As filed with the Securities and Exchange Commission on October 29, 2003 Registration No. 333-108793

> SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

> > FORM S-3/A REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

VASCO DATA SECURITY INTERNATIONAL, INC.

(Exact name of registrant as specified in its charter)

1901 SOUTH MEYERS ROAD, SUITE 210, OAKBROOK TERRACE, IL 60181 (630) 932-8844

(Address of principal executive offices)

DELAWARE (State or other jurisdiction of incorporation or organization)

36-416320 (I.R.S. employer identification number)

T. Kendall Hunt Chairman and Chief Executive Officer VASCO Data Security International, Inc. 1901 South Meyers Road, Suite 210 Oakbrook, Illinois 60181 (630) 932-8844

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

> COPIES TO: Robert B. Murphy, Esq. Enger McCartney-Smith, Esq. Pepper Hamilton LLP 600 14th Street, NW Washington, D.C. 20005-2004 (202) 220-1200

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. |_|

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. |X|

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

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

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. |_|

CALCULATION OF REGISTRATION FEE

______ PROPOSED MAXIMUM PROPOSED MAXIMUM AMOUNT OF TITLE OF EACH CLASS OF AMOUNT TO BE OFFERING PRICE PER AGGREGATE OFFERING SECURITIES TO BE REGISTERED REGISTERED (1) REGISTRATION FEE SHARE(2) PRICE Common Stock, par value \$0.001 per share 7.500.000

\$2 89

\$21,675,000

\$1753 51*

* Previously filed.

⁽¹⁾ Pursuant to Rule 416 under the Securities Act, as amended, this registration statement also covers such additional number of shares of common stock as may become issuable under any stock split, stock dividend or similar transaction.

⁽²⁾ Estimated pursuant to Rule 457(c) under the Securities Act solely for the purpose of calculating the registration fee, based upon the average of the high

and low prices reported for such shares of common stock, as reported on the Nasdaq SmallCap Market on September 11, 2003.

Pursuant to Rule 429 under the Securities Act, the prospectus contained in this Registration Statement is a combined prospectus and also relates to (i) up to 6,418,595 options to purchase common stock and up to 6,418,595 shares of common stock underlying such options and (ii) up to 1,056,922 warrants to purchase common stock and up to 1,056,922 shares of common stock underlying such warrants, which options, warrants and shares of common stock were registered under a Registration Statement on Form S-4 (File No. 333-35563) previously filed with the SEC and declared effective, and which Registration Statement, pursuant to Rule 416, also covered such indeterminate number of shares of common stock as may be issuable upon the exercise of the options and/or warrants pursuant to anti-dilution provisions. This Registration Statement constitutes Post-Effective $\hbox{Amendment No. 5 to Registration Statement No. 333-35563, which Post-Effective } \\$ Amendment shall hereafter become effective concurrently with the effectiveness of this Registration Statement and in accordance with Section 8(c) of the Securities Act. This Registration Statement covers the resale of 1,239,474 shares of common stock underlying other outstanding warrants, and 322,565 shares of restricted common stock issued in connection with certain acquisitions, including such indeterminate number of shares of common stock as may be issuable pursuant to the anti-dilution provisions of such securities. Upon the effectiveness of such Post-Effective Amendment and this Registration Statement, this Registration Statement will relate to an aggregate of 6,418,595 options and 1,056,922 warrants to purchase common stock and 14,578,659 shares of common stock.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

VASCO DATA SECURITY INTERNATIONAL, INC.

Common Stock

This prospectus relates to the sale by the selling stockholders, listed on pages 12-14, from time to time, of up to 7,500,000 shares of our common stock, including 2,000,000 shares currently held by the selling stockholders, 4,000,000 shares issuable upon the conversion of preferred stock held by the selling stockholders, 600,000 shares issuable upon the exercise of warrants held by the selling stockholders and 900,000 shares issuable to the selling stockholders by us as dividends on the preferred stock. The issuance of the shares upon exercise of the warrants is not covered by this prospectus; only the resale of the shares by the selling stockholders is covered. See "Selling Stockholders."

