeting our business plan objectives, as part of their compensation for employment or for retention purposes.

Compensation Discussion and Analysis

Background and Compensation Philosophy

We currently have three named executive officers, Dr. James A. Hayward, a director, our Chief Executive Officer, President and Chairman of the Board of Directors, Kurt Jensen, who was our Controller during fiscal 2007 and was appointed our Chief Financial Officer on December 21, 2007, and Ben Liang, our Secretary and Chief Technology Officer. Dr. Hayward has elected not to receive cash compensation until there is an improvement in the Company’s financial and operating performance and prospects.

Our Board of Directors has not adopted or established a formal policy or procedure for determining the amount of compensation paid to our executive officers. No pre-established, objective performance goals or metrics have been used by the Board of Directors in determining the compensation of our executive officers. Dr. Hayward is involved in the Board's deliberations regarding executive compensation and provides recommendations with respect to his and the compensation of Mr. Jensen and Dr. Liang based on, among other things, the Company’s financial and operating performance and prospects and the contributions made by Mr. Jensen and Dr. Liang to the success of the Company.

Employment Agreements

We have no employment agreements with our named executive officers.

Bonuses and Deferred Compensation

In fiscal 2007, we had no established bonus, deferred compensation or retirement plan, although we may adopt such compensation arrangements in the future. No bonuses were paid to our named executive officers related to fiscal 2007.

Payment of Post-Termination Compensation

We do not have change-in-control agreements with any of our executive officers, and we are not obligated to pay severance or other enhanced benefits to executive officers upon termination of their employment.

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Equity Compensation Plan Information

2002 Professional/Employee/Consultant Compensation Plan. In November of 2002, we created a special compensation plan to pay the founders, consultants and professionals that had been contributing valuable services to us during the previous nine months. This plan, under which 2,000,000 shares of our common stock were reserved for issuance, is called the Professional/Employee/Consultant Compensation Plan (the "Compensation Plan"). Share and option issuances from the Compensation Plan were to be staggered over the following six to eight months, and consultants that were to continue providing services thereafter either became employees or received renewed contracts from us in July of 2003, which contracts contained a more traditional cash compensation component. Each qualified and eligible recipient of shares and/or options under the Compensation Plan received securities in lieu of cash payment for services. Each recipient agreed, in his or her respective consulting contract with us, to sell a limited number of shares monthly. In December of 2004, we adjusted the exercise price of options under the Compensation Plan to \$0.60 per share. As of September 30, 2007, a total of 1,440,000 shares have been issued from, and options to purchase 560,000 shares have been issued under the Compensation Plan, and options to purchase 264,000 shares have been exercised as of that date.

2005 Incentive Stock Plan. On January 26, 2005, the Board of Directors, and on February 15, 2005, the holders of a majority of the outstanding common stock of the Company approved the Company's 2005 Incentive Stock Plan and authorized the issuance of 16,000,000 shares of common stock as stock awards and stock options thereunder. On May 16, 2007, at the annual meeting of stockholders, the holders of a majority of the outstanding common stock of the Company approved an increase in the number of shares subject to the 2005 Incentive Stock Plan to 20,000,000 shares of common stock. The 2005 Incentive Stock Plan is designed to retain directors, executives, and selected employees and consultants by rewarding them for making contributions to our success with an award of shares of our common stock. As of September 30, 2007, a total of 8,550,000 shares have been issued and options to purchase 5,660,000 shares have been granted under the 2005 Incentive Stock Plan.

The Board of Directors, in their discretion, may award stock and stock options to executive officers and key employees as part of their compensation for employment or for retention purposes.

Plan Category	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
2005 Incentive Stock Plan approved on January 26, 2005	5,660,000	\$ 0.47	5,790,000
Total	5,660,000	\$ 0.47	5,790,000

Fiscal 2007 Director Compensation

Our directors received no compensation for their services as such in fiscal 2007.

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CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

During the year ended September 30, 2007, we issued and sold an aggregate principal amount of \$850,000 in secured convertible promissory notes bearing interest at 10% per annum and warrants to purchase an aggregate of 1,700,000 shares of our common stock to James A. Hayward, our President, Chairman, Chief Executive Officer and a director .

On April 23, 2007, we issued and sold to James A. Hayward a \$100,000 principal amount secured promissory note (“April Note”) bearing interest at a rate of 10% per annum and a warrant (“April Warrant”) to purchase 200,000 shares of our common stock. On June 30, 2007, we issued and sold to James A. Hayward a \$250,000 principal amount secured promissory note (“June Note”) bearing interest at a rate of 10% per annum and a warrant (“June Warrant”) to purchase 500,000 shares of our common stock. On July 30, 2007, we issued and sold to James A. Hayward a \$200,000 principal amount secured promissory note (“July Note”) bearing interest at a rate of 10% per annum and a warrant (“July Warrant”) to purchase 400,000 shares of our common stock. On September 28, 2007, we issued and sold to James A. Hayward a \$300,000 principal amount secured promissory note (“September Note”) bearing interest at a rate of 10% per annum and a warrant (“September Warrant”) to purchase 600,000 shares of our common stock.

The April Note and accrued but unpaid interest thereon converted on April 22, 2008 at a conversion price of \$ 0.15 into 733,334 shares of our common stock. The April Warrant is exercisable for a four-year period commencing on April 23, 2008, and expiring on April 22, 2012, at a price of \$0.50 per share. The April Warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) April 22, 2010, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

The June Note and accrued but unpaid interest thereon converted on June 30, 2008 at a conversion price of \$0.087732076 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance into 3,134,543 shares of our common stock . The June Warrant is exercisable for a four-year period commencing on June 30, 2008, and expiring on June 29, 2012, at a price of \$0.50 per share. The June Warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) June 29, 2010, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

The July Note and accrued but unpaid interest thereon is convertible into shares of our common stock at a price of \$0.50 per share by the holder at any time from July 30, 2007, through July 29, 2008, and shall automatically convert on July 30, 2008 at a conversion price of \$0.102568072 per share, which is equal to a 20% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance. At any time prior to conversion, we have the right to prepay the July Note and accrued but unpaid interest thereon upon 3 days prior written notice (during which period the holder can elect to convert the note). The July Warrant is exercisable for a four-year period commencing on July 30, 2008, and expiring on July 29, 2012, at a price of \$0.50 per share. The July Warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) July 29, 2010, and (ii) the date our common stock has traded on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

