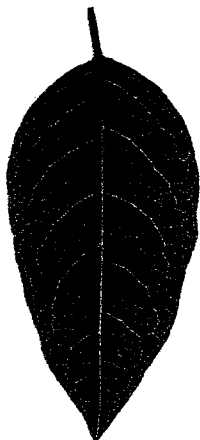


vYstar[®]
CORPORATION



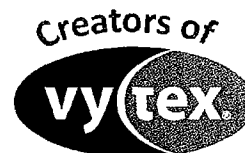
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2010 Annual Report to Shareholders

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May 10, 2011

Dear Fellow Shareholders:

I look forward to meeting with you at our 2011 Annual Meeting of Shareholders to be held on Friday, June 3, 2011 at 8:00 a.m. local time at the offices of Greenberg Traurig LLP, 3290 Northside Parkway, Suite 400, Atlanta, GA. This will be our second annual meeting since becoming a publicly traded company.

As you may be aware, in 2010 continuing into 2011 many commodities have experienced increases in raw material prices, in some cases up to 100%, and natural rubber latex was no exception. The Vystar staff recreated Vytex NRL during the past year even as oil by-product prices fell to almost half those of natural rubber latex. Even polypropylene (Neoprene to some) has fallen in line with Vytex NRL pricing. We have strengthened our product offerings to help those manufacturers of niche products add value by offering specialized versions of our Vytex NRL. This effort has added time to the purchase cycle but has also added resilience to achieving our ROI goals. I look forward to presenting our strategy to you and answering all questions and handling your concerns. If all goes as planned in Guatemala, we will involve attendees in consumer research on a revolutionary new item that we all use every day. There are so many additional comments I could make here, but I will exercise restraint.

In listening to feedback from last year, I have scheduled the meeting this year to be less intrusive on the work day for Vystar's staff as well as our investors. Please make your best efforts to attend and participate but be sure to cast your votes for the Board of Directors as well as our auditors even if you are not able to attend.

Vystar's corporate officers and the board of directors will be in attendance at the meeting. Only registered shareholders of Vystar as of May 2, 2011 may attend.

Sincerely,

A handwritten signature in black ink that reads "William R. Doyle". The signature is written in a cursive, flowing style.

William R. Doyle
Chairman, President and Chief Executive Officer

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

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Section

MAY 16 2011

WASHINGTON, DC
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FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 2010
OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the Transition Period from _____ to _____
Commission File No. 000-53754

VYSTAR CORPORATION

(Exact name of registrant as specified in its charter)

GEORGIA

20-2027731

(State or other jurisdiction of
incorporation or organization)

(I.R.S. Employer
Identification No.)

3235 Satellite Blvd.
Building 400, Suite 290
Duluth GA

30096

(Address of principal executive offices)

(Zip Code)

Registrant's telephone number, including area code: (770) 965-0383

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

NONE

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

Common Stock, par value \$0.0001 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Smaller Reporting Company

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

Aggregate market value of the voting and non-voting common stock held by non-affiliates of the registrant as of June 30, 2010, the last business day of the registrant's most recently completed second fiscal quarter, based on the last private sale price of the registrant's common shares on such date: \$10,247,409. See Item 12.

The number of shares outstanding of each of the registrant's classes of common stock, as of March 29, 2011 was as follows:

TITLE OF EACH CLASS	SHARES OUTSTANDING AS OF March 29, 2011
Common Stock, \$0.0001 Par Value	15,417,524

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the 2011 annual meeting of shareholders are incorporated by reference into Part III of this Form 10-K.

Vystar Corporation
Annual Report on Form 10-K
For the Year Ended December 31, 2010

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CAUTIONARY NOTE REGARDING FORWARD LOOKING STATEMENTS

Certain oral and written statements made by Vystar Corporation about future events and expectations, including statements in this Annual Report on Form 10-K (the “Report”) contain forward-looking statements, within the meaning of the Securities Exchange Act of 1934, as amended (the “Exchange Act”) and the Securities Act of 1933, as amended (the “Securities Act”), that involve risks and uncertainties. For those statements, we claim the protection of the safe-harbor for forward-looking statements contained in the Private Securities Litigation Act of 1995. In some cases, forward-looking statements are identified by words such as “believe,” “anticipate,” “expect,” “intend,” “plan,” “will,” “may” and similar expressions. You should not place undue reliance on these forward-looking statements, which speak only as of the date of this Report or the statement. All of these forward-looking statements are based on information available to us at this time, and we assume no obligation to update any of these statements. Actual results could differ from those projected in these forward-looking statements as a result of many factors, including those identified in “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and elsewhere. We urge you to review and consider the various disclosures made by us in this Report, and those detailed from time to time in our filings with the Securities and Exchange Commission (the “SEC”), that attempt to advise you of the risks and factors that may affect our future results. We qualify any forward-looking statements entirely by these cautionary factors.

The above mentioned risk factors are not all-inclusive. Given these uncertainties and that such statements speak only as of the date made, you should not place undue reliance on forward-looking statements. We undertake no obligation to update publicly or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I.

ITEM 1. BUSINESS

Vystar Corporation (“Vystar”, the “Company”, “we”, “us”, or “our”) is the creator and exclusive owner of the innovative technology to produce Vytex® Natural Rubber Latex (“NRL”). This technology reduces antigenic protein in natural rubber latex products made with Vytex to virtually undetectable levels. The allergic reactions to untreated latex are a significant detriment affecting numerous individuals globally that use many different products made with NRL. With non-latex products growing at a rapid rate due to these allergy problems, the costs for alternative materials incurred by the manufacturers of these many different products have greatly increased. Nearly all substitute materials have been more expensive than NRL – by a factor of five in some cases. This fact has changed in the past thirteen months as NRL prices have increased by as much as 66% and continue to fluctuate in the higher priced zone. Synthetic prices have not kept up with this increase as supply for nitrile and neoprene has exceeded demand while crude oil prices have not kept up with the increase in NRL thus moving both below NRL itself and therefore well below Vytex NRL. We have introduced Vytex NRL, our “ultra low protein” natural rubber latex, throughout the worldwide marketplace that uses NRL or latex substitutes as a component of manufactured products. We intend for Vytex NRL to become the standard source of latex and latex substitutes, not unlike a standard computer operating system on which many other applications can run. Over 9.7 million tonnes of NRL are produced globally of which just over 1.4 million tonnes are in liquid latex form. There are more than 40,000 products made from the liquid latex while the other eight plus million tonnes are used to produce tires and other hard rubber products. Natural rubber latex is used in an extensive range of products including balloons, textiles, footwear and clothing (threads), adhesives, foams, furniture, carpet, paints, coatings, protective equipment, sporting equipment, and, especially health care products such as condoms, surgical and exam gloves, catheters and other items. We have introduced Vytex NRL into the supply channels with aggressive, targeted marketing campaigns directed to the end users to create the pull-through. This provides a competitive advantage for manufacturers utilizing Vytex NRL, ranging from those who use it as a raw material to those who are using a product that contains NRL, including manufacturers of the end products.

During the fourth quarter of 2009, we transitioned from the development stage to the operating stage. This resulted from our completion of substantially all the activities associated with the developmental stage of our business and we are now involved in expanding our operations, particularly increasing market acceptance and sales of Vytex. We are marketing to multiple industries concurrently, targeting regulated (condoms, surgical and exam gloves) and non-regulated product (foam and non-medical and non-food packaging adhesive) categories to balance the lengthier sales cycles inherent in medical devices. A manufacturer’s conversion from their standard latex or synthetic raw material to Vytex NRL can be a protracted process, ranging from twelve to eighteen months to complete the sales cycle due to the multiple steps required. The sales cycle generally starts with a laboratory analysis of Vytex NRL whereby physical properties and protein levels of the finished goods are tested by potential customers to ensure it meets the required specifications and then progresses to a full production run on the manufacturer’s equipment. A manufacturer’s decision to convert to Vytex NRL is impacted by many functional areas including research and development, manufacturing, sales, marketing, purchasing and finance. Each of these areas has a significantly different decision-making role per company thus the large difference in the sales cycle. If the product is regulated and requires regulatory clearances or approvals prior to commercialization, the sales cycle could be extended by another nine to twelve months for testing, filing and agency review. By diversifying the target product categories we believe this balanced approach will reduce our exposure to individual market fluctuations and increase our aggregate revenues.

Products and Services

Natural rubber latex is an agricultural product produced from the sap of the rubber tree, *Hevea brasiliensis*. In 2007, over 9.7 million tonnes of NRL were produced globally, of which just over 1.4 million tonnes are liquid latex according to recent information published by the International Rubber Study Group, Singapore, for dipped products (e.g., gloves, condoms, catheters and other products that require multiple layers of the NRL) and other latex end products such as foams, adhesives, etc. This data has been reaffirmed by the same organization in a presentation to the Indian Rubber Expo in January 2011. Substantially all of the latex processors are located in Southeast Asia, India, Africa and Latin America and are owned by local groups or large multinational corporations. The typical processor acquires raw NRL (or “field latex”) aggregated from latex plantations. The processors in Southeast Asia, except for India, have a worldwide advantage, since latex is predominately a product of that area and labor and water are abundant and inexpensive. However, because of the intrinsic allergenic problems of NRL, the processors’ market volume had been level, if not slightly decreasing, for many years. Significant price and demand increases in NRL have turned the industry into a “sunrise” industry. A sunrise industry indicates a replanting of the natural rubber plantations to keep up with growing worldwide demand. Some reports show a shortage of NRL in the coming decade as demand in developing countries such as China and India continues to grow. This future demand is awakening interest in other areas of the world where the climate is suitable, particularly in Guatemala, where it is expected the latex industry will grow from 57,000 tonnes produced in 2006 to over 95,000 tonnes by 2016, a 40% increase, according to a report issued by the office of Consulate General of Guatemala, Atlanta, Georgia. This is particularly attractive to U.S. manufacturers of latex products who could potentially see reduced transportation costs and lead times over the usual Asian sources.

Vytex NRL is produced at the latex processor level and can be easily integrated into the current processing environments without additional capital equipment investment. The protein removal and modification process that leads to Vytex NRL allows manufacturers to lower manufacturing costs with the benefit of reduced protein levels. We presented a paper on this topic (“technical paper”) at the RAPRA Latex and Synthetic Polymer Dispersions 2010 Conference in Amsterdam in March 2010. Reduced leaching times and resulting reductions in energy, water and material handling consumption can lead to realized cost savings. The manufacturing process may occur entirely within a direct manufacturer that takes the NRL in its raw, harvested form all the way through to the final product, such as a large glove manufacturer, but this is rare. More typically, there are several sub-manufacturers fabricating components to be used in final products, such as elastic thread manufacturers selling product to bedding and clothing manufacturers. Although not part of the manufacturing process, the links between the NRL processors and the first manufacturer are independent distributors specializing in NRL, similar to those participating in other agricultural commodity trading.

We have two different models for generating revenue: toll manufacturing and licensing our technology to others. To implement our toll manufacturing model, we signed a Toll Manufacturing Agreement with Revertex (Malaysia), the world’s largest producer of prevulcanized natural rubber latices, in 2008. Our Revertex agreement covers the areas of processing and technical support. Revertex is a non-exclusive toll manufacturer for us and is in full production mode to manufacture Vytex NRL for Vystar commercially. Through our agreement with Revertex, Revertex produces the concentrated Vytex NRL for a fee and Vystar is responsible for marketing and selling it. We expect this model to be responsible for generating the majority of our revenues over the next few years. Our initial Vytex NRL product portfolio currently has three versions, high ammonia (HA), low ammonia (LA) and Vytex NRL 0.5, which is a very low (0.5%) ammoniated version.

To implement our licensing model, we signed a licensing agreement with Pica de Hule Natural, a division of Grupo Agroindustrial Occidente (“Occidente”), located in Guatemala, in March 2010. Occidente is the largest processor of natural rubber latex in Latin America and the largest exporter serving more than 15 countries. Under the agreement, Occidente will manufacture, sell and market Vytex NRL throughout Latin America as well as supply Vytex NRL to North America and Europe through the Company’s existing distribution system. The distributor for North America and Europe purchases and sells Vytex for specific orders in their territory and does not purchase inventory to hold. In October 2010, we signed a second licensing agreement with KA Prevulcanized Latex (KAPVL) to manufacture and sell Vytex NRL in the SAARC region which includes India, Pakistan, Sri Lanka, Bangladesh, Bhutan and Nepal. India is the second largest consumer of concentrated latex behind China and dropped their incoming tariff from 75% to 25% according to recent reports. Other licensors could include other processors that could contract to market and sell a proprietary version of Vytex NRL in its own proprietary compound formula to create a new Vytex NRL distinctly their own that becomes part of their portfolio of products. There are multiple methods for us to utilize a licensing model, and a variation of this model is also applicable for a vertically integrated manufacturer whose operations span the entire manufacturing chain from the latex plantation to finished goods production. This is commonly found in glove and condom manufacturing, where today several manufacturers located in Thailand, Malaysia and India control their processes from the rubber tree to the end-product. In all licensing scenarios, the licensor pays the Company a licensing fee for usage and/or sales of the technology based on volume. We currently have multiple tentative discussions in process for one or more licensing scenarios in addition to the aforementioned.