No underwriter is being used in connection with this offering of our common stock. The selling stockholders may offer and sell their shares to or through broker-dealers, who may receive compensation in the form of discounts, concessions or commissions from the selling stockholders, the purchasers of the shares, or both. The selling stockholders and any broker-dealer executing selling orders on their behalf may be deemed to be an "underwriter" within the meaning of the Securities Act of 1933 (the "Securities Act") in which event commissions received by such broker-dealer may be deemed to be underwriting commissions under the securities laws. We will not receive any direct proceeds from the sale of shares, but will receive proceeds related to the exercise of the warrants held by the selling stockholders.

The price of the common stock being offered under this prospectus will be determined by the prevailing market price for our common stock or in negotiated transactions. Our common stock is traded on the Nasdaq SmallCap Market under the symbol VDSI. On October 17, 2003, the closing price of one share of our common stock was \$2.39.

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. YOU SHOULD CAREFULLY READ AND CONSIDER THE RISK FACTORS BEGINNING ON PAGE 6.

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

The date of this prospectus is October 29, 2003.

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 $\hbox{VASCO, VACMAN and Digipass are registered trademarks in the United States. In addition, VACMAN Optimum is a registered trademark in the Benelux countries.}\\$

SUMMARY

This Summary highlights some information contained elsewhere in this prospectus. You should read the entire prospectus carefully including the section entitled "Risk Factors" before deciding to invest in our common stock.

Our Company

We design, develop, market and support patented "Identity Authentication" products for e-business and e-commerce. Our products enable secure financial transactions to be made over private enterprise networks and public networks, such as the Internet. VASCO's Identity Authentication software is delivered via its Digipass security products, small "calculator" hardware devices carried by an end user, or in a software format on mobile phones or other portable devices and PCs. The Digipass devices, most of which incorporate an electronic digital signature capability, guarantee the integrity of electronic transactions and data transmissions. For user access control, VASCO's VACMAN Server products limit application access to designated Digipass users. Digipass and VACMAN combine to provide greater flexibility and a more affordable means than competing products of authenticating to any network, including the Internet.

Our target markets are the applications and their several hundred million users that utilize fixed passwords as security. Our time-based system generates a "one-time" password that changes with every use. As a result, when compared to fixed passwords, it substantially reduces the risk of unauthorized access to the application.

Our security solutions are sold worldwide through our direct sales force, as well as through distributors, resellers and systems integrators. We currently have approximately 1,250 customers in more than 60 countries. Representative customers of our products include Rabobank Nederland, ABN AMRO Bank, Eterra Norway, ING Bank, DaimlerChrysler, Fortis Bank, Telindus, CoStar Group, and the U.S. Government.

Our principal executive offices are located at 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois 60181 and the telephone number at that address is (630) 932-8844. Our principal offices in Europe are located at Koningin Astridlaan 164, B-1780 Wemmel Belgium and the telephone number at that address is 32-2-456-98-10. We maintain a website at www.vasco.com. The information contained on our website does not constitute part of this prospectus.

Recent Developments

Financial Results. For the six and three months ended June 30 and March 31, 2003, respectively, we reported net income of \$1,202,000 and \$481,000 on net revenues from continuing operations of \$11,071,000 and \$5,118,000. Revenues for the first quarter have been adjusted to exclude the net revenues from the VACMAN Enterprise business, which was sold in July 2003 as noted below, and reported as a discontinued operation in the second quarter of 2003. This represents the first consecutive quarters of net income since we became a public company in 1997. In addition, we were able to add 160 new customers in the second quarter of 2003 and for the first six months of 2003, we have added a total of 330 new customers.

Series C Preferred Stock. On July 15, 2003, we reached an agreement with Ubizen N.V., a Belgian Internet securities firm, to repurchase all of the Series C Convertible Preferred Stock and Common Stock Purchase Warrants owned by Ubizen. We paid Ubizen \$3,000,000 in cash and issued 2,000,000 shares of our common stock on July 25, 2003, and agreed to pay Ubizen an additional \$1,000,000 on or before November 14, 2003. The common stock is subject to a lock-up period that expires in increments of 500,000 shares each on October 15, 2003 and January 15, April 15, and July 15, 2004. Upon the expiration of each lock-up, the released shares will be subject to volume trading restrictions through January 1, 2005.