The September Note and accrued but unpaid interest thereon is convertible into shares of our common stock at a price of \$0.50 per share by the holder at any time from September 28, 2007, through September 27, 2008, and shall automatically convert on September 28, 2008 at a conversion price of \$0.066429851 per share, which is equal to a 30% discount to the average volume, weighted average price of our common stock for the ten trading days prior to issuance. At any time prior to conversion, we have the right to prepay the September Note and accrued but unpaid interest thereon upon 3 days prior written notice (during which period the holder can elect to convert the note). The September Warrant is exercisable for a four-year period commencing on September 28, 2008, and expiring on September 27, 2012, at a price of \$0.50 per share. The September Warrant may be redeemed at our option at a redemption price of \$0.01 upon the earlier of (i) September 27, 2010, and (ii) the date our common stock has traded

on The Over the Counter Bulletin Board at or above \$1.00 per share for 20 consecutive trading days.

Until the principal and interest under the July Note and September Note are paid in full, or converted into our common stock, each note will be secured by a security interest in all of our assets. This security interest is pari passu with the security interest granted to the holders of secured convertible promissory notes issued in our private placement offerings.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information regarding the shares of our common stock beneficially owned as of July 18, 2008, (i) by each person who is known to us to beneficially own more than 5% of the outstanding common stock, (ii) by each of the executive officers named in the table under "Executive Compensation" and by each of our directors, and (iii) by all officers and directors as a group.

NAME AND ADDRESS OF BENEFICIAL OWNER	TITLE OF CLASS	NUMBER OF SHARES OWNED (1)	PERCENTAGE OF CLASS (2)
James A. Hayward 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790	Common Stock	7,759,400 (3)	3.9%
Yacov Shamash 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790	Common Stock	250,000 (4)	*
Kurt Jensen 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790	Common Stock	580,000 (5)	*
Ben Liang 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790	Common Stock	478,650 (6)	*
Sanford R. Simon 25 Health Sciences Drive, Suite 113 Stony Brook, New York 11790	Common Stock	250,000 (4)	*
All directors and officers as a group (5 persons)	Common Stock	9,318,050 (7)	4.6%

* indicates less than one percent

- (1) Beneficial ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to the shares shown. Except as indicated by footnote and subject to community property laws where applicable, to our knowledge, the stockholders named in the table have sole voting and investment power with respect to all common stock shares shown as beneficially owned by them. A person is deemed to be the beneficial owner of securities that can be acquired by such person within 60 days upon the exercise of options, warrants or convertible securities (in any case, the "Currently Exercisable Options"). Each beneficial owner's percentage ownership is determined by assuming that the Currently Exercisable Options that are held by such person (but not those held by any other person) have been exercised and converted.
- (2) Based upon 197,104,480 shares of common stock outstanding as of July 18, 2008 .
- (3) Includes 7,500,000 shares underlying currently exercisable warrants.
- (4) Includes 250,000 shares underlying a currently exercisable warrant.
- (5) Includes 40,000 shares held by a spouse and 500,000 immediately exercisable options.
- (6) Includes 325,392 shares held by spouse.
- (7) Includes 8,000,000 shares underlying currently exercisable options and warrants.

DESCRIPTION OF SECURITIES

Our current authorized capital stock consists of 410,000,000 shares of common stock, par value \$0.001 per share, of which 197,104,480 shares were issued and outstanding as of July 18, 2008, and 10,000,000 shares of preferred stock, par value \$0.001 per share, of which 60,000 shares were issued and outstanding as of July 18, 2008.

COMMON STOCK

The holders of common stock are entitled to one vote for each share held of record on all matters to be voted on by the stockholders. The holders of common stock are entitled to receive dividends ratably when, as and if declared by the board of directors out of funds legally available therefore. In the event of our liquidation, dissolution or winding up, the holders of common stock are entitled to share equally and ratably in all assets remaining available for distribution after payment of liabilities and after provision is made for each class of stock, if any, having preference over the common stock. Holders of common stock have no preemptive, subscription, redemption or conversion rights. The outstanding shares of common stock are validly issued, fully paid and nonassessable.

We have engaged American Stock Transfer & Trust Company, located in Brooklyn, New York, as independent transfer agent or registrar.

PREFERRED STOCK

Under our Restated Certificate of Incorporation, as amended, the Board of Directors is authorized, subject to any limitations prescribed by the laws of the State of Nevada, but without any further action by our stockholders, to provide for the issuance of up to 10,000,000 shares of preferred stock in one or more series, to establish from time to time the number of shares to be included in such series, to fix the designations, powers, preferences and rights of the shares of each such series and any qualifications, limitations or restrictions thereof, and to increase or decrease the number of shares of any such series (but not below the number of shares of such series then outstanding) without any further vote or action by the stockholders. The board of directors may authorize and issue preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock.

To date, the Board has designated a Founders' Series of Convertible Preferred Stock, which, in six months from the date of issuance, shall be convertible at the option of the holder and upon our reaching certain financial objectives, into shares of our restricted Common Stock. Each share, when eligible, is convertible into 25 fully paid and non-assessable shares of our Common Stock, subject to a leak out agreement that extends the Rule 144 period to two years. Holders will be permitted to sell, after a one year holding period through a three year holding period, 1% of the issued and outstanding shares of our common stock every 90 days. This series has been authorized by the Board of Directors. On or about February 1, 2005, the Founders' Series of Preferred Stock was converted into 1,500,000 shares of our common stock.

OPTIONS

There are currently options outstanding that have been issued to our officers, directors and employees to purchase 5,660,000 shares of our common stock pursuant to our 2005 Incentive Stock Plan. In addition, in connection with an amendment to the 2005 Incentive Stock Plan adopted by the Board of Directors on June 17, 2008, which will increase the total number of shares of common stock issuable pursuant to the 2005 Incentive Stock Plan from a total of 20,000,000 shares to a total of 100,000,000 shares, options to purchase a total of 37,750,000 shares were granted under the 2005 Incentive Stock Plan to certain key employees and non-employee directors. The effectiveness of the share increase amendment and the exercise of these stock options by the key employees are subject to approval by stockholders at our 2008 annual meeting of stockholders.