We are optimistic that both models will successfully generate revenues for us. In addition, we entered into a Distribution Agreement with Centrotrade Minerals & Metals, US and Centrotrade Deutschland, GmbH, Germany, the leading global distributors of latex raw materials, to create a worldwide distribution network that will further enhance our ability to cost effectively reach and service manufacturer customers in these key manufacturing areas. This gives the Company an expansive distribution network that facilitates both the licensing and toll manufacturing models and can assist with processors in getting product to market who are making Vytex NRL under a licensing model.

These agreements eliminate the need for us to create a costly infrastructure along with the other investment and regulatory compliance costs to develop and operate a processing or manufacturing facility. All of these costs are or will be borne by our manufacturing and distribution contractors and/or customers. This means we must show the NRL producers and product manufacturers the economic value proposition of including Vytex NRL in their product lines, hence the technical paper presented in Amsterdam in March of 2010. In addition, as an all natural raw material, Vytex NRL puts the main component in gloves, etc. back in the environmentally friendly arena.

Competition

Traditional users of NRL as a product component have been seeking and developing alternative synthetic raw materials. Currently, it is estimated that NRL processors have lost one-half of the overall latex market to synthetic latex. Base synthetic feedstocks such as ethylene, propylene and styrene are expected to stabilize in both pricing and supply over the next 12-18 months, however, pricing will remain approximately 60% higher than 2003 prices. Butadiene users have continued to see short supply and pricing volatility through 2010, according to Chemical Market Associates, Inc., a national petrochemical consulting group in their report “Synthetic Latex Feedstocks: Can It Get Any Worse?”, presented at the International Latex Conference, July 2008, Cleveland, Ohio. Butadiene is the

feedstock most commonly found in synthetic exam gloves and a component of synthetic latex foams. These facts, coupled with the easy transition to the process to manufacture Vytex NRL, make it very attractive for the processors to regain lost business.

Several attempts, including new source crops, synthetic latices and various treatment methods, have been made to eliminate problem proteins from Hevea NRL by biological, physical and/or chemical methods that act on proteins. One approach has been to introduce the latex articles to multiple leaching steps and chlorination. While it does reduce the protein levels in the finished product, it weakens the latex film thus compromising the desirable physical properties of the product. Another attempt to reduce proteins in NRL is the use of proteolytic enzymes to degrade the proteins in the latex solution but this approach introduces another protein (the enzyme) to the latex, which may itself be allergenic. Attempts to commercialize two other non-Hevea NRL materials have been made in the United States: guayule rubber latex and *Taraxacum kok-saghyz*, also known as the Russian dandelion. These materials are reported to be higher in cost compared to natural rubber latex and presently are available only in limited quantities.

Intellectual Property

Vystar has two issued patents by the United States Patent Trademark Office (“USPTO”) that were issued in 2005 (Patent No. 6,906,126) and 2006 (Patent No. 7,056,970) and one issued patent from the Republic of South Africa in 2009 (2008/00886). In 2005, we sought international patent protection of our application that would become our U.S. patent No. 6,906,126 pursuant to the Patent Cooperation Treaty (“PCT”) (No.: PCT/US2005/025018), and this application has been nationalized in the following countries and regions: The European Union (No. 05775523.3), Canada (No. 2,614,945), China (No. 200580051526.1), Hong Kong (No. 09104255.3), India (No. 295/DELNP/2008), Japan (No. 2008-521367), and Sri Lanka (No. 14827). Additionally, this PCT was nationalized back into the United States to expand our protection to both method and composition claims (No. 11/988,498). We expect patents to be issued in these countries without objection.

In January and July of 2008, we filed two provisional patent applications, respectively, in the United States with the USPTO for new developments and unexpected results in our technologies (Nos. 61/022,250 and 61/081,927). The new developments and unexpected results reflected in these two provisional applications were converted into a full utility patent application for both method and composition with new and unexpected results in January 2009 (No. 12/356,355). We also sought international protection for the new developments and unexpected results reflected in this 2009 USPTO patent application through another PCT application (No. PCT/US2009/031445). This PCT application was nationalized in the following countries in 2010: the European Union (No. 09702339.4), Brazil (No. PI0906513-0), Guatemala (No. 2010-000208), India (No. 2487/KOLNP/2010), Indonesia (No. W-00201002436), and Malaysia (No. PI 2010003317). In addition, we filed the same patent application that was the subject of our USPTO patent application No. 12/356,355 and PCT/US2009/031445 directly into Thailand (No. 0901000201).

Vystar filed and has received registered trademark protected status in the United States for the marks “Vystar”, “Vytex” and “Created by Nature. Recreated by Science.” In 2010 Vystar filed for international trademark protection of “Vytex” in Malaysia (No.2010013149) and India (No. 1992991).

While we believe that the pending patent and trademark applications will be granted without objection, there are no guarantees that all such will be granted by each relevant governing body. No assurance can be given that such patent and trademark protection will provide substantial protection from competition. We realize that the market for Vytex NRL is an industrialized world concern and we are committed to aggressively challenging any infringements of its patents and/or trademarks.

Research and Development

Vytex NRL has produced protein test results on finished products that are both “below detection” and “not detectable” in terms of the amount of proteins remaining in these finished goods made with Vytex NRL. These results have been reproduced in many subsequent tests. From inception through December 31, 2010, Vystar's research and development costs have been approximately \$2.3 million, with an additional \$43,000 budgeted for continued efforts in 2011. These efforts past and future have been and will continue to be patented and/or trademarked. As of December 31, 2010, Vystar has expended since inception approximately \$145,000 on such patent and trademark costs and has budgeted approximately \$40,000 more for the year ended December 31, 2011 to continue to pursue and maintain its patents and trademarks around the world.

Government Regulation

In the United States, healthcare and many food and food-based packaging products are subject to regulation by the Food and Drug Administration (FDA). Vystar is not directly subject to regulation by the FDA due to the fact that it does not manufacture a finished medical device or other product, but only provides Vytex NRL as a component or raw material to healthcare or other product manufacturers. However, there will be FDA regulation of the labeling of healthcare and food-based packaging products that are produced with Vytex NRL and the FDA has promulgated standards for good manufacturing practices for manufacturing the end products, which makes the end product manufacturers responsible for seeing that all of their components and component

manufacturers, including Vytex NRL, are produced using good manufacturing processes. Additionally, the FDA prohibits the use of the term “hypoallergenic” or “low protein” on any natural rubber latex product it regulates. In order to make any such claim, the latex product manufacturer must seek a waiver from the FDA of such regulatory prohibitions. Commentary by the FDA in its guidance documents and other rulings indicate that the prohibition on the use of the “hypoallergenic” or “low protein” label is based, at least in part, on the fact that, although the use of such terms in such labeling may be intended to indicate that the risk of allergic reaction to residual levels of processing chemicals has been reduced, consumers may interpret the labeling to mean that the risk of allergic reactions to any component in the device would be minimal. Thus the hypoallergenic or low protein label is deemed misleading. There can be no assurance, however, that we will succeed in securing FDA approval for any claim regarding the “hypoallergenic” “low protein” or reduced allergy potential of latex produced with the Vytex NRL process. Failure to secure, if required, such FDA approval, could delay or otherwise detrimentally affect our introduction to natural rubber latex healthcare and/or food packaging products regulated by the FDA. Notwithstanding, the medical or food packaging manufacturer will be able to use the Vytex NRL trademark on its label if size permits to indicate only that the Vytex NRL component was used in the production of the healthcare product, and what protein levels the end product does contain, but no further claim is asserted. We been able to provide sufficient testing data to the FDA to support our protein level claims with respect to the natural rubber latex antigenic and total proteins present in end products made with Vytex NRL.

On May 1, 2009, Vystar and Alatech Healthcare, LLC (“Alatech”), a major United States condom manufacturer, received 510(k) clearance from the U.S. Food and Drug Administration to market and sell Alatech’s Envy™ condom manufactured with Vytex NRL. The Envy condom is the first medical product available in the United States made from Vystar’s patented Vytex NRL, which has less than 2 micrograms/dm², virtually undetectable levels, of the antigenic proteins that can cause an allergic response, while retaining and improving upon all the desirable qualities of latex. The Envy condom carries labeling that reflects the lowest antigenic protein content currently available in a natural rubber latex medical device in the United States.

On July 22, 2009, Vystar and Alatech further received 510(k) clearance from the FDA to market and sell Alatech's unpowdered medical exam glove manufactured with Vytex NRL. The Alatech exam glove will include labeling of less than 50 micrograms/gram of total proteins.

Inflation and Seasonality

We do not believe that our operations are significantly impacted by inflation. Our business is not seasonal in nature, but is subject to commodity pricing. Our product is a commodity-based raw material and prices for such material fluctuate from day-to-day.

Employees

As of December 31, 2010, we had five full-time employees and one part-time employee, five of which were employed at our corporate headquarters in Atlanta, GA. We had three full-time employees engaged primarily in sales and marketing, one of which includes research & development responsibilities with his sales activities. Finance and administration were the primary activities for the two remaining full-time employees and the part-time employee.

Corporate Information

Vystar Corporation is a Georgia corporation that was incorporated in 2003. Our predecessor company, Vystar LLC, was formed by our founder, Travis Honeycutt, in February 2000 as a Georgia limited liability company.

Our principal executive offices are located at 3235 Satellite Boulevard, Building 400, Suite 290, Duluth, Georgia 30096, and our telephone number is 770-965-0383. Our website address is www.vytex.com. The information contained on, or that can be accessed through, our website is not a part of this Report. We have links on our website to reports, information statements, and other information that we file electronically with the Securities and Exchange Commission, or SEC, at the Internet website maintained by the SEC, www.sec.gov. In addition to visiting our website and the SEC’s website, you may read and copy public reports we file with or furnish to the SEC at the SEC’s Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

ITEM 1A. RISK FACTORS

Our business does not presently generate the cash needed to finance our current and anticipated operations.

We have had very limited revenues in our history prior to 2010 and have just transitioned from the development stage to the operational stage during the fourth quarter of 2009. We are still in the early stages of establishing our business including attracting new customers and increasing sales; our financial success will be dependent upon the soundness of our business concept and our management’s ability to successfully and profitably execute our plan.

While we anticipate that revenues will grow from what we achieved in 2010, our limited operating history makes it difficult to evaluate our business. We expect to make significant future operating expenditures to develop and expand our business. We may incur significant losses in the future for a number of reasons, including due to the other risks described in this Report, and we may encounter unforeseen expenses, difficulties, complications and delays and other unknown events. Accordingly, we may not be able to achieve or maintain profitability, and we may incur significant losses for the foreseeable future. See additional discussion under Liquidity and Capital Resources.

At December 31, 2010 we had \$282,625 cash on hand and an accumulated deficit of \$14,060,217. We plan to finance our operations for the next twelve (12) months through the use of cash on hand, increased revenues, the credit facility and notes payable from certain shareholders entered into on March 11, 2011, stock warrant exercises from existing shareholders and potentially raising capital through a private placement. You should consider, among other factors, our prospects for success in light of the risks and uncertainties encountered by companies that, like us, have not generated net earnings on an annual basis. Various factors, such as economic conditions, regulatory and legislative considerations, and competition, may also impede our ability to expand our market presence. We may not successfully address these risks and uncertainties or successfully implement our operating strategies. If we fail to do so, it could materially harm our business and impair the value of our common stock. Even if we accomplish these objectives, we may not generate positive cash flows or profits we anticipate in the future.

Operating results could fluctuate and differ considerably from our financial forecasts.

Our business model is based on assumptions derived from (i) the experience of the principals of the Company, and (ii) third party market information and analysis. There are no assurances that these assumptions will prove to be valid for our future operations or plans.