The Series C Convertible Preferred Stock along with warrants to purchase 1,269,474 shares of our common stock were sold to Ubizen for \$15,000,000 in July 2000. The Series C Convertible Preferred Stock was subject to a mandatory redemption feature that would have been effective in July 2004. At the mandatory redemption date, we would have been obligated to either redem the stock for \$15,000,000 in cash or issue an equivalent value in common stock at a per share price equal to the average trading price of the common stock for the 30 trading dates prior to the redemption date less five (5) percent.

Sale of VACMAN Enterprise. In July 2003, we also announced the sale of our VACMAN Enterprise business unit, originally known as IntelliSoft and/or SnareWorks, to SecureD Services, Inc., a newly-organized security consulting and managed security services company. Under the terms of the Agreement, we received a senior secured promissory note of approximately \$1,100,000 and \$2,000,000 of convertible preferred stock from SecureD Services.

The promissory note bears a six percent (6%) interest rate and will be payable in thirty-six (36) equal and consecutive monthly payments commencing August 1, 2003. The SecureD Services Preferred Stock includes a six percent (6%) cumulative stock dividend, payable quarterly, and can be converted into SecureD Services Inc. common stock at defined intervals beginning July 1, 2005. T. Kendall Hunt, our Chairman and CEO, is one of the founders and organizers of SecureD Services, Inc.

Series D Preferred Stock and Warrants. On September 11, 2003, we completed a private placement of 800 shares of our Series D 5% Cumulative Convertible Voting Preferred Stock with several investors including all of the selling stockholders other than Ubizen N.V. The Series D preferred stock is convertible, at the option of its holders, into shares of our common stock at a per share conversion price of \$2.00. Holders of the Series D preferred stock are entitled to the payment of cumulative dividends quarterly, at the rate of five percent (5%), either in cash or in shares of our common stock, in our discretion. Each investor also purchased warrants to purchase a number of shares of our common stock equal to fifteen percent (15%) of the number of shares of common stock that such investor's Series D preferred stock is convertible into. The exercise price of the warrants is \$3.47 per share and may be exercised at any time until September 11, 2008. We received a total purchase price for all shares of Series D preferred stock and warrants equal to \$8,006,000.

On October 17, 2003, after discussions with The Nasdaq Stock Market and receipt of consent from the requisite percentage of stockholders, we amended the voting terms of the Series D preferred stock to decrease the number of votes to which each such stockholder is entitled prior to conversion of their Series D preferred stock. As a result of the amendment, instead of each share of Series D preferred stock voting as 5,000 shares of common stock (based on the \$2.00 conversion rate), each will vote as 3,413 shares (based on the \$2.93 closing market price on September 11, 2003) on all matters submitted to the stockholders for approval. No change was made to the conversion price or other terms of the Series D preferred stock.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risk factors as well as other information contained in this prospectus before deciding to invest in our common stock. If any of the following risks were to occur, our business, financial condition or operating results could be materially and adversely affected. In that case, the trading price of our common stock could decline and you could lose all or part of your investment.

We Had a History of Operating Losses and Have a Large Accumulated Deficit.

Although we have reported net income of \$1,202,000 and \$721,000 for the six and three months ended June 30, 2003, respectively, we have incurred net losses of \$4,538,995, \$12,033,970 and \$4,161,772 for the years ended December 31, 2002, 2001 and 2000, respectively, and as of June 30, 2003, our accumulated deficit is \$41,405,905.

We Face Significant Competition and If We Lose or Fail to Gain Market Share Our Financial Results Will Suffer.

The market for computer and network security products is highly competitive. Our competitors include organizations that provide computer and network security products based upon approaches similar to and different from those that we employ such as RSA Security Inc., ActivCard, Rainbow Technologies, and Aladdin Knowledge Systems. Many of our competitors have significantly greater financial, marketing, technical and other competitive resources than