WARRANTS

In connection with a private placement of convertible promissory notes in January and February of 2005, we issued warrants to purchase a total up to 14,742,000 shares of our common stock. The warrants are exercisable until five years from the date of issuance at a purchase price of \$0.75 per share. The registration statement of which this prospectus forms a part registers the resale of the common stock issuable upon exercise of these warrants.

In connection with a private placement of a promissory note in November, 2005, we have issued warrants to purchase a total of up to 5,500,000 shares of our common stock exercisable at an exercise price of \$0.50 per share at any time until five years from their date of issuance to certain persons designated by the noteholder. Each of these warrants provide for customary adjustments to the exercise price of and shares subject to the warrant, including upon a subdivision or combination of our common stock, but no such adjustment will be made to either the exercise price or the number of shares subject to these warrants in the event that we effect a reverse-split, or combination, of our common stock within three years from their date of issuance.

In connection with a private placement of secured convertible notes that was completed on March 8, 2006, we have issued warrants to purchase a total of up to 3,000,000 shares of our common stock. The warrants are exercisable until five years from the date of issuance at a purchase price of \$0.50 per share.

In connection with the closing of first and second tranches of the Offshore Offering described under “Convertible Securities” below, on May 2, 2006, and June 15, 2006, respectively, we issued warrants to purchase a total of 7,900,000 shares of our common stock, exercisable five years from the date of issuance at a purchase price of \$0.50 per share.

On September 1, 2006, we issued warrants to purchase an aggregate of 18,900,000 shares of our common stock exercisable for a period of five years commencing on September 1, 2006, at a price of \$0.09 per share, the closing price of our common stock on the date of issuance. Each such warrant provides its holder unlimited piggyback registration rights with respect to any registration statement we file. These warrants include a warrant to purchase an aggregate of 6,400,000 shares of our common stock that was issued to James A. Hayward, our President, Chairman, Chief Executive Officer and a director, and a warrant to purchase 6,000,000 shares of our common stock that was issued to Timpix International Limited, a British Virgin Islands corporation, and warrants to purchase an aggregate of 6,000,000 shares of our common stock that were issued to entities affiliated with Arjent, our placement agent. The Company also issued a warrant to purchase 250,000 shares of our common stock to each of Sanford R. Simon and Yacov Shamash, each of whom is one of our directors. Each of these warrants is exercisable for a period commencing on March 17, 2007, and expiring on August 31, 2011, at a price of \$0.09 per share, the closing price of our common stock on the date of issuance of the warrants, and provide its holder unlimited piggyback registration rights with respect to any registration statement filed by the Company. On February 10, 2008 one of the warrants to purchase an aggregate of 2,500,000 shares of our common stock was exercised using the cashless provision to purchase 1,375,000 shares.

In addition, we also have outstanding (i) warrants to purchase 105,464 shares of common stock at \$0.10 per share, (ii) warrants to purchase 5,000 shares of common stock at \$0.20 per share, (iii) warrants to purchase 7,550,000 shares of common stock at \$0.50 per share, (iv) warrants to purchase 8,226,000 shares of common stock at \$0.60 per share, (v) warrants to purchase 200,000 shares of common stock at \$0.70 per share, and (vi) warrants to purchase 55,000 shares of common stock at \$0.75 per share.

CONVERTIBLE SECURITIES

We sold \$1.465 million in convertible promissory notes to 13 investors in December 2004. Each promissory note was automatically convertible into shares of our common stock, at a price of \$0.50 per share, upon the closing of a private placement for \$1 million or more. On January 28, 2005, we closed upon a private placement transaction in excess of \$1 million and the promissory notes converted into an aggregate of 2,930,000 shares of common stock. The registration statement of which this prospectus forms a part registers the resale of the common stock issued upon conversion of these promissory notes.

We conducted a private placement in January and February 2005 in which we sold \$7.371 million of secured convertible promissory notes bearing interest at 10% per annum to 61 investors. These promissory notes automatically converted into shares of our common stock, at a price of \$0.50 per share, upon the filing of this registration statement. The registration statement of which this prospectus forms a part registers the resale of the common stock issued upon conversion of these promissory notes.

We completed a private placement on March 8, 2006, in which we sold an aggregate of 30 units of our securities, (i) a \$50,000 principal amount secured convertible promissory note bearing interest at 10% per annum, and (ii) a warrant to purchase 100,000 shares of our common stock, for aggregate gross proceeds of \$1.5 million. The notes and interest accrued thereon are convertible into shares of our common stock at a price of \$0.50 per share by the holder anytime from issuance through the first anniversary of issuance of the notes and automatically convert on the maturity date at a 20% discount to the average bid price for our common stock for the ten trading days prior to conversion.

In March, 2006 we commenced the Offshore Offering of up to 140 units, at a price of \$50,000 per unit, for a maximum offering of \$7 million for sale to “accredited investors” who are not “U.S. persons.” These units consist of (i) a \$50,000 principal amount secured convertible promissory note, and (ii) a warrant to purchase 100,000 shares of our common stock at a price of \$0.50 per share. The notes and accrued but unpaid interest thereon are convertible into shares of our common stock at a price of \$0.50 per share by the holder of the notes at any time from their date of issuance through the first anniversary of such date and shall automatically convert on such anniversary at a 20% discount to the average of the closing bid prices of our common stock on trading days during the 12 months prior to such conversion. On May 2, 2006, we closed on the first tranche of the Offshore Offering in which we sold 20 units for aggregate gross proceeds of \$1,000,000. We paid Arjent Limited \$375,000 in commissions, fees and expenses from these gross proceeds. On June 15, 2006, we completed the second tranche of the Offshore Offering in which we sold 59 units for aggregate gross proceeds of \$2,950,000. We paid Arjent Limited \$442,500 in commissions, fees and expenses from these gross proceeds.