Our operating results may fluctuate significantly as a result of a variety of factors, including:

- Acceptance by manufacturers of the Vytex Natural Rubber Latex technology;
- Our ability to achieve and sustain profitability;
- Consumer confidence in products manufactured using our Vytex Natural Rubber Latex technology.

Our business is totally dependent on market demand for, and acceptance of, the Vytex Natural Rubber Latex process.

We expect to derive most of our revenue from the sales of our Vytex Natural Rubber Latex raw material to various manufacturers of rubber and rubber end products using NRL and/or their distributors. We pay natural rubber latex processors a fee for the service of manufacturing and creating Vytex NRL for us under our toll manufacturing agreement. Conversely, Vystar collects a fee under the licensing model. Our Vytex NRL product is relatively new and operates within broad, diverse and rapidly changing markets. As a result, widespread acceptance and use of product is critical to our future growth and success. If the market for our product fails to grow or grows more slowly than we currently anticipate, demand for our product could be negatively affected.

Our ability to generate significant revenues is substantially dependent upon the willingness of consumers to make discretionary purchases and the willingness of manufacturers to utilize capital for research and development and the retooling of their manufacturing process, both of which are impacted by the state of the economy.

The current state of the world economy has and likely will in the future impact upon our ability to increase revenues. Certain of the products that we anticipate will be manufactured with our Vystar NRL process, such as mattresses and sponge products, are considered discretionary consumer purchases which decline during economic downturns. Additionally, certain manufacturers who might otherwise utilize the Vytex NRL process in the manufacturing of products with NRL have determined not to expend capital to complete the research of the Vytex NRL process or to retool their manufacturing process because of the general downturn in the economy. While we are beginning to see signs that the economy is improving and manufacturers are becoming more willing to consider the use of the Vytex NRL process, the state of the economy has delayed our generation of significant revenue and will likely continue to impact our revenues in the future.

Assertions by a third party that our process infringes its intellectual property, whether or not correct, could subject us to costly and time-consuming litigation or expensive licenses.

There is frequent litigation based on allegations of infringement or other violations of intellectual property rights. As we face increasing competition and become increasingly visible as an operating company, the possibility of intellectual property rights claims against us may grow.

Any intellectual property rights claim against us or our customers, with or without merit, could be time-consuming, expensive to litigate or settle and could divert management attention and financial resources. An adverse determination also could prevent us from offering our process, require us to pay damages, require us to obtain a license or require that we stop using technology found to be in violation of a third party's rights or procure or develop substitute services that do not infringe, which could require significant resources and expenses.

The market in which we will participate is competitive and if we do not compete effectively, our operating results may be harmed.

The markets for our product are competitive and rapidly changing. With the introduction of new technologies and market entrants, we expect competition to intensify in the future. In addition, pricing pressures and increased competition generally could result in reduced sales, reduced margins or the failure of our services to achieve or maintain widespread market acceptance.

While early interest was strong in a new innovative product in the natural rubber latex industry, pricing and regulatory approvals remain a key selling factor especially in the exam glove arena. There is no exam glove manufacturer signed to date that has accepted Vytex NRL into its product mix.

Our revenues will vary based on fluctuations in commodity prices for NRL.

NRL is a commodity and, as such, its price fluctuates on a daily basis. NRL increased in price by approximately 66% from January 2010 to January 2011. As a result, our revenues may also fluctuate either upward or downward based on such price fluctuations, over which we have no control. Such fluctuations could have an adverse effect on our revenues. Additionally, if NRL pricing stays inflated or continues to increase some manufacturers may choose to utilize synthetic alternatives to NRL in their manufactured products as an over abundance has reduced the prices for nitrile and neoprene.

While Vytex NRL has received 510(k) clearance from the FDA for condoms and exam gloves, there is no assurance that future applications will be cleared.

In order for Vytex to be used in medical device applications, the manufacturer of the end product must submit an application to the FDA. If the device is classified by the FDA as Class II (e.g., condoms, surgical gloves, and most non-cardiac and non-renal/dialysis catheters) and in some cases Class I (e.g., exam gloves), a 510(k) application must be filed with the FDA seeking clearance to market the device based on the fact that there is at least one other predicate or similar device already marketed. If the product is classified as a Class III product (e.g., most cardiac and renal/dialysis catheters, certain adhesives and other in vivo devices), or is otherwise a new device with no predicate on the market already, then the manufacturer of the end product must submit a Pre-Market Approval ("PMA") application seeking approval by the FDA to market the device. The PMA approval process is much more in depth and lengthy and requires a greater degree of clinical data and FDA review than does a 510(k) clearance process.

Since Vytex is a raw material and not an end-product, Vystar is not the entity that files with the FDA for any clearance or approval to market a device. Instead, the end-product manufacturers who will be selling and marketing the device(s) must submit applications and seek FDA clearance or approval depending upon the device classification. Vystar's role in this process is only as a background support to the manufacturers to supply information and any technical or test data regarding the Vytex raw material if and to the extent needed.

An American manufacturer of condoms and exam gloves had been engaged in production work and had completed required testing and received FDA clearance for using Vytex NRL in their condom and exam glove lines. However this manufacturer is not currently producing products made with Vytex NRL or any other type of raw material. Notwithstanding such approvals, we have no assurance that future products will provide acceptable test results and even if they do, there is no certainty that the FDA will approve the applications.

Vystar may seek to have lower protein claims than what is currently on the market today for exam gloves, and may ultimately seek to have latex warnings removed from or modified on all FDA-regulated products, but it cannot guarantee that either of such actions will be approved by the FDA.

The FDA scrutinizes heavily any and all claims categorizing the protein levels and other claims of a NRL product. Currently, the FDA has allowed claims only stating the level of less than 50 micrograms/gram of total extractable proteins pursuant to only one of two FDA-recognized standards on exam or surgical gloves. Vystar intends to claim protein levels pursuant to both of the two FDA-recognized standards, which will result in claiming the lowest level of antigenic proteins for a Hevea NRL product currently on the market. Although the FDA has cleared such claims on the condom using Vytex NRL, the FDA rejected those claims for the exam glove. There is no guarantee that the FDA will ultimately or ever allow these claims on an exam glove.

Additionally, for many years, the FDA has required warnings on products containing latex due to the latex allergy issue that exists. Vystar plans on petitioning the FDA to have that label removed from or modified on products manufactured with Vytex NRL, by filing a Citizen's Petition. Such Petition is likely to require clinical test results indicating acceptable allergic reactions associated with Vytex NRL. There are no assurances that the FDA will grant that request.

Manufacturers are implementing trials of Vytex NRL in their facilities but final data are not yet available from all these manufacturers on its viability for their particular environments.

Samples of Vytex NRL have been made available to over 50 natural rubber latex and latex substitute end product manufacturers. Since the completion of the Vytex NRL Standard Operating Procedures (SOPs), Vystar has been in full production at Revertex Malaysia. Manufacturers that have signed a sampling agreement with us have been provided with samples of Vytex NRL for validating its use in their manufacturing processes. To date, a number of manufacturers have completed those runs and feedback is somewhat minimal at this point in some industries. Although most feedback received to date is positive, there is no assurance that such feedback will continue to be satisfactory.

We do not expect to declare any dividends in the foreseeable future.

We do not anticipate declaring any cash dividends to holders of our common stock in the foreseeable future. Consequently, shareholders must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize any future gains on their investment. Investors seeking cash dividends should not purchase our common stock.

There is no assurance that any significant public market for our shares of common stock will develop.

While our shares of common stock have been approved for trading on the OTC Bulletin Board under the symbol "VYST", there is currently no significant public market for our common stock and there is no assurance that there will be any such significant public market for our common stock in the future.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None

ITEM 2. PROPERTIES

Our headquarters are located in approximately 2,500 square feet of leased office space in Duluth, Georgia, a suburb of Atlanta. The term of the lease ends in January 2014.

Although we believe that our current space is adequate for the foreseeable future, if additional office space is required, we believe that suitable space will be available at market rates.

ITEM 3. LEGAL PROCEEDINGS

None

ITEM 4. [RESERVED]

PART II.

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Price Information

Our common stock is traded in the United States on the Over the Counter Bulletin Board (OTCBB) under the symbol "VYST." The following table shows the range of high and low closing prices for our common stock since it began trading on December 10, 2009.

	<u>High</u>	<u>Low</u>
December 31, 2009		
Fourth Quarter	\$ 2.10	\$ 1.00
December 31, 2010		
First Quarter	\$ 2.03	\$ 1.26
Second Quarter	\$ 1.75	\$ 1.11
Third Quarter	\$ 1.16	\$ 0.65
Fourth Quarter	\$ 1.00	\$ 0.66

Holders

As of March 29, 2011, there were 190 holders of record of the Company's common stock.

Dividends

We have never paid or declared any cash dividends on our common stock and we do not intend to pay or declare dividends on our common stock in the near future. We presently expect to retain any future earnings to fund continuing development and growth of our business. Our payment of dividends is subject to the discretion of our board of directors and will depend on earnings, financial condition, capital requirements and other relevant factors.

Issuer Purchases of Equity Securities

We did not make any repurchases of our equity securities during the fourth quarter of 2010.

Securities Authorized for Issuance Under Equity Compensation Plans

Information concerning our equity compensation plans is set forth in Item 12 of Part III of this Annual Report on Form 10-K.

Recent Sales of Unregistered Securities

Private Placements

From October 1, 2010 through December 31, 2010, the Company issued 280,250 shares of its common stock upon the exercise of warrants at \$0.50 per share.

From October 1, 2010 through December 31, 2010, the Company issued 25,000 shares of its common stock valued at \$18,000 for services rendered to the Company in 2010.

From October 1, 2010 through December 31, 2010, the Company issued 2,817 warrants to purchase one share of common stock at an exercise price of \$0.71 per share, 2,353 warrants to purchase one share of common stock at an exercise price of \$0.85 per share, 2,500 warrants to purchase one share of common stock at an exercise price of \$0.80 per share, and 100,000 warrants to purchase one share of common stock at an exercise price of \$0.25 per share, all for services rendered to the Company in 2010.

Stock Option Grants

None.

Application of Securities Laws and Other Matters

No underwriters were involved in the foregoing sales of securities. The securities described above were issued to investors in reliance upon the exemption from the registration requirements of the Securities Act, as set forth in Section 4(2) under the Securities Act and Regulation D promulgated thereunder, as applicable, relative to sales by an issuer not involving any public offering, to the extent an exemption from such registration was required.

The issuance of stock options as described above were issued pursuant to written compensatory plans or arrangements with our employees, directors and consultants, in reliance on the exemption provided by Rule 701 promulgated under the Securities Act. All recipients either received adequate information about us or had access, through employment or other relationships, to such information.

All of the foregoing securities are deemed restricted securities for purposes of the Securities Act. All certificates representing the issued shares of common stock, warrants and options described above included appropriate legends setting forth that the securities had not been registered and the applicable restrictions on transfer.

ITEM 6. SELECTED FINANCIAL DATA

As a smaller reporting company, we are not required to provide the information required by this Item pursuant to 301(c) of Regulation S-K.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

This analysis of our results of operations should be read in conjunction with the accompanying financial statements, including notes thereto, contained in Item 8 of this Report. This Report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act, and Section 21E of the Exchange Act. Statements that are predictive in nature and that depend upon or refer to future events or conditions are forward-looking statements. Although we believe that these statements are based upon reasonable expectations, we can give no assurance that projections will be achieved. Please refer to the discussion of forward-looking statements included in Part I of this Report.

Overview

Vystar LLC, the predecessor to the Company, was formed February 2, 2000, as a Georgia limited liability company by Travis W. Honeycutt. The Company's operations under the LLC entity were focused substantially on the research, development and testing of the Vytex® Natural Rubber Latex ("NRL") process, as well as attaining intellectual property rights. In 2003, the Company reorganized as Vystar Corporation, a Georgia corporation, at which time all assets and liabilities of the limited liability company became assets and liabilities of Vystar Corporation, including all intellectual property rights, patents and trademarks.

We are the creator and exclusive owner of the innovative technology to produce Vytex NRL. This technology reduces antigenic protein in natural rubber latex products to virtually undetectable levels in both liquid NRL and finished latex products. We have introduced Vytex NRL, our "ultra low protein" natural rubber latex, throughout the worldwide marketplace that uses NRL or latex substitutes as a component of manufactured products. Natural rubber latex is used in an extensive range of products including balloons, textiles, footwear and clothing (threads), adhesives, foams, furniture, carpet, paints, coatings, protective equipment, sporting equipment, and especially health care products such as condoms, surgical and exam gloves. We produce Vytex through toll manufacturing and licensing agreements and have introduced Vytex NRL into the supply channels with aggressive, targeted marketing campaigns directed to the end users.