REGISTRATION RIGHTS

Pursuant to the terms of a registration rights agreement with respect to common stock underlying convertible notes and warrants we issued in private placements in November and December, 2003, December, 2004, and January and February, 2005, if we did not have a registration statement registering the shares underlying these convertible notes and warrants declared effective on or before June 15, 2005, we are obligated to pay liquidated damages in the amount of 3.5% per month of the face amount of the notes, which equals \$367,885, until the registration statement is declared effective. At our option, these liquidated damages can be paid in cash or unregistered shares of our common stock. To date we have decided to pay certain of these liquidated damages in common stock, although any future payments of liquidated damages may, at our option, be made in cash. If we decide to pay such liquidated damages in cash, we would be required to use our limited working capital and potentially raise additional funds. If we decide to pay the liquidated damages in shares of common stock, the number of shares issued would depend on our stock price at the time that payment is due. Based on the closing market prices of \$0.66, \$0.58, \$0.70, \$0.49, \$0.32 and \$0.20 for our common stock on July 15, 2005, August 15, 2005, September 15, 2005, October 17, 2005, November 15, 2005 and December 15, 2005, respectively, we issued a total of 3,807,375 shares of common stock in liquidated damages from August, 2005 to January, 2006 to persons who invested in the January and February, 2005 private placements. The issuance of shares upon any payment by us of further liquidated damages will have the effect of further diluting the proportionate equity interest and voting power of holders of our common stock, including investors in this offering.

We paid liquidated damages in the form of common stock only for the period from June 15, 2005 to December 15, 2005, and only to persons who invested in the January and February, 2005 private placements. We believe that we have no enforceable obligation to pay liquidated damages to holders of any shares we agreed to register under the registration rights agreement for periods after the first anniversary of the date of issuance of such shares, since they were eligible for resale under Rule 144 of the Securities Act during such periods, and such liquidated damages are grossly inconsistent with actual damages to such persons. Nonetheless, as of March 31, 2008 we have accrued approximately \$11.8 million in penalties representing further liquidated damages associated with our failure to have the registration statement declared effective by the deadline, and have included this amount in accounts payable and accrued expenses.

In June 2005, we issued to Trilogy Capital Partners, Inc. a warrant to purchase 7,500,000 shares of our common stock at a price of \$0.55 per share and Joff Pollon ("Pollon") a warrant to purchase 1,500,000 shares of our common stock at a price of \$0.55 per share. In connection with the issuance of those warrants we also agreed to file a registration statement with the SEC with respect to the shares underlying such warrants no later than the earlier to occur of: (i) 15 days following the effectiveness of this Registration Statement, or (ii) September 15, 2005. As of the date hereof we have not filed a registration statement with respect to the shares of our common stock underlying the warrants we issued to Trilogy and Pollon.

On November 3, 2005, we issued and sold a promissory note in the principal amount of \$550,000 to Allied International Fund, Inc. ("Allied"). Allied in turn financed a portion of its making of this loan by borrowing \$450,000 from certain persons, including \$100,000 from James A. Hayward, our President, Chairman, Chief Executive Officer and a director. The terms of the promissory note provided that we issue upon the funding of the note warrants to purchase 5,000,000 shares of our common stock at an exercise price of \$0.50 per share to certain persons designated by Allied. On November 9, 2005, we issued nine warrants to Allied and eight other persons to purchase an aggregate of 5,500,000 shares of our common stock at an exercise price of \$0.50 per share. These warrants included a warrant to purchase 1,100,000 shares that was issued to James A. Hayward, our President, Chairman, Chief Executive Officer and a director. Each such warrant provides its holder the broadest possible unlimited piggyback registration rights with respect to any registration statement filed by the Company.

In connection with the private placement that we completed on March 8, 2006, we have agreed to file a registration statement to effect the registration of 100% of our shares of common stock issuable upon conversion of the notes and exercise of the warrants within 30 days of the registration statement of which this prospectus is a part being declared effective by the SEC. We have agreed to use our reasonable best efforts to cause the registration statement to be declared effective no later than 180 days after the filing date. If we fail to file a registration statement with the SEC on or before the time frame described, the holders will be entitled to liquidated damages from Applied DNA Operations Management, Inc. in an amount equal to 2% per month for each month that we are delinquent in filing the registration statement.

As part of the Offshore Offering we have offered to enter into, and with respect to the closing of the first and second tranches of the Offshore Offering on May 2, 2006 and June 15, 2006 have entered into, a registration rights agreement with purchasers of notes and warrants in that offering that provides that we will prepare and file a registration statement with the SEC covering the common stock underlying the notes and the warrants sold in the Offshore Offering within 30 days of the registration statement of which this prospectus is a part being declared effective by the SEC, and use our reasonable best efforts to have the registration statement declared effective by the SEC by no later than 180 days after filing. These obligations to file and have the registration statement declared effective would terminate as to any holder of the units upon the earlier of the date: (a) when all of such holder's common stock underlying the notes and the warrants may be sold during a single three month period under Rule 144 of the Securities Act; and (b) when all of such holder's common stock underlying the notes and the warrants may be transferred under Rule 144(k) of the Securities Act, unless such holder later becomes our affiliate (as defined in Rule 144 of the Securities Act) in which case our obligation shall be revived until such holder's rights otherwise terminate under clause (a) above.

On September 1, 2006, we issued warrants to purchase an aggregate of 18,900,000 shares of the our common stock , including to James A. Hayward, our President, Chairman, Chief Executive Officer and a director , Timpix International Limited, a British Virgin Islands corporation , entities affiliated with Arjent, our placement agent , and Sanford R. Simon and Yacov Shamash, each of whom is one of our directors. Each of these warrants provides its holders unlimited piggyback registration rights with respect to any registration statement filed by the Company in the future.

INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our Articles of Incorporation, as amended, provide to the fullest extent permitted by Nevada law, our directors or officers shall not be personally liable to us or our shareholders for damages for breach of such director's or officer's fiduciary duty. The effect of this provision of our Articles of Incorporation, as amended, is to eliminate our rights and our shareholders (through shareholders' derivative suits on behalf of our company) to recover damages against a director or officer for breach of the fiduciary duty of care as a director or officer (including breaches resulting from negligent or grossly negligent behavior), except under certain situations defined by statute. We believe that the indemnification provisions in our Articles of Incorporation, as amended, are necessary to attract and retain qualified persons as directors and officers. In addition, we have entered into indemnification agreements with our officers and directors.

Insofar as indemnification for liabilities arising under the Securities Act, may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the SEC, such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable.

PLAN OF DISTRIBUTION

The selling stockholders and any of their respective pledgees, donees, assignees and other successors-in-interest may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits the purchaser;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately-negotiated transactions;
- short sales that are not violations of the laws and regulations of any state or the United States;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- through the writing of options on the shares;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus. The selling stockholders shall have the sole and absolute discretion not to accept any purchase offer or make any sale of shares if they deem the purchase price to be unsatisfactory at any particular time.

The selling stockholders may also engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades.

The selling stockholders or their respective pledgees, donees, transferees or other successors in interest, may also sell the shares directly to market makers acting as principals and/or broker-dealers acting as agents for themselves or their customers. Such broker-dealers may receive compensation in the form of discounts, concessions or commissions from the selling stockholders and/or the purchasers of shares for whom such broker-dealers may act as agents or to whom they sell as principal or both, which compensation as to a particular broker-dealer might be in excess of customary commissions. Market makers and block purchasers purchasing the shares will do so for their own account and at their own risk. It is possible that a selling stockholder will attempt to sell shares of common stock in block transactions to market makers or other purchasers at a price per share which may be below the then market price. The selling stockholders cannot assure that all or any of the shares offered in this prospectus will be issued to, or sold by, the selling stockholders. VC Arjent, a registered broker-dealer; Michael Morris, Susan Diamond and Ronald Heineman, all of whom are employees of VC Arjent, are an “underwriter” as that term is defined under the Securities Act, the Securities Exchange Act of 1934, as amended, and the rules and regulations of such acts. Further, the other selling stockholders and any brokers, dealers or agents, upon effecting the sale of any of the shares offered in this prospectus, may be deemed to be “underwriters.” In such event, any commissions received by such broker-dealers or agents and any profit on the resale of the shares purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares, including fees and disbursements of counsel to the selling stockholders, but excluding brokerage commissions or underwriter discounts.

The selling stockholders, alternatively, may sell all or any part of the shares offered in this prospectus through an underwriter. No selling stockholder has entered into any agreement with a prospective underwriter and there is no assurance that any such agreement will be entered into.

The selling stockholders may pledge their shares to their brokers under the margin provisions of customer agreements. If a selling stockholder defaults on a margin loan, the broker may, from time to time, offer and sell the pledged shares. The selling stockholders and any other persons participating in the sale or distribution of the shares will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations under such act, including, without limitation, Regulation M. These provisions may restrict certain activities of, and limit the timing of purchases and sales of any of the shares by, the selling stockholders or any other such person. In the event that the selling stockholders are deemed affiliated purchasers or distribution participants within the meaning of Regulation M, then the selling stockholders will not be permitted to engage in short sales of common stock. Furthermore, under Regulation M, persons engaged in a distribution of securities are prohibited from simultaneously engaging in market making and certain other activities with respect to such securities for a specified period of time prior to the commencement of such distributions, subject to specified exceptions or exemptions. In regards to short sells, the selling stockholder can only cover its short position with the securities they receive from us upon conversion. In addition, if such short sale is deemed to be a stabilizing activity, then the selling stockholder will not be permitted to engage in a short sale of our common stock. All of these limitations may affect the marketability of the shares.

We have agreed to indemnify the selling stockholders, or their transferees or assignees, against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the selling stockholders or their respective pledgees, donees, transferees or other successors in interest, may be required to make in respect of such liabilities.

If the selling stockholders notify us that they have a material arrangement with a broker-dealer for the resale of the common stock, then we would be required to amend the registration statement of which this prospectus is a part, and file a prospectus supplement to describe the agreements between the selling stockholders and the broker-dealer.

PENNY STOCK

The SEC has adopted Rule 15g-9 which establishes the definition of a “penny stock,” for the purposes relevant to us, as any equity security that has a market price of less than \$5.00 per share or with an exercise price of less than \$5.00 per share, subject to certain exceptions. For any transaction involving a penny stock, unless exempt, the rules require:

- that a broker or dealer approve a person’s account for transactions in penny stocks; and
- the broker or dealer receive from the investor a written agreement to the transaction, setting forth the identity and quantity of the penny stock to be purchased.

In order to approve a person’s account for transactions in penny stocks, the broker or dealer must

- obtain financial information and investment experience objectives of the person; and
- make a reasonable determination that the transactions in penny stocks are suitable for that person and the person has sufficient knowledge and experience in financial matters to be capable of evaluating the risks of transactions in penny stocks.

The broker or dealer must also deliver, prior to any transaction in a penny stock, a disclosure schedule prescribed by the SEC relating to the penny stock market, which, in highlight form:

- sets forth the basis on which the broker or dealer made the suitability determination; and
- that the broker or dealer received a signed, written agreement from the investor prior to the transaction.

Disclosure also has to be made about the risks of investing in penny stocks in both public offerings and in secondary trading and about the commissions payable to both the broker-dealer and the registered representative, current quotations for the securities and the rights and remedies available to an investor in cases of fraud in penny stock transactions. Finally, monthly statements have to be sent disclosing recent price information for the penny stock held in the account and information on the limited market in penny stocks.

SELLING STOCKHOLDERS

The table below sets forth information concerning the resale of the shares of common stock by the selling stockholder. We will not receive any proceeds from the resale of the common stock by the selling stockholder. We will receive proceeds from the exercise of the warrants. Assuming all the shares registered below are sold by the selling stockholders, none of the selling stockholders will continue to own any shares of our common stock.

The following table also sets forth the name of each person who is offering the resale of shares of common stock by this prospectus, the number of shares of common stock beneficially owned by each person, the number of shares of common stock that may be sold in this offering and the number of shares of common stock each person will own after the offering, assuming they sell all of the shares offered.