Prior to the last quarter of 2009, we were a development stage company. Our primary focus since late 2009 has been increasing market-acceptance for Vytex NRL and accordingly, increasing sales. We expect that our financial condition and results of operations will undergo substantial change from what we experienced in our first year as an operating stage company and previously as a development stage company. In addition to recording both revenue and expense from product sales, we expect to incur increased costs for sales and marketing expenses. Accordingly, the financial condition and results of operations reflected in our historical financial statements are not expected to be indicative of our future financial condition and results of operations.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations are based upon our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles. As such, we are required to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the

financial statements and the reported amounts of revenues and expenses during the reporting period. By their nature, these estimates and judgments are subject to an inherent degree of uncertainty. Our management reviews its estimates on an on-going basis. We base our estimates and assumptions on historical experience, knowledge of current conditions and our understanding of what we believe to be reasonable that might occur in the future considering available information. Actual results may differ from these estimates, and material effects on our operating results and financial position may result.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our financial statements.

Share-based Compensation

Generally accepted accounting principles require all share-based payments, including grants of employee stock options and warrants, to be recognized in the financial statements based on their fair values. We compute the value of awards granted by utilizing the Black-Scholes valuation model based upon their expected lives, expected volatility, expected dividend yield, and the risk-free interest rate. The value of the awards is then straight-line expensed over the service period of the awards.

Income Taxes

We account for income taxes using the assets and liability method. This method requires that the deferred tax consequences of temporary differences between the amounts recorded in our financial statements and the amounts included in our federal and state income tax returns be recognized in the balance sheet. Estimates are often required with respect to, among other things, the potential utilization of any operating and capital loss carry-forwards for both federal and state income tax purposes and valuation allowances required, if any, for tax assets that may not be realizable in the future. We believe that it is more likely than not that the amounts recorded as deferred income tax assets will not be recoverable through future taxable income generated by us. As a result, the Company recorded a 100% valuation allowance against our net deferred tax assets as of December 31, 2010. We believe the procedures and estimates used in our accounting for income taxes are reasonable and in accordance with established tax law.

RESULTS OF OPERATIONS

Year ended December 31, 2010 compared to year ended December 31, 2009

Revenues and Gross Margin

	Year Ended December 31		\$ Change	% Change
	2010	2009		
Revenues	\$ 861,982	\$ 50,933	\$ 811,049	N/M ("not meaningful")
Gross Margin	\$ (191,754)	\$ (3,420)	\$ (188,334)	N/M

We transitioned to an operating company from the development stage during the fourth quarter of 2009. This is why the percentage increase in revenues for the year ended December 31, 2010 compared to the year ended December 31, 2009 is not meaningful. During 2010, we offered introductory pricing to certain customers to partially offset the costs they incurred in preparation and startup costs associated with introducing Vytex into their manufacturing processes which generated the negative gross margin. For the fourth quarter of 2010, we had positive gross margin of approximately \$7,100. We expect that increasingly positive gross margins will occur in 2011 and forward. All of our revenues for the periods shown above have been generated through product sales. Cost of revenues consists primarily of product and freight costs.

Operating Costs and Expenses

	Year Ended December 31		\$ Change	% Change
	2010	2009		
OPERATING COSTS AND EXPENSES				
Sales and marketing	\$ 770,845	\$ 676,370	\$ 94,475	14%
General and administrative	2,154,241	1,332,890	821,351	62%
Research and development	70,570	223,102	(152,532)	(68)%
	\$ 2,995,656	\$ 2,232,362	\$ 763,294	34%

Our operating expenses were \$2,995,656 and \$2,232,362 for the years ended December 31, 2010 and 2009, respectively, for an increase of \$763,294 or 34%. In 2010, \$440,842 was recorded for share-based compensation as well as an additional \$701,393 for amortization of deferred compensation. This compares with \$299,084 for share-based compensation in 2009 and \$100,469 for amortization of deferred compensation in that period. The deferred compensation expense in 2010 and 2009 represents the amortized fair value of stock and warrants issued for services to non-employees. The share-based compensation charges to operations in 2010 and 2009 were primarily for stock options granted under our Stock Option Plan to executive officers and were made so that their interests would be aligned with those of shareholders, providing incentive to improve Company performance on a long-term basis. Grants of stock purchase warrants were also made to third parties for various services rendered. Amortization of deferred compensation is recorded in general and administrative expenses. Share-based compensation expense is included in sales and marketing and general and administrative expenses. For 2010, the amount of share-based compensation included in sales and marketing was \$70,530 and in general and administrative was \$370,312. For 2009, the amount of share-based compensation included in sales and marketing was \$61,697 and in general and administrative was \$237,387.

For the years ended December 31, 2010 and 2009, sales and marketing expenses were \$770,845 and \$676,370, respectively. The increase of \$94,475 is primarily due to in 2010 having one additional full-time sales professional, increases in travel and other related sales activities, including consulting services and promotional and advertising expenditures. Sales and marketing expenses consist primarily of compensation and support costs for sales and marketing personnel, professional services, promotional, marketing and related activities.

For the years ended December 31, 2010 and 2009, general and administrative expenses were \$2,154,241 and \$1,332,890, respectively. The increase of \$821,351 is primarily composed of increased costs of being a public company and relate primarily to investor and public relations, and insurance cost increases, as well as the increase in amortization of deferred compensation for stock and warrants issued for services and increase in share-based compensation expense. General and administrative expenses consist primarily of compensation and support costs for management and administrative staff, and for other general and administrative costs, including professional fees related to accounting, finance, and legal services as well as other operating expenses.

Included in our operating expenses for 2010 was \$70,570 for research and development expenses compared to \$223,102 for 2009 for a decrease of \$152,532. The decrease is primarily due to the completion of many research and development projects in 2009 with more focus in 2010 on sales and marketing and less on research and development activities. Research and development expenses consist primarily of compensation for employees and contractors engaged in internal research and product development activities, laboratory operations, and related expenses.

Other Income (Expense)

Other income for year ended December 31, 2010, consisted of \$2,954 of interest income on cash deposits net of interest expense of \$3,639. This compares to \$13,065 of interest income for the year ended December 31, 2009 net of \$3,135 interest expense and the \$120,205 reversal of a provision for a related party note receivable.

Net Loss

As a result of the factors described above, the net loss increased \$1,082,448 to \$3,188,095 for the year ended December 31, 2010 compared to \$2,105,647 for the year ended December 31, 2009.

LIQUIDITY AND CAPITAL RESOURCES

As of December 31, 2010, we had current assets of \$655,894, including cash of \$282,625, and \$666,157 in current liabilities, or a working capital deficit of \$10,263. We use working capital to finance our ongoing operations and since those operations do not currently cover all of our operating costs, managing working capital is essential to our company's future success.

Net cash used in operating activities was \$1,746,491 for the year ended December 31, 2010 as compared to \$2,031,106 for the year ended December 31, 2009. During the year ended December 31, 2010, cash used in operations was primarily due to the net loss for the year of \$3,188,095, net of non-cash related add-back of share-based compensation expense of \$1,142,234.

Net cash provided by investing activities was \$120,344 during the year ended December 31, 2010, as compared to net cash provided of \$791,868 during the year ended December 31, 2009. During the year ended December 31, 2010, we received proceeds of \$137,949 from a related party note receivable offset partially by \$17,605 in costs related to our patents and intellectual property.

Net cash provided by financing activities was \$1,128,625 during the year ended December 31, 2010, as compared to cash provided of \$1,062,730 during the year ended December 31, 2009. These were the proceeds we received from the sale of common stock and the exercise of warrants.

On March 11, 2011, the Company entered into a \$3,000,000 credit facility with Topping Lift Capital LLC (the "Lender") pursuant to a Loan and Security Agreement and accompanying Loan Documents (the "Facility"). The material terms of the Facility include the following:

- (i) (i)The Company may borrow up to a total of \$3,000,000 under the Facility consisting of borrowings up to \$750,000 under the working capital portion of the Facility and up to \$3,000,000 less any advances under the working capital portion of the Facility under the borrowing base portion of the Facility. The latter portion of the Facility is based on percentages of the Company's purchase orders, inventory and accounts receivable outstanding from time to time. Borrowings under the Facility are subject to the Company maintaining compliance with certain affirmative, negative and financial covenants, including covenants based on the Company's financial projections.
- (ii) The repayment of any obligations due and owing under the Facility are secured by all assets of the Company.
- (iii) The term of the Facility is 18 months.
- (iv) The borrowing base portion of the Facility bears interest at 14% per annum and is paid monthly. The working capital portion of the Facility bears interest at 17% per annum and is paid monthly. The principal of the Facility is due in full at September 11, 2012.
- (v) The Company issued warrants to purchase 495,500 shares of the Company's common stock to the Lender at \$.01 per share which vest upon the initial loan advance.
- (vi) The Company must raise \$800,000 in additional capital (consisting of common or preferred equity and/or subordinated indebtedness) by not later than May 31, 2011, before borrowing under the Facility.

- (vii) Borrowings under the working capital portion of the Facility are available beginning on June 1, 2011.
- (viii) Amounts outstanding under the Facility may be repaid at any time by the Company without penalty.

Also on March 11, 2011, the Company issued to existing shareholders of the Company an aggregate of \$400,000 of convertible promissory notes together with warrants to purchase an aggregate of 160,000 shares of the Company's common stock at \$0.68 per share for two years from the date of issuance. Such notes are (i) unsecured, (ii) bear interest at an annual rate of ten percent (10%) per annum from January 1, 2011, and (iii) are convertible into shares of the Company's common stock at the conversion rate of \$0.68 of principal and interest for each such share. No payments of interest or principal are payable until March 11, 2013. The notes may be prepaid by the Company without penalty upon 15 days prior notice to the holders.

The Company's financial statements are prepared using the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America and have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. However, the Company has incurred significant losses and experienced negative cash flow since its inception. At December 31, 2010, the Company had cash of approximately \$283,000 and a deficit in working capital of \$10,263. Further, at December 31, 2010, the accumulated deficit amounted to approximately \$14,060,217. As a result of the Company's history of losses and financial condition, there is substantial doubt about the ability of the Company to continue as a going concern.

A successful transition to attaining profitable operations is dependent upon obtaining sufficient financing to fund the Company's planned expenses and achieving a level of revenues adequate to support the Company's cost structure. Management plans to finance future operations through the use of cash on hand, increased revenues and the financing transactions closed in March 2011 (see Note 15 to the financial statements). Management plans to raise the required additional \$800,000 in permitted debt, as defined, by April 30, 2011 so that the Company may utilize the loan facility which closed in March 2011, assuming that the other covenants, most importantly achieving the financial projections, are met. We may also consider raising additional capital through a private placement and expect to receive proceeds from stock warrant exercises from existing shareholders. As the Company's product continues to gain market acceptance, the Company expects sales in 2011 to continually increase.

There can be no assurances that the Company will be able to achieve its projected level of revenues in 2011 and beyond. If the Company is unable to achieve its projected revenues and is not able to obtain alternate additional financing of equity or debt, the Company would need to significantly curtail or reorient its operations during 2011, which could have a material adverse effect on the Company's ability to achieve its business objectives and as a result may require the Company to file for bankruptcy or cease operations. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts classified as liabilities that might be necessary should the Company be forced to take any such actions.

Our future expenditures will depend on numerous factors, including: the rate at which we can introduce and sell NRL to manufacturers; the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights; and market acceptance of our products and competing technological developments. We expect that we will incur approximately \$2 million of cash expenditures for our operating expenses over the next 12 months. This includes almost \$800,000 in both personnel costs and general and administrative expenses, including professional fees. As we expand our activities and operations, our cash requirements are expected to increase at a rate consistent with revenue growth after we have achieved sustained revenue generation.

Off-Balance Sheet Arrangements

We do not have any material off-balance sheet arrangements.

Income Taxes

Due to a required change in the applicable accounting standards, the Company adopted a new recognition threshold for income tax benefits arising from uncertain positions effective January 1, 2009. Generally accepted accounting principles in the United States of America ("GAAP") prescribe a recognition threshold that a tax position is required to meet before being recognized in the financial statements and provides guidance on derecognition, measurement, classification, interest and penalties, accounting in interim periods, disclosure and transition issues. We recognized tax benefits from all tax positions we have taken, and there has been no material adjustment to any carryforwards, NOL or R&D credits, as a result of implementing the new standard. There were no material unrecognized tax benefits and related tax liabilities at December 31, 2010 and 2009. In addition, future changes in the unrecognized tax benefits will likely have no impact on our effective tax rate due to the existence of the valuation allowance.