For the table set forth below, the following persons have investment and voting control over the shares owned by the respective entities:

Entity	Control Person
AS Capital Partners	Michael Coughlan
Avonwoods Ltd.	C. Rand
Basso Private Opportunity Holding Fund Ltd.	Howard I. Fischer
Basso Multi-Strategy Holding Fund Ltd.	Howard I. Fischer
F Berdon Comp.	Frederick Berdon
Beston Worldwide Ltd	Michael Ben-Jacob
Blumfield Investments	M. Kraus
Clear Mountain Holdings	Raul Garrido Garibaldo
Cordilliera Funds	Stephen J. Carter
Double U Master Fund	David Sims
Equilibrium Solutions	Johnny Vage
Gemini Master Funds	Steve Winters
GSSF Master Fund	E.B. Lyon IV
Guerilla IRA L.P.	Leigh Curry
ID Federman Holdings LTD	Iris Federman
KA Steel Chemical	Kenneth Steel Jr.
Lone Star Equity	Mark A. Bogina
Melton Management	Yehuda Breitkops
Odin Partners LP	John A. Gibbons
Omega Capital Small Cap	Abraham Sylverin
P.R. Diamonds	Pinkus Reisz
Provident Master Fund	Steven Winters
Rock Capital Partners, LLC	Howard Chalfin
Rabbi Scheinerman KBY LLC	Rabbi Scheinerman
Vestal Venture Capital	Allan Lyons
Whalehaven	Evan Schemenauer
Wolfson Trust	Franchesca Wolfson

Name of Selling Security Holder	Beneficial Ownership Prior to Offering (1)			Beneficial Ownership After Offering (1)		
	Shares	Percentage (2)	Offered	Shares	Percentage (2)	
Adrian Davidescu	451,639	*	400,000(11)	51,639	*	
Alex Verjovski	100,000	*	100,000(21)	-	*	
Alexander J. Lapatka	57,500	*	50,000(5)	7,500	*	
Alexander Stolin	270,984	*	240,000(19)	30,984	*	
Angela Chen Sabella	230,000	*	120,000(19)	110,000	*	
Arthur Priver	289,948	*	250,379(14)	39,569	*	
AS Capital Partners	51,250	*	50,000(5)	1,250	*	
Avindam Rapaport	112,909	*	100,000(5)	12,909	*	
Avonswood Ltd.	1,303,275	*	800,000(20)	503,275	*	
Basso Multi-Strategy Holding Fund Ltd.	1,769,305	*	1,463,350(24)	305,955	*	
Basso Private Opportunity Holding Fund Ltd.	442,768	*	361,437(23)	81,331	*	
Bestin Worldwide Ltd	57,500	*	50,000(5)	7,500	*	
Blumfield Investments	200,000	*	200,000(11)	-	*	
Chaim Stern	1,954,400	1.02%	1,500,000(27)	454,400	*	
Clear Mountain Holdings	338,728	*	300,000(12)	38,728	*	
Cordilliera Funds	500,000	*	500,000(25)	-	*	
David and Jeanette Defoto	225,819	*	200,000(21)	25,819	*	
David Cohen	225,819	*	200,000(21)	25,819	*	
Double U Master Fund	400,000	*	400,000(20)	-	*	
Doug Bowen	155,417	*	138,758(6)	16,659	*	
Edward M Rotter	2,113,102	1.10%	1,700,000(16)	413,102	*	
Eileen Patterson	28,750	*	25,000(10)	3,750	*	
Equilibrium Solutions	112,909	*	100,000(5)	12,909	*	
Eric Okamoto	523,901	*	464,000(13)	59,901	*	
Eric Yaoz	120,000	*	120,000(19)	-	*	
Eser Tuman	201,515	*	201,515(5)	-	*	
Eugene Gross	200,000	*	200,000(11)	-	*	
Evan B. Azriliant	62,909	*	50,000(5)	12,909	*	
F Berdon Comp.	216,719	*	200,000(21)	16,719	*	
Franchesca Wolfson	14,375	*	12,500(9)	1,875	*	
Frederick Frank	256,515	*	201,515(5)	55,000	*	
Frederick Sandvick	125,819	*	100,000(21)	25,819	*	
Gemini Master Funds	325,819	*	200,000(21)	125,819	*	
GSSF Master Fund	500,000	*	500,000(25)	-	*	
Guerilla IRA L.P.	383,551	*	206,515(7)	177,036	*	
Harry/Temy/Ark Zelcer	100,000	*	100,000	-	*	

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Houston Muthart	387,834	*	362,015(12)	25,819	*
JD Federman Holdings LTD	624,506	*	600,000(22)	24,506	*
Jack Basch	300,000	*	300,000	-	*
Jacob and Linda Davidowitz JTWROS	400,000	*	400,000	-	*
Jeanine Fehn	270,984	*	240,000(19)	30,984	*
Jeffery Kessler	104,508	*	25,000(10)	79,508	*
Jerry Silva	500,000	*	500,000	-	*
Joel Schindler	50,000	*	50,000(5)	-	*
Joseph Digiacamò	25,000	*	25,000(10)	-	*
Joseph Henn	14,375	*	12,500(9)	1,875	*
Joseph Iorio	50,000	*	50,000(5)	-	*
Joseph Prezioso	251,638	*	200,000(11)	51,638	*
Joseph Rozehzadeh	251,639	*	200,000(11)	51,639	*
Judith Barclay	200,000	*	200,000(11)	-	*
KA Steel Chemical	25,000	*	25,000(10)	-	*
Kenneth Reichelle	165,163	*	150,379(15)	14,784	*
Kenneth Steel Jr.	25,000	*	25,000(10)	-	*
Kyle Morgan	225,819	*	200,000(21)	25,819	*
Lon E Bell	15,000	*	7,500(4)	7,500	*
Lone Star Equity	200,000	*	200,000(11)	-	*
Marcovich Tibo	112,909	*	100,000(5)	12,909	*
Marvin Numeroff	434,834	*	401,515(12)	33,319	*
Mary Anne Gray	50,000	*	50,000(5)	-	*
Melton Management	200,000	*	200,000(11)	-	*
Michael Glazer	16,875	*	12,500(9)	4,375	*
Michael Mangan	50,000	*	50,000(5)	-	*
Michael Nizza	28,555	*	25,000(10)	3,555	*
Mordechai Bank	225,819	*	200,000(21)	25,819	*
Nicholas Giustino	151,659	*	125,000(8)	26,659	*
Notzer Chesed	201,138	*	200,000(11)	1,138	*
Odin Partners LP	57,500	*	50,000(5)	7,500	*
Omega Capital Small Cap	705,901	*	600,000(17)	105,901	*
P.R. Diamonds	120,000	*	120,000	-	*
Paul Masters IRA	108,750	*	100,000(21)	8,750	*
Paul Reyes-Guerra	33,750	*	25,000(10)	8,750	*
Peter Wiesel	225,819	*	200,000(21)	25,819	*
Phil Westridge	25,000	*	25,000(10)	-	*
Platinum Partners	200,000	*	200,000(11)	-	*
Provident Master Fund	845,814	*	690,900(17)	154,914	*
Rabbi Scheinerman KBY LLC	62,909	*	50,000(5)	12,909	*
Raymond Mikulich	643,849	*	603,030(11)	40,819	*
Richard Neslund	1,129,095	*	1,000,000(25)	129,095	*

Richard Swier Jr.	67,746	*	60,000(28)	7,746	*
Robert & Claudia Quinn	101,629	*	50,379(9)	51,250	*
Rochelle Gold	377,456	*	300,000(22)	77,456	*
Rock Capital Partners, LLC	377,456	*	300,000(22)	77,456	*
Sem Viktori	270,984	*	240,000(19)	30,984	*
Shatashvili Sharona	117,650	*	100,000(21)	17,650	*
Stewart Taylor	55,008	*	51,258(10)	3,750	*
Thomas Iovino	100,000	*	100,000(21)	-	*
Tony Manual	225,819	*	200,000(21)	25,819	*
Vestal Venture Capital	50,000	*	50,000(5)	-	*
Wayne Grubb	50,000	*	50,000(5)	-	*
Whalehaven	1,129,095	*	1,000,000(25)	129,095	*
William L. Jiler	52,254	*	50,379(9)	1,875	*
Wolfson Trust	14,375	*	12,500(9)	1,875	*
	27,129,259		23,169,824	3,959,435	

* Less than 1%

(1) Beneficial Ownership is determined in accordance with the rules of the SEC and generally includes voting or investment power with respect to securities. Shares of common stock subject to options or warrants currently exercisable or convertible, or exercisable or convertible within 60 days of July 18, 2008 are deemed outstanding for computing the percentage of the person holding such option or warrant but are not deemed outstanding for computing the percentage of any other person.

(2) Percentage prior to offering is based on 197,104,480 shares of common stock outstanding; percentage after offering is based on 213,053,980 shares of common stock outstanding, which assumes that all shares registered in the offering will be sold.

(3) Of which 50% of such number of shares are issuable upon exercise of currently exercisable warrants.

(4) Includes 7,500 shares of common stock underlying warrants.

(5) Includes 50,000 shares of common stock underlying warrants.

(6) Includes 75,000 shares of common stock underlying warrants.

(7) Includes 55,000 shares of common stock underlying warrants.

(8) Includes 80,000 shares of common stock underlying warrants.

(9) Includes 12,500 shares of common stock underlying warrants.

(10) Includes 25,000 shares of common stock underlying warrants.

(11) Includes 200,000 shares of common stock underlying warrants.

(12) Includes 150,000 shares of common stock underlying warrants.

(13) Includes 232,000 shares of common stock underlying warrants.

(14) Includes 112,500 shares of common stock underlying warrants.

(15) Includes 62,500 shares of common stock underlying warrants.

(16) Includes 1,700,000 shares of common stock underlying warrants.

(17) Includes 600,000 shares of common stock underlying warrants.

(18) Includes 650,000 shares of common stock underlying warrants.

(19) Includes 120,000 shares of common stock underlying warrants.

(20) Includes 400,000 shares of common stock underlying warrants.

- (21) Includes 100,000 shares of common stock underlying warrants.
- (22) Includes 300,000 shares of common stock underlying warrants.
- (23) Includes 315,000 shares of common stock underlying warrants.
- (24) Includes 1,185,000 shares of common stock underlying warrants.
- (25) Includes 500,000 shares of common stock underlying warrants.
- (26) Includes 360,000 shares of common stock underlying warrants.
- (27) Includes 1,500,000 shares of common stock underlying warrants.
- (28) Includes 30,000 shares of common stock underlying warrants.
- (29) Includes 4,100,000 shares of common stock underlying warrants.

LEGAL MATTERS

The validity of the issuance of the securities offered hereby will be passed upon for us by Snell & Wilmer L.L.P., Las Vegas, Nevada.

EXPERTS

RBSM LLP, independent registered public accounting firm, have audited, as set forth in their report thereon appearing elsewhere herein, our financial statements at September 30, 2007 and 2006 and for the years then ended that appear in the prospectus. The financial statements referred to above are included in this prospectus with reliance upon the independent registered public accounting firm's opinion based on their expertise in accounting and auditing.

AVAILABLE INFORMATION

We have filed a registration statement on Form S-1 under the Securities Act, as amended, relating to the shares of common stock being offered by this prospectus, and reference is made to such registration statement. This prospectus constitutes the prospectus of Applied DNA Sciences, Inc., filed as part of the registration statement, and it does not contain all information in the registration statement, as certain portions have been omitted in accordance with the rules and regulations of the SEC.

We are subject to the informational requirements of the Securities Exchange Act of 1934, as amended, which requires us to file reports and other information with the SEC. Such reports and other information may be inspected at public reference facilities of the SEC at 100 F Street, N.E., Washington, D.C. 20549. Copies of such material can be obtained from the Public Reference Section of the SEC at 100 F Street, N.E., Washington, D.C. 20549 at prescribed rates. Because we file documents electronically with the SEC, you may also obtain this information by visiting the SEC's website at <http://www.sec.gov>.

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RBSM LLP
CERTIFIED PUBLIC ACCOUNTANTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors
Applied DNA Sciences, Inc.
Stony Brook, New York

We have audited the accompanying consolidated balance sheet of Applied DNA Sciences, Inc. (the "Company") as of September 30, 2007 and 2006 and the related consolidated statements of losses, deficiency in stockholders' equity, and cash flows for each of the two years in the period ended September 30, 2007. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based upon our audits.