As of December 31, 2010 and 2009, we have no accrual requirement for interest or penalties related to uncertain tax positions. Accrued interest relating to uncertain tax positions would be recorded as interest expense and penalties related to uncertain positions would be recorded as general and administrative expenses.

The tax years 2007 to 2010 remain open to examination by the major taxing jurisdictions to which we are subject. Additionally, upon inclusion of the NOL and R&D credit carryforward tax benefits in future tax returns, the related tax benefit for the period in which the benefit arose may be subject to examination.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

As a smaller reporting company, we are not required to provide the information required by this Item pursuant to 301(c) of Regulation S-K.

ITEM 8. FINANCIAL STATEMENTS

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Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders
Vystar Corporation

We have audited the accompanying balance sheets of Vystar Corporation (the "Company") as of December 31, 2010 and 2009, and the related statements of operations, stockholders' equity, and cash flows for the years then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. 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 that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Vystar Corporation as of December 31, 2010 and 2009, and the results of its operations and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 2 to the financial statements, the Company's recurring losses from operations and limited capital resources raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters also are described in Note 2. These financial statements do not include any adjustments that may result from the outcome of this uncertainty.

/s/ Habib, Arogeti & Wynne, LLP
Atlanta, Georgia
March 31, 2011

Vystar Corporation
Balance Sheets
As of December 31

	<u>2010</u>	<u>2009</u>
ASSETS		
CURRENT ASSETS		
Cash	\$ 282,625	\$ 780,147
Accounts receivable	31,707	25,678
Inventory	189,268	140,827
Prepaid expenses	97,396	97,483
Note receivable due from related party	-	137,949
Other	54,898	31,435
TOTAL CURRENT ASSETS	<u>655,894</u>	<u>1,213,519</u>
PROPERTY AND EQUIPMENT, NET	2,622	8,104
OTHER ASSETS		
Patents and trademarks, net	125,260	115,975
Other	4,421	5,887
TOTAL ASSETS	<u>\$ 788,197</u>	<u>\$ 1,343,485</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
CURRENT LIABILITIES		
Accounts payable	\$ 210,106	\$ 128,888
Accrued compensation	205,395	60,648
Accrued expenses	250,656	67,274
TOTAL CURRENT LIABILITIES	<u>666,157</u>	<u>256,810</u>
LONG-TERM LIABILITIES	<u>-</u>	<u>47,399</u>
TOTAL LIABILITIES	<u>666,157</u>	<u>304,209</u>
STOCKHOLDERS' EQUITY		
Preferred stock, \$0.0001 par value, 15,000,000 shares authorized; none issued and outstanding	-	-
Common stock, \$0.0001 par value, 50,000,000 shares authorized; 15,417,524 and 13,042,774 shares issued and outstanding at December 31, 2010 and 2009, respectively	1,542	1,304
Additional paid-in capital	14,192,551	11,994,522
Deferred compensation	(11,836)	(84,428)
Accumulated deficit	(14,060,217)	(10,872,122)
TOTAL STOCKHOLDERS' EQUITY	<u>122,040</u>	<u>1,039,276</u>
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	<u>\$ 788,197</u>	<u>\$ 1,343,485</u>

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

Vystar Corporation
 Statements of Operations
 For the Years Ended December 31

	<u>2010</u>	<u>2009</u>
REVENUES, NET	\$ 861,982	\$ 50,933
COST OF REVENUES	<u>1,053,736</u>	<u>54,353</u>
Gross Margin	(191,754)	(3,420)
OPERATING EXPENSES		
Sales and marketing, including non-cash share-based compensation of \$68,085 and \$61,697 in 2010 and 2009, respectively	770,845	676,370
General and administrative, including non-cash share-based compensation of \$1,074,149 and \$309,670 in 2010 and 2009, respectively	2,154,241	1,332,890
Research and development, including non-cash share-based compensation of \$28,186 in 2009	<u>70,570</u>	<u>223,102</u>
Total Operating Expenses	<u>2,995,656</u>	<u>2,232,362</u>
LOSS FROM OPERATIONS	(3,187,410)	(2,235,782)
OTHER INCOME (EXPENSE)		
Interest income	2,954	13,065
Interest expense	(3,639)	(3,135)
Reversal of provision for note receivable from related party	<u>-</u>	<u>120,205</u>
NET LOSS	<u>\$ (3,188,095)</u>	<u>\$ (2,105,647)</u>
Basic and Diluted Loss per Share	<u>\$ (0.22)</u>	<u>\$ (0.17)</u>
Basic and Diluted Weighted Average Number of Common Shares Outstanding	<u>14,504,066</u>	<u>12,467,732</u>

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

Vystar Corporation
 Statements of Stockholders' Equity
 For the Years Ended December 31, 2010 and 2009

	Number of Shares	Common Stock	Additional Pai d-in Capital	Deferred Compensation	Accumulated Deficit	Total
Ending Balance, December 31, 2008	11,951,774	\$ 1,195	\$ 10,466,302	\$ (18,384)	\$ (8,766,475)	\$ 1,682,638
Common stock issued with warrants in private placement memorandum at \$2.00/share, net of issuance costs of \$34,394 cash	503,000	50	971,556	-	-	971,606
Common stock issued for exercise of warrants, net of issuance costs of \$875 cash	488,000	49	91,076	-	-	91,125
Common stock issued for services, valued at \$1.63/share	100,000	10	162,990	(163,000)	-	-
Share-based compensation to employees	-	-	184,550	-	-	184,550
Share-based payments for services vested in 2009, net of issuance costs of \$1,751 non-cash	-	-	118,048	(3,514)	-	114,534
Amortization of deferred compensation	-	-	-	100,470	-	100,470
Net loss	-	-	-	-	(2,105,647)	(2,105,647)
Ending Balance, December 31, 2009	13,042,774	1,304	11,994,522	(84,428)	(10,872,122)	1,039,276
Common stock issued with warrants in private placement memorandum at \$1.25/share	448,000	45	559,955	-	-	560,000
Issuance of additional common stock and warrants to 2009 purchasers in private placement	129,000	13	(13)	-	-	-
Common stock issued for exercise of warrants	1,302,750	130	568,495	-	-	568,625
Common stock issued for services to be rendered, valued between \$2.03 and \$0.72 per share	320,000	32	478,468	(478,500)	-	-
Common stock issued for services already rendered, valued between \$2.03 and \$0.72 per share	175,000	18	190,882	-	-	190,900
Share-based compensation to employees	-	-	334,738	-	-	334,738
Share-based payments for services vested in 2010	-	-	65,504	-	-	65,504
Amortization of deferred compensation	-	-	-	551,092	-	551,092
Net loss	-	-	-	-	(3,188,095)	(3,188,095)
Ending Balance, December 31, 2010	15,417,524	\$ 1,542	\$ 14,192,551	\$ (11,836)	\$ (14,060,217)	\$ 122,040

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

Vystar Corporation
 Statements of Cash Flows
 For the Years Ended December 31

	<u>2010</u>	<u>2009</u>
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss	\$ (3,188,095)	\$ (2,105,647)
Adjustment to reconcile net loss to net cash used in operating activities		
Share-based compensation expense	1,142,234	399,553
Reversal of provision on related party note receivable	-	(120,205)
Depreciation	5,482	7,203
Amortization	8,320	2,982
(Increase) decrease in assets		
Accounts receivable	(6,029)	(25,678)
Inventory	(48,441)	(140,827)
Prepaid expenses	87	(69,801)
Other	(21,997)	(30,218)
Increase (decrease) in liabilities		
Accounts payable	81,218	24,850
Accrued compensation and expenses	<u>280,730</u>	<u>26,682</u>
Net cash used in operating activities	<u>(1,746,491)</u>	<u>(2,031,106)</u>
CASH FLOWS FROM INVESTING ACTIVITIES		
Proceeds on related party note receivable	137,949	60,000
Cost of patents	(17,605)	(18,132)
Maturity (purchase) of investment	<u>-</u>	<u>750,000</u>
Net cash provided by investing activities	<u>120,344</u>	<u>791,868</u>
CASH FLOWS FROM FINANCING ACTIVITIES		
Issuance of common stock, net of issuance costs	<u>1,128,625</u>	<u>1,062,730</u>
Net cash provided by financing activities	<u>1,128,625</u>	<u>1,062,730</u>
NET DECREASE IN CASH	(497,522)	(176,508)
CASH - BEGINNING OF YEAR	<u>780,147</u>	<u>956,655</u>
CASH - END OF YEAR	<u>\$ 282,625</u>	<u>\$ 780,147</u>
SUPPLEMENTAL DISCLOSURES OF CASH FLOW INFORMATION:		
CASH PAID DURING THE YEAR FOR		
Interest	\$ 3,639	\$ 3,135

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

NOTE 1- SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

History and Nature of Business

Vystar Corporation ("Vystar", the "Company", "we", "us", or "our") is the creator and exclusive owner of the innovative technology to produce Vytex® Natural Rubber Latex ("NRL"). This technology reduces antigenic protein in natural rubber latex products to virtually undetectable levels in both liquid NRL and finished latex products. Vystar has introduced Vytex NRL, its "ultra low protein" natural rubber latex, throughout the worldwide marketplace that uses NRL or latex substitutes as a component of manufactured products. Natural rubber latex or latex substitutes are used in an extensive range of products including balloons, textiles, footwear and clothing (threads), adhesives, foams, furniture, carpet, paints, coatings, protective equipment, sporting equipment, and, especially health care products such as condoms, surgical and exam gloves. The Company plans to produce Vytex through toll manufacturing and licensing agreements and has started introducing Vytex NRL into the supply channels with targeted marketing campaigns directed to the end users. During 2008, the Company signed an agreement with Revertex (Malaysia) for the production of Vytex NRL. Revertex is a non-exclusive, toll manufacturer for Vystar.

Vystar LLC, the predecessor to the Company, was formed February 2, 2000, as a Georgia limited liability company. The Company's operations under the LLC entity were focused substantially on the research, development and testing of the Vytex NRL process, as well as attaining intellectual property rights. In 2003, the Company reorganized as Vystar Corporation, a Georgia corporation, at which time all assets and liabilities of the limited liability company became assets and liabilities of Vystar Corporation, including all intellectual property rights, patents and trademarks.

Development Stage

Since inception as Vystar LLC on February 2, 2000 through the period ending September 30, 2009, the Company's activities were devoted primarily to the development of NRL and the raising of capital. Vystar Corporation was considered a development stage company as defined under accounting principles generally accepted in the United States of America ("GAAP") during that period. The Company transitioned to the operational stage from the development stage during the final quarter of 2009; with that change, Vystar's primary focus changed to increasing market acceptance for NRL and accordingly, increasing sales.

Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying disclosures. Although these estimates are based on management's best knowledge of current events and actions the Company may undertake in the future, actual results could differ from these estimates.

Concentration of Credit Risk

Certain financial instruments potentially subject the Company to concentrations of credit risk. These financial instruments consist primarily of cash, accounts receivable and, as discussed in Note 10, an unsecured related party note receivable. Cash held in operating accounts in many cases exceeds the Federal Deposit Insurance Corporation, or FDIC, insurance limits. While we monitor cash balances in our operating accounts on a regular basis and adjust the balances as appropriate, these balances could be impacted if the underlying financial institutions fail. To date, we have experienced no loss or lack of access to our cash; however, we can provide no assurances that access to our cash will not be impacted by adverse conditions in the financial markets.

Accounts Receivable

Accounts receivable are stated at the amount management expects to collect from outstanding balances. Management provides for uncollectible amounts through a charge to earnings and a credit to an allowance for doubtful accounts based upon its assessment of the current status of individual accounts. Balances that are still outstanding after management has performed reasonable collection efforts are written off through a charge to the allowance and a credit to accounts receivable. As of December 31, 2010 and 2009, we have not provided for any uncollectible amounts through a charge to earnings as all balances are believed to be fully collectable. We grant credit to our customers without requiring collateral. The amount of accounting loss for which we are at risk in these unsecured accounts receivable is limited to their carrying value.

Inventory

Inventory consisting of Vytex is stated at the lower of cost or market and cost is determined using the first-in, first-out (FIFO) method.

Property and Equipment

Property and equipment is stated at cost. Depreciation is provided by the use of the straight-line and accelerated methods for financial and tax reporting purposes, respectively, over the estimated useful lives of the assets, generally 5 years.

Patents and Trademarks

Patents represent legal and other fees associated with the registration of patents. The Company has two patents and two provisional patent submissions with the United States Patent and Trade Office (USPTO) as well as an international PCT (Patent Cooperation Treaty) patent. Patents are carried at cost and are being amortized on a straight-line basis over their estimated useful lives, typically 20 years.

The Company has incurred legal and other fees associated with its application to the USPTO for trademark protection for "Vystar", "Vytex", and "Created by Nature. Recreated by Science." during 2010 and 2009. Trademarks are carried at cost and since their estimated life is indeterminable, no amortization is recognized. Instead, they are evaluated annually for impairment.

Impairment of Long-lived Assets

Long-lived assets, including property and equipment and intangible assets with finite lives, are evaluated for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. If the sum of the expected future undiscounted cash flows is less than the carrying amount of the asset, an impairment loss is recognized in the amount that the carrying amount of the asset exceeds its fair value. Fair value is determined based on discounted future net cash flows associated with the use of the asset.

Fair Value of Financial Instruments

The Company's financial instruments consist of cash, accounts receivable, note receivable due from related party, accounts payable and accrued expenses. The carrying values of all the Company's financial instruments approximate fair value because of their short maturities.

In specific circumstances, certain assets and liabilities are reported or disclosed at fair value. Fair value is the exit price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the Company's principal market for such transactions. If there is not an established principal market, fair value is derived from the most advantageous market.

Valuation inputs are classified in the following hierarchy:

- Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 inputs are directly or indirectly observable valuation inputs for the asset or liability, excluding Level 1 inputs.
- Level 3 inputs are unobservable inputs for the asset or liability.

Highest priority is given to Level 1 inputs and the lowest priority to Level 3 inputs. Acceptable valuation techniques include the market approach, income approach, and cost approach. In some cases, more than one valuation technique is used.

Income Taxes

The Company follows the asset and liability approach to financial accounting and reporting for income taxes. Deferred income tax assets and liabilities are computed for temporary differences between the financial statement and tax bases of assets and liabilities and for net operating loss carryforwards that will result in taxable or deductible amounts in the future based on enacted tax laws and rates applicable to the periods in which the differences or carryforwards are expected to affect taxable income. Valuation allowances are established when necessary to reduce deferred tax assets to the amount more likely than not to be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the net operating losses and temporary differences becomes deductible. Income tax expense (benefit) is the tax payable or refundable for the period plus or minus the change during the period in deferred tax assets and liabilities.

Loss Per Share

The Company presents basic and diluted loss per share. Because the Company reported a net loss in 2010 and 2009, common stock equivalents, including stock options and warrants, were anti-dilutive; therefore, the amounts reported for basic and dilutive loss per share were the same. Excluded from the computation of diluted loss per share were options to purchase 3,963,333 shares and 3,565,000 shares of common stock for 2010 and 2009, respectively, as their effect would be anti-dilutive. Warrants to purchase 1,727,920 shares and 2,627,764 shares of common stock for 2010 and 2009, respectively, were also excluded from the computation of diluted loss per share as their effect would be anti-dilutive.

Revenues

We expect to derive most of our revenue from the sales of or license fees from our Vytex Natural Rubber Latex raw material to various manufacturers of rubber and rubber end products using NRL and/or their distributors. The Company recognizes revenue when the following four criteria are met: (1) persuasive evidence of an arrangement exists; (2) shipment or delivery has occurred; (3) the price is fixed or determinable and (4) collectability is reasonably assured. Revenue is recognized at the time product is shipped and title passes to the customer.

Cost of Revenues

Cost of revenues consists primarily of product and freight costs.

Research and Development

Research and development costs are expensed when incurred. Research and development costs include all costs incurred related to the research, development and testing of the Company's process to produce Vytex NRL.

NOTE 2 – LIQUIDITY AND GOING CONCERN

The Company's financial statements are prepared using the accrual method of accounting in accordance with accounting principles generally accepted in the United States of America and have been prepared on a going concern basis, which contemplates the realization of assets and the settlement of liabilities in the normal course of business. However, the Company has incurred significant losses and experienced negative cash flow since its inception. At December 31, 2010, the Company had cash of approximately \$283,000 and a deficit in working capital of \$10,263. Further, at December 31, 2010, the accumulated deficit amounted to approximately \$14,060,217. As a result of the Company's history of losses and financial condition, there is substantial doubt about the ability of the Company to continue as a going concern.

A successful transition to attaining profitable operations is dependent upon obtaining sufficient financing to fund the Company's planned expenses and achieving a level of revenues adequate to support the Company's cost structure. Management plans to finance future operations through the use of cash on hand, increased revenues and the financing transactions closed in March 2011 (see Note 15). Management plans to raise the required additional \$800,000 in permitted debt, as defined, by April 30, 2011 so that the Company may utilize the loan facility which closed in March 2011, assuming that the other covenants, most importantly achieving the financial projections, are met. We may also consider raising additional capital through a private placement and expect to receive proceeds from stock warrant exercises from existing shareholders. As the Company's product continues to gain market acceptance, the Company expects sales in 2011 to continually increase.

There can be no assurances that the Company will be able to achieve its projected level of revenues in 2011 and beyond. If the Company is unable to achieve its projected revenues and is not able to obtain alternate additional financing of equity or debt, the Company would need to significantly curtail or reorient its operations during 2011, which could have a material adverse effect on the Company's ability to achieve its business objectives and as a result may require the Company to file for bankruptcy or cease operations. The financial statements do not include any adjustments relating to the recoverability and classification of recorded asset amounts or amounts classified as liabilities that might be necessary should the Company be forced to take any such actions.

NOTE 3 – PROPERTY AND EQUIPMENT

Property and equipment consists of the following at December 31:

	<u>2010</u>	<u>2009</u>
Furniture and fixtures	\$ 15,347	\$ 15,347
Equipment	<u>23,431</u>	<u>23,431</u>
	38,778	38,778
Accumulated depreciation	<u>(36,156)</u>	<u>(30,674)</u>
	<u>\$ 2,622</u>	<u>\$ 8,104</u>

Depreciation expense for the years ended December 31, 2010 and 2009 was \$5,482 and \$7,203, respectively.

NOTE 4 – PATENTS AND TRADEMARKS

Patents and trademarks are as follows at December 31:

	<u>2010</u>	<u>2009</u>
Patents	\$ 136,342	\$ 118,737
Accumulated amortization	<u>(20,154)</u>	<u>(11,834)</u>
	116,188	106,903
Trademarks	<u>9,072</u>	<u>9,072</u>
	<u>\$ 125,260</u>	<u>\$ 115,975</u>

Amortization expense for the years ended December 31, 2010 and 2009 was \$8,320 and \$2,982, respectively. Estimated future amortization expense for patents recorded as of December 31, 2010 for the next five years is expected to be approximately \$8,300 per year.

NOTE 5 – COMMITMENTS

Operating Leases

The Company is obligated under operating leases for its corporate office and office equipment expiring through January 2014 and March 2013, respectively.

Aggregate minimum future lease payments are as follows:

Year Ending December 31	Amount
2011	\$ 56,687
2012	58,263
2013	56,926
2014	4,707
Total	\$ 176,583

Rent expense approximating \$47,000 and \$53,000 is included in general and administrative expense for the years ended December 31, 2010 and 2009, respectively. Under the office lease, the Company is required to pay additional rent for excess operating expenses on an annual basis.

Employment Agreements

The Company has entered into employment agreements with certain members of the executive management, which include provisions for the continued payment of salary and benefits for periods ranging from 3 months to 6 months, as well as a percentage of base salary for compliance with specified covenants in the agreements, upon termination of employment by the Company without cause, as defined.

NOTE 6 – INCOME TAXES

Differences between the income tax benefit for 2010 and 2009 and the amount determined by applying the statutory federal income tax rate (34%) to the loss before income taxes were as follows:

	2010	2009
Statutory rate	(34.0%)	(34.0%)
State income taxes, net of federal deduction	(4.0)	(4.0)
Valuation allowance	38.0	38.0
	-%	-%

Significant components of the Company's deferred tax assets are as follows as of December 31:

	2010	2009
Deferred tax assets:		
Net operating loss carryforwards	\$ 3,334,000	\$ 2,555,000
Share-based compensation	1,133,000	739,000
Other	38,000	49,000
	<u>4,505,000</u>	<u>3,343,000</u>
Valuation allowance	(4,505,000)	(3,343,000)
Net deferred tax asset	<u>\$ -</u>	<u>\$ -</u>

The change in the total valuation allowance for the years ended December 31, 2010 and 2009 was an increase of \$1,162,000 and a decrease of \$147,000, respectively.

As of December 31, 2010, the Company had net operating loss carryforwards of approximately \$8,767,000 expiring during the years December 31, 2024 through 2030. This amount can be used to offset future taxable income of the Company.

Due to a required change in the applicable accounting standards, the Company adopted a new recognition threshold for income tax benefits arising from uncertain tax positions effective January 1, 2009. Upon adoption of the new standard and in all subsequent years, a tax benefit arising from an uncertain tax position can only be recognized for financial reporting purposes if, and to the extent that, the position is more likely than not to be sustained in an audit by the applicable taxing authority. There were no material unrecognized tax benefits and related tax liabilities at December 31, 2010 and 2009. Penalties related to uncertain tax positions would be recorded as a component of general and administrative expenses. Interest relating to uncertain tax positions would be recorded as a component of interest expense.

The tax years 2007 to 2010 remain open to examination by the major taxing jurisdictions to which we are subject. Additionally, upon inclusion of the NOL carryforward tax benefits in future tax returns, the related tax benefit for the period in which the benefit arose may be subject to examination.

NOTE 7 – DEFERRED COMPENSATION

Deferred compensation, which represents the unamortized fair value of the issuance of warrants and common stock for future services to non-employees, was as follows as of December 31:

	<u>2010</u>	<u>2009</u>
Warrants	\$ 1,549,209	\$ 1,549,209
Stock	641,500	163,000
Accumulated amortization	(2,178,873)	(1,627,781)
	<u>\$ 11,836</u>	<u>\$ 84,428</u>

NOTE 8 – STOCKHOLDERS' EQUITY

Common Stock and Warrants

In April 2009 the Company reopened a best efforts private placement to existing shareholders and qualified investors which had begun and closed in 2008 under the same terms and conditions (sale of common stock at \$2.00 per share with one stock purchase warrant at \$1.00 per share for every two common shares purchased) for a period not to exceed May 28, 2009. The Company received an additional \$565,700 in net proceeds and issued 288,000 shares of common stock and warrants to purchase an additional 144,000 shares of common stock.

During 2009 the Company issued stock purchase warrants to purchase 189,735 shares of common stock at exercise prices ranging from \$1.00 to \$2.20 in exchange for services rendered, valued at \$108,917. The warrants are exercisable for periods ranging from 2014 through 2019 and vested immediately.

During 2009 the Company issued 100,000 shares of common stock under an agreement for professional services to be provided for a period of twelve months, expiring June 30, 2010 and valued at \$163,000.

On November 2, 2009, the Company began a new private placement offering to sell up to 1,000,000 shares of common stock and 1,000,000 warrants to purchase common stock through a private placement memorandum. Under the terms of the private placement memorandum, the Company offered up to 1,000,000 shares of common stock at \$2.00 per share. For each two (2) shares of common stock purchased, the investor received a warrant to purchase a share of common stock at an exercise price of \$1.50 per share exercisable for one year from issuance and an additional warrant to purchase a share of common stock at an exercise price of \$3.25 per share exercisable for two years from issuance. The Company reserved the right to increase the offering up to 2,000,000 shares of common stock and 2,000,000 warrants to purchase common stock. In May 2010, the Company modified the private placement memorandum by changing the price of the common stock to \$1.25 per share. The exercise price of the warrants also was modified to \$1.00 per share if exercised by December 31, 2010. If the warrants were not exercised by December 31, 2010, then the price per share reverts back to the \$1.50 per share or \$3.25 per share, respectively. A total of an additional 129,000 shares of common stock and 129,000 warrants were issued to investors who participated in this private placement in 2009 prior to the modification of terms. During 2010 from this private placement memorandum, the Company received \$560,000 and issued 448,000 shares of common stock and warrants to purchase an additional 448,000 shares of common stock. Cumulatively since November 2, 2009, the Company received \$990,000 and issued 792,000 shares of common stock and 792,000 warrants related to this private placement memorandum. This private placement memorandum was closed in the fourth quarter of 2010. Additionally, in the fourth quarter of 2010, the Company reduced the exercise price of such common stock warrants to \$0.50 per share if warrants were exercised prior to December 31, 2010. If the common stock purchase warrants were not exercised by December 31, 2010, then the original exercise prices would remain in effect.

In January 2010, the Company issued 20,000 shares of common stock valued at \$40,598 under an agreement for professional services that were provided in the three month period ended March 31, 2010. The value of the common stock was expensed and included in stock-based compensation expense in the three month period ended March 31, 2010.

In January 2010, the Company issued 100,000 shares of common stock valued at \$185,000 under an agreement for professional services to be provided over a period of twelve months. The amortization of deferred compensation expense for the year ended December 31, 2010 related to these shares was \$173,164.

From May through October 2010, the Company issued 375,000 shares of common stock valued at \$443,800 under agreements for professional services to be provided over periods of four to six months in 2010. All of the amortization of deferred compensation expense related to these shares was recorded in 2010.

Additionally, the Company had recorded \$84,427 in amortization of deferred compensation expense during 2010, related to 2009 common stock and warrants issuances for services.

NOTE 9 – SHARE-BASED COMPENSATION

Generally accepted accounting principles require share-based payments to employees, including grants of employee stock options, to be recognized in the income statement based on their fair values at the date of grant, net of estimated forfeitures.

The Company used the Black-Scholes option pricing model to estimate the grant-date fair value of awards granted during 2010 and 2009. The following assumptions were used:

- Expected Dividend Yield – because the Company does not currently pay dividends, the expected dividend yield is zero;
- Expected Volatility in Stock Price – because trading in the Company's stock began late in 2009, there is insufficient data to project the Company's future volatility and instead the expected volatility of similar public entities (including companies engaged in the manufacture and/or distribution of medical, surgical and healthcare supplies) was considered with expected volatility ranging from 23.26% - 39.27%;
- Risk-free Interest Rate – reflects the average rate on a United States Treasury bond with maturity equal to the expected term of the option, ranging from 1.32 – 3.00%; and
- Expected Life of Awards – because the Company has had minimal experience with the exercise of options or warrants for use in determining the expected life for each award, the simplified method was used to calculate an expected life based on the midpoint between the vesting date and the end of the contractual term of the stock award.

The Company recorded \$334,738 and \$195,436 for the years ended December 31, 2010 and 2009, respectively, of share-based compensation expense related to employee and board members stock options. As of December 31, 2010, approximately \$831,000 of unrecognized compensation expense related to non-vested share-based awards remains to be recognized over a weighted average period of approximately 3 years.

Stock Options

During 2004, the Board of Directors of the Company adopted a stock option plan (the "Plan") and authorized up to 4,000,000 shares to be issued under the Plan. In April 2009, the Company's Board of Directors authorized an increase in the number of shares to be issued under the Plan to 10,000,000 shares and to include the independent board members in the Plan in lieu of continuing the previous practice of granting warrants each quarter to independent Board Members for services. At December 31, 2010, there were 4,012,500 shares of common stock reserved for issuance under the Plan. The Plan is intended to permit stock options granted to employees to qualify as incentive stock options under Section 422 of the Internal Revenue Code of 1986, as amended ("Incentive Stock Options"). All options granted under the Plan that are not intended to qualify as Incentive Stock Options are deemed to be non-qualified options. Stock options are granted at an exercise price equal to the fair market value of the Company's common stock on the date of grant, typically vest over periods up to 4 years and are typically exercisable up to 10 years. In 2010, the Company issued a total of 600,000 non-qualified stock options to certain employees that would only vest upon achievement of certain financial targets in 2010-2012. No expense has been recorded in the 2010 financial statements for any of these options as none vested in 2010 and it is not probable that vesting will occur in 2011.

The weighted-average assumptions used in the option pricing model for stock option grants were as follows:

	2010	2009
Expected Dividend Yield	-	-
Expected Volatility in Stock Price	39.23%	38.15%
Risk-Free Interest Rate	2.93%	1.88%
Expected Life of Stock Awards - Years	6	5.1
Weighted Average Fair Value at Grant Date	\$ 0.72	\$ 0.61

The following tables summarize all stock option activity of the Company for the years ended December 31, 2010 and 2009:

	Number of Shares	Weighted Average Exercise Price
Outstanding, December 31, 2008	3,400,000	\$ 1.03
Granted	2,175,000	1.63
Forfeited	<u>(400,000)</u>	\$ 1.63
Outstanding, December 31, 2009	5,175,000	\$ 1.26
Granted	<u>812,500</u>	\$ 1.92
Outstanding, December 31, 2010	<u>5,987,500</u>	\$ 1.33
Exercisable, December 31, 2010	<u>3,963,333</u>	\$ 1.12

	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Range of Exercise Prices
Outstanding, December 31, 2009	5,175,000	6.5	\$1.00 - \$1.63
Granted	812,500	9.3	\$0.75 - 2.00
Outstanding, December 31, 2010	<u>5,987,500</u>	7.4	\$0.75 - \$2.00
Exercisable, December 31, 2010	<u>3,963,333</u>	6.7	\$1.00 - \$1.63

As of December 31, 2010, there is no aggregate intrinsic value of outstanding stock options as the closing price of the Company's common stock on the last trading day of the year was below the exercise price of all outstanding stock options. The amount of aggregate intrinsic value will change based on the fair market value of the Company's common stock.

Warrants

Warrants are issued to third parties as payment for services and in conjunction with the issuance of common stock. The fair value of each common stock warrant issued for services is estimated on the date of grant using the Black-Scholes option pricing model. The following weighted average assumptions were used for warrants granted in 2010 and 2009:

	2010	2009
Expected Dividend Yield	-	-
Expected Volatility in Stock Price	38.46%	37.75%
Risk-Free Interest Rate	0.80%	2.00%
Expected Life of Awards, Years	2.5	4.6

The following table represents the Company's warrant activity for the years ended December 31, 2010 and 2009:

	Number of Warrants	Weighted Average Grant Date Fair Value	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life (Years)
Outstanding, December 31, 2008	2,690,779		\$ 0.85	5.14
Issued in private placement	359,000		\$ 1.82	
Granted	189,735	\$ 0.57	\$ 1.56	
Exercised	(488,000)		\$ 0.19	
Expired	<u>(15,000)</u>		\$ 1.00	
Outstanding, December 31, 2009	2,736,514		\$ 1.17	3.60
Issued in private placement	577,000		\$ 2.38	
Granted	138,956	\$ 0.47	\$ 0.52	
Exercised	(1,302,750)		\$ 0.44	
Expired	<u>(421,800)</u>		\$ 1.09	
Outstanding, December 31, 2010	<u>1,727,920</u>		\$ 1.64	3.86
Exercisable, December 31, 2010	<u>1,727,920</u>		\$ 1.64	3.86

The Company issued 138,956 warrants for services during 2010 at exercise prices ranging from \$0.25 to \$1.70 per share, exercisable over periods ranging from eighteen months to ten years. All of the warrants vested immediately. The fair value of the warrants was calculated as of the date of the grant utilizing the Black-Scholes option pricing model and assumptions as detailed above. The total amount of the fair value of warrants totaling \$65,504 was recorded in 2010 when vesting occurred.

NOTE 10 – RELATED PARTY TRANSACTIONS

Climax Global Energy

During 2005 and 2006, the Company advanced cash and made payments on behalf of Climax Global Energy, Inc. (“Climax”), a development stage company controlled by the Company’s former CEO, resulting in a note. On August 15, 2008, the Company entered into an agreement with Climax which specified the repayment terms of the note receivable. The significant terms were established as follows: (A) the note is non-interest bearing, (B) a \$25,000 payment to be made on or before September 30, 2008, (C) equal monthly payments of \$5,000 will commence in October 2008, and (D) the note shall be due and payable in full no later than January 31, 2010. In 2008, due to uncertainty of collection a reserve of approximately \$120,000 was recorded against the note, and in 2009, the reserve was reversed when it became apparent that the note would be repaid. In 2009 all payments due under the agreement were received by the Company, and the note balance totaling \$137,949 was paid in full in the first quarter of 2010.

Officers and Directors

On March 31, 2009, the Company’s four independent directors each received warrants, valued at approximately \$12,000 each, to purchase 20,000 shares of the Company’s common stock with an exercise price of \$1.63. The warrants are exercisable in whole or in part at or before March 31, 2019 and vested immediately.

During April 2009 the Company’s Board of Directors authorized the inclusion of the independent Board Members in the Company’s stock option plan in lieu of continuing the previous practice of granting warrants each quarter to independent board members. Each Board member was granted options to purchase 400,000 shares of the Company’s common stock, valued at approximately \$233,000 each, at an exercise price of \$1.63. Vesting occurs at the end of each complete calendar quarter served as an independent board member of the Company at a rate of 20,000 shares each. The options are exercisable in whole or in part before September 30, 2019.

The options granted to one of the Board members were forfeited in September 2009 due to resignation from the Board. That member returned to the Board in September 2009 and was granted an option to purchase 400,000 shares of the Company’s common stock at an exercise price of \$1.63. The terms are as discussed in the above paragraph and the options are exercisable in whole or in part before September 30, 2019.

Other

At December 31, 2009, the Company had accrued severance of \$81,250 payable to the Company’s former CFO, Glenn Smotherman. Mr. Smotherman has agreed to payment of this liability beginning at the earlier of payment in full of the Climax receivable or the Company’s achievement of specific sales goals. The payments on this liability began in January 2010 and will be satisfied in 24 equal monthly payments. The balance of this accrued severance at December 31, 2010 was \$40,626 and is recorded as part of accrued compensation.

NOTE 11 – DEFINED CONTRIBUTION PLAN

The Company maintains a tax-qualified retirement plan that provides all regular employees with an opportunity to save for retirement on a tax-advantaged basis. Under the 401(k) plan, 100 percent of participants’ contributions up to a maximum of 3 percent of compensation and 50 percent of participants’ contributions up to an additional 2 percent of compensation are matched. Company contributions under the plan were approximately \$14,000 and \$18,000 for the years ended December 31, 2010 and 2009, respectively.

NOTE 12 – RECLASSIFICATIONS

Certain amounts in the 2009 financial statements were reclassified to conform to the current presentation.

NOTE 13 – MAJOR CUSTOMERS AND VENDORS

Major customers and vendors are defined as a customer or vendor from which the Company derives at least 10% of its revenues and cost of revenues, respectively.

During 2010, the Company had product revenues from two major customers for the year, which comprised 73% and 12% of the Company’s total revenues. The Company had accounts receivable from the larger customer of \$61,629 at December 31, 2010. During 2010, the Company had cost of revenues from two major vendors, which comprised 60% and 38% of the Company’s total cost of revenues. The Company had accounts payable to the smaller major vendor of \$85,846 at December 31, 2010.

During 2010, the Company's revenues were approximately 76% and 24% to customers in the United States and outside of the United States, respectively.

NOTE 14 – RISKS AND UNCERTAINTIES

The Company is exposed to commodity price risk, mainly associated with variations in the market price for NRL as well as wintering of the Hevea trees, which differs for each country. The timing and magnitude of industry cycles are difficult to predict and are impacted by general economic conditions including the buying climate in China. The Company responds to changes in NRL prices by adjusting sales prices on a weekly basis and by turning rather than holding inventory in anticipation of higher prices. The Company actively manages its exposure to commodity price risk and monitors the actual and expected spread between forward selling prices and purchase costs and processing and shipping expense. The Company also currently spreads the processing of Vytex between three continents. Sales contracts are based on forward market prices, and generally orders are placed 30 to 90 days ahead of shipment date due to these fluctuations. However, financial results may be negatively impacted where selling prices fall more quickly than purchase price adjustments can be made or when levels of inventory have an anticipated net realizable value that is below cost.

NOTE 15 – SUBSEQUENT EVENTS

On March 11, 2011, the Company entered into a \$3,000,000 credit facility with Topping Lift Capital LLC (the "Lender") pursuant to a Loan and Security Agreement and accompanying Loan Documents (the "Facility"). The material terms of the Facility include the following:

(i) The Company may borrow up to a total of \$3,000,000 under the Facility consisting of borrowings up to \$750,000 under the working capital portion of the Facility and up to \$3,000,000 less any advances under the working capital portion of the Facility under the borrowing base portion of the Facility. The latter portion of the Facility is based on percentages of the Company's purchase orders, inventory and accounts receivable outstanding from time to time. Borrowings under the Facility are subject to the Company maintaining compliance with certain affirmative, negative and financial covenants, including covenants based on the Company's financial projections.

(ii) The repayment of any obligations due and owing under the Facility are secured by all assets of the Company.

(iii) The term of the Facility is 18 months.

(iv) The borrowing base portion of the Facility bears interest at 14% per annum and is paid monthly. The working capital portion of the Facility bears interest at 17% per annum and is paid monthly. The principal of the Facility is due in full at September 11, 2012.

(v) The Company issued warrants to purchase 495,500 shares of the Company's common stock to the Lender at \$.01 per share which vest upon the initial loan advance.

(vi) The Company must raise \$800,000 in additional capital (consisting of common or preferred equity and/or subordinated indebtedness) by not later than May 31, 2011, before borrowing under the Facility.

(vii) Borrowings under the working capital portion of the Facility are available beginning on June 1, 2011.

(viii) Amounts outstanding under the Facility may be repaid at any time by the Company without penalty.

Also on March 11, 2011, the Company issued to existing shareholders of the Company an aggregate of \$400,000 of convertible promissory notes together with warrants to purchase an aggregate of 160,000 shares of the Company's common stock at \$0.68 per share for two years from the date of issuance. Such notes are (i) unsecured, (ii) bear interest at an annual rate of ten percent (10%) per annum from January 1, 2011, and (iii) are convertible into shares of the Company's common stock at the conversion rate of \$0.68 of principal and interest for each such share. No payments of interest or principal are payable until March 11, 2013. The notes may be prepaid by the Company without penalty upon 15 days prior notice to the holders.

On March 14, 2011, the Company's Board of Directors approved modifying the exercise price for 5,787,500 compensatory stock options and 425,282 compensatory stock purchase warrants previously issued to the Company's employees and directors to \$0.68 per share, which was the closing price of the Company's common stock on that date. As a result of this modification, the Company will record non-cash stock compensation expense on March 14, 2011 of \$425,000 and \$220,000 of additional non-cash compensation expense will be recorded over a weighted average period of approximately 2.75 years. Additionally on March 14, 2011, the Company's Board of Directors approved the issuance of 1,150,000 stock options to certain employees. These new option were issued at the closing market price of the Company's common stock on the date of issuance and have a 10 year term. Vesting is immediate for 150,000 options and in equal increments on March 14, 2012, 2013 and 2014 for 1,000,000 of the options. The total non-cash compensation expense to be recorded related to these options is \$38,000 on March 14, 2011 and \$296,000 over three years.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None

ITEM 9A. CONTROLS AND PROCEDURES

The Company's Chief Executive Officer and Chief Financial Officer (the Certifying Officers) are responsible for establishing and maintaining disclosure controls and procedures for the Company. The Certifying Officers have designed such disclosure controls and procedures to ensure that material information is made known to them, particularly during the period in which this report was prepared. The Certifying Officers have evaluated the effectiveness of the Company's disclosure controls and procedures (as such term is defined in Exchange Act Rules 13a-15(e) and 15d-15(e) (the Rules) under the Securities Exchange Act of 1934 (or Exchange Act) as of the end of the period covered by this Annual Report and believe that the Company's disclosure controls and procedures are effective to the reasonable assurance level based on the required evaluation.

Management's Annual Report on Internal Control Over Financial Reporting

Management of Vystar is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in the Securities Exchange Act Rule 13a-15(f). Under the supervision and with the participation of the Company's management, including the Chief Executive Officer (principal executive officer) and the Chief Financial Officer (principal accounting and financial officer), the Company's management conducted an evaluation of the effectiveness of its internal control over financial reporting as of December 31, 2010 as required by the Securities Exchange Act of 1934 Rule 13a-15(c). In making this assessment, the Company's management used the criteria set forth in the framework in "Internal Control – Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on the evaluation conducted under the framework in "Internal Control – Integrated Framework," the Company's management concluded that the Company's internal control over financial reporting was effective as of December 31, 2010.

During our most recent fiscal quarter, there has not occurred any change in our internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

This annual report does not include an attestation report of our registered independent public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by our registered independent public accounting firm pursuant to laws enacted in 2010 that permit us to provide only management's report in this annual report because we are not an accelerated filer.

ITEM 9B. OTHER INFORMATION

None

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information contained in the Company's definitive Proxy Statement, which the Company will file with the Securities and Exchange Commission no later than 120 days after December 31, 2010, with respect to: the identity, background and Section 16 filings of directors and executive officers of the Company; the Audit Committee of the Board of Directors and the Committee's "audit committee financial expert", the Company's procedures by which security holders may recommend nominees to the Board of Directors; and the Company's code of ethics applicable to its chief executive, financial, and accounting officers is incorporated herein by reference to this item.

ITEM 11. EXECUTIVE COMPENSATION

The information contained in the Company's definitive Proxy Statement, which the Company will file with the Securities and Exchange Commission no later than 120 days after December 31, 2010, with respect to director and executive compensation, the Compensation Committee of the Board of Directors and the Compensation Committee Report, is incorporated herein by reference in response to this item.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

The information contained in the Company's definitive Proxy Statement, which the Company will file with the Securities and Exchange Commission no later than 120 days after December 31, 2010, with respect to the ownership of common stock by certain beneficial owners and management, and with respect to the Company's compensation plans under which our equity securities are authorized for issuance, is incorporated herein by reference to this item.

For purposes of determining the aggregate market value of the Company's voting and non-voting common stock held by non-affiliates, shares held by all directors and executive officers of the Company have been excluded. The exclusion of such shares is not intended to, and shall not, constitute a determination as to which persons or entities may be "affiliates" of the Company as defined by the Securities and Exchange Commission.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information contained in the Company's definitive Proxy Statement, which the Company will file with the Securities and Exchange Commission no later than 120 days after December 31, 2010, with respect to related party transactions and director independence, is incorporated herein by reference in response to this item.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information contained under the heading "Audit Matters" in the Company's definitive Proxy Statement, which the Company will file with the Securities and Exchange Commission no later than 120 days after December 31, 2010, is incorporated herein by reference in response to this item.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

a) 1. FINANCIAL STATEMENTS

The following financial statements and notes thereto of Vystar Corporation, and the related Report of Independent Registered Public Accounting Firm are set forth in Item 8.

Report of Independent Registered Public Accounting Firm	F-1
Balance Sheets	F-2
Statements of Operations	F-3
Statements of Stockholders' Equity	F-4
Statements of Cash Flows	F-5
Notes to Financial Statements	F-6

2. FINANCIAL STATEMENT SCHEDULES

All schedules for which provision is made in the applicable accounting regulations of the SEC have been omitted because they are not applicable or the required information is included in the financial statements or notes thereto.

3. EXHIBITS

Exhibit Index *

* Some Exhibits have certain confidential information redacted pursuant to a request for confidential treatment

Number	Description
3.1	Articles of Incorporation of Vystar Acquisition Corporation (now named Vystar Corporation) dated December 17, 2003 (as amended) (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
3.2	Bylaws of Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
4.1	Specimen Certificate evidencing shares of Vystar common stock (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)

Number	Description
4.2	Form of Share Subscription Agreements and Investment Letter (First Private Placement) (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
4.3	Form of Share Subscription Agreement and Investment Letter (Second Private Placement) (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
4.4	Form of Vystar Corporation Investor Questionnaire and Subscription Agreement (Third Private Placement) (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
4.5	Warrant to Purchase Shares of Common Stock of Vystar Corporation dated March 11, 2011 issued to Topping Lift Capital LLC (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
4.6	Form of Warrant issued to Investor note holders (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
10.1*	Manufacturing Agreement between Vystar Corporation and Revertex (Malaysia) Sdn. Bhd. effective April 1, 2008 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.2	Executive Employment Agreement between Vystar Corporation and William R. Doyle, dated November 11, 2008 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.3	Management Agreement dated January 31, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.4	Letter Agreement dated August 15, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.5	Addendum to Management Agreement dated February 29, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.6	Warrant Purchase Agreement dated January 31, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.7	Management Agreement dated April 30, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.8	Warrant Purchase Agreement dated April 30, 2008 between Universal Capital Management, Inc. and Vystar Corporation (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.9	Vystar Corporation 2004 Long-Term Compensation Plan, as amended (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.10	Employment Agreement between Vystar Corporation and Sandra Parker dated April 1, 2008 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.11	First Amendment to Employment Agreement dated July 1, 2009, between Vystar Corporation and Sandra Parker (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)

Number	Description
10.12*	Distributor Agreement among Vystar Corporation, Centrotech Minerals & Metals, Inc. and Centrotech Deutschland, GmbH dated January 6, 2009 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.13	Note agreement between Vystar Corporation and Climax Global Energy, Inc. dated August 15, 2008 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.14	Lockup Agreement with Glen W. Smotherman dated July 30, 2009 (incorporated by reference to Vystar's Registration Statement on Form S-1 originally filed on November 13, 2008, Registration Statement No. 333-155344)
10.15	\$3,000,000 Loan and Security Agreement between Topping Lift Capital LLC dated March 11, 2011 (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
10.16	Validity and Fraud Guaranty from William R. Doyle, Jack W. Callicutt and Matthew P. Clark to Topping Lift Capital LLC dated March 11, 2011 (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
10.17	Intellectual Property Security Agreement between Topping Lift Capital LLC and Vystar Corporation dated March 11, 2011 (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
10.18	Form of Investor Note (incorporated by reference to Vystar's Current Report on Form 8-K dated March 11, 2011 and filed on March 15, 2011)
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

VYSTAR CORPORATION

Date: March 31, 2011

By: /s/ William R. Doyle

William R. Doyle

Chairman, President, Chief Executive Officer and
Director (Principal Executive Officer)

Date: March 31, 2011

By: /s/ Jack W. Callicutt

Jack W. Callicutt

Chief Financial Officer (Principal Financial
and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated, on March 31, 2011.

Signature	Title
<hr/> <i>/s/ William R. Doyle</i> <hr/> William R. Doyle	Chairman, President, and Chief Executive Officer
<hr/> <i>/s/ Jack W. Callicutt</i> <hr/> Jack W. Callicutt	Chief Financial Officer
<hr/> <i>/s/ J. Douglas Craft</i> <hr/> J. Douglas Craft	Director
<hr/> <i>/s/ Joseph C. Allegra, MD</i> <hr/> Joseph C. Allegra, MD	Director
<hr/> <i>/s/ Mitsy Y. Mangum</i> <hr/> Mitsy Y. Mangum	Director
<hr/> <i>/s/ W. Dean Waters</i> <hr/> W. Dean Waters	Director

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the registration statement on Form S-1 (No. 333-155341) of Vystar Corporation of our report dated March 31, 2011, relating to the financial statements appearing in the Company ' s Annual Report on Form 10-K for the year ended December 31, 2010.

/s/ Habif, Arogeti & Wynne, LLP

Habif, Arogeti & Wynne, LLP
Atlanta, Georgia
March 31, 2011

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, William R. Doyle, certify that:

1. I have reviewed this Annual Report on Form 10-K of Vystar Corporation (the "Company") for the year ended December 31, 2010;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and we have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision to ensure that material information relating to the Company is made known to us by others within the Company, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 31, 2011

By: /s/ William R. Doyle
Chairman, President and Chief Executive Officer

**CERTIFICATION OF CHIEF FINANCIAL OFFICER PURSUANT TO SECTION 302 OF THE
SARBANES-OXLEY ACT OF 2002**

I, Jack W. Callicutt, certify that:

1. I have reviewed this Annual Report on Form 10-K of Vystar Corporation (the "Company") for the year ended December 31, 2010;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and we have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision to ensure that material information relating to the Company, is made known to us by others within the Company, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 31, 2011

By: /s/ Jack W. Callicutt

Chief Financial Officer

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

In connection with the Annual Report of Vystar Corporation (the "Company") on Form 10-K for the year ended December 31, 2010 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, William R. Doyle, Chairman, President and Chief Executive Officer of the Company, and Jack W. Callicutt, Chief Financial Officer of the Company, each do hereby certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to the best of our knowledge:

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

/s/ William R. Doyle

William R. Doyle
Chairman, President and Chief Executive Officer
March 31, 2011

/s/ Jack W. Callicutt

Jack W. Callicutt
Chief Financial Officer
March 31, 2011

A signed original of this written statement required by Section 906 has been provided to Vystar Corporation and will be retained by Vystar Corporation and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished solely to accompany the Report pursuant to 18 U.S.C. Section 1350, and is not being filed for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, and is not to be incorporated by reference into any filing of Vystar Corporation, whether made before or after the date hereof, regardless of any general incorporation language in such filing.