We conducted our audits in accordance with standards of the Public Company Accounting Oversight Board (United States of America). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of September 30, 2007 and 2006, and the results of its operations and its cash flows for each of the two years in the period ended September 30, 2007 in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As discussed in the Note K to the accompanying financial statements, the Company is experiencing difficulty in generating cash flow to meet its obligations and sustain its operations, which raises substantial doubt about the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/S/ RBSM, LLP
RBSM, LLP
Certified Public Accountants

McLean, Virginia
January 14, 2008

APPLIED DNA SCIENCES, INC
CONSOLIDATED BALANCE SHEET
SEPTEMBER 30, 2007 AND 2006

ASSETS

	SEPTEMBER 30,	
	2007	2006
Current assets:		
Cash	\$ 25,185	1,225,304
Accounts receivable	-	9,631
Advances and other receivables		8,419
Prepaid expenses	101,000	106,667
Restricted cash (Note C)	399,920	-
Total current assets	526,105	1,350,021
Property, plant and equipment-net of accumulated depreciation of \$82,825	105,537	156,437
Other assets:		
Deposits	13,822	13,822
Capitalized finance costs-net of accumulated amortization of \$7,997	29,503	1,049,087
Intangible assets:		
Patents, net of accumulated amortization of \$25,445 (Note B)	8,812	15,663
Intellectual property, net of accumulated amortization and write off of \$7,702,891 (Note B)	1,728,009	2,091,800
Total Assets	\$ 2,411,788	4,676,830

LIABILITIES AND DEFICIENCY IN STOCKHOLDERS' EQUITY

Current liabilities:		
Accounts payable and accrued liabilities	\$ 13,215,975	5,560,032
Convertible notes payable, net of unamortized discount (Note D)	740,405	3,761,771
Notes payable –related party (Note E)	-	410,429
Other current liabilities (Note C)	399,920	-
Total current liabilities	14,356,300	9,732,232
Debt derivative and warrant liability	-	4,530,795
Commitments and contingencies (Note J)		
Deficiency in Stockholders' Equity- (Note F)		
Preferred stock, par value \$0.001 per share; 10,000,000 shares authorized; 60,000 issued and outstanding	6	6
Common stock, par value \$0.001 per share; 410,000,000 shares authorized; 180,281,661 issued and outstanding	180,281	120,982
Additional paid in capital	128,448,584	82,627,606
Accumulated deficit	(140,573,383)	(92,334,791)
Total deficiency in stockholders' equity	(11,944,512)	(9,586,197)

Total liabilities and Deficiency in Stockholders' Equity	\$ 2,411,788	4,676,830
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See the accompanying notes to the consolidated financial statements

F-3

APPLIED DNA SCIENCES, INC
CONSOLIDATED STATEMENTS OF LOSSES
YEARS ENDED SEPTEMBER 30, 2007 AND 2006

	2007	2006
Sales	\$ 121,920	\$ 18,900
Cost of sales	(23,073)	(15,639)
Gross Profit	98,847	3,261
Operating expenses:		
Selling, general and administrative	12,096,444	8,530,354
Research and development	110,845	153,191
Impairment of intangible asset(s)	-	5,655,011
Depreciation and amortization	432,582	1,370,299
Total operating expenses	12,639,871	15,708,855
LOSS FROM OPERATIONS	(12,541,024)	(15,705,594)
Net gain in revaluation of debt derivative and warrant liabilities	1,387,932	16,844,837
Other income	977	79,488
Interest expense	(2,152,718)	(3,628,968)
Net loss before provision for income taxes	(13,304,833)	(2,410,237)
Income taxes (benefit)	-	-
NET LOSS	\$ (13,304,833)	\$ (2,410,237)
Net (loss) per share-basic and fully diluted	\$ (0.10)	\$ (0.02)
Weighted average shares outstanding- Basic and fully diluted	135,229,885	116,911,022

See the accompanying notes to the consolidated financial statements

APPLIED DNA SCIENCES, INC.
CONSOLIDATED STATEMENT OF DEFICIENCY IN STOCKHOLDERS' EQUITY
TWO YEARS ENDED SEPTEMBER 30, 2007

	Preferred Shares	Preferred Stock Amount	Common Shares	Common Stock Amount	Additional Paid in Capital	Common Stock Subscribed	Accumulated Deficit	Total
Balance, October 1, 2005:	60,000	\$ 6	112,230,392	\$ 112,230	\$ 82,320,715	\$ 20,000	\$(89,924,554)	\$(7,471,603)
Common stock issued in exchange for services at \$0.50 per share in October 2005	-	-	400,000	400	199,600	-	-	200,000
Common stock issued in exchange for consulting services at \$0.75 per share in October 2005	-	-	100,000	100	74,900	-	-	75,000
Common stock returned in October 2005, previously issued for services at \$0.60 per share	-	-	(350,000)	(350)	(209,650)	-	-	(210,000)
Common stock issued pursuant to subscription at \$0.50 per share in December 2005	-	-	40,000	40	19,960	(20,000)	-	-
Common stock to investors pursuant to registration rights agreement \$0.51 per share	-	-	505,854	506	257,480	-	-	257,986

in December
2005

Common stock
returned in
January 2006,
previously
issued for
services
rendered at
\$0.60 per share

-	-	(250,000)	(250)	(149,750)	-	-	(150,000)
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Common stock
issued to
investors
pursuant to
registration
rights
agreement at
\$0.32 per share
in January 2006

-	-	806,212	806	257,182	-	-	257,988
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Common stock
issued to
investors
pursuant to
registration
rights
agreement at
\$0.20 per share
in January 2006

-	-	1,289,927	1,290	256,695	-	-	257,985
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Subtotal	60,000	\$ 6	114,772,385	\$ 114,772	\$ 83,027,132	\$	-	\$ (89,924,554)	\$ (6,782,644)
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See the accompanying notes to the consolidated financial statements

APPLIED DNA SCIENCES, INC.
 CONSOLIDATED STATEMENT OF DEFICIENCY IN STOCKHOLDERS' EQUITY
 TWO YEARS ENDED SEPTEMBER 30, 2007

	Preferred Preferred Shares	Preferred Stock Amount	Common Shares	Common Stock Amount	Additional Paid in Capital	Common Stock Subscribed	Accumulated Deficit	Total
Subtotal	60,000	\$ 6	114,772,385	\$ 114,772	\$ 83,027,132	\$ -	\$ (89,924,554)	\$ (6,782,644)
Fair value of 200,000 warrants issued to consultants for services at \$0.22 per warrant in January 2006	-	-	-	-	43,098	-	-	43,098
Common stock issued in exchange for consulting services at \$0.17 per share in February 2006	-	-	160,000	160	27,040	-	-	27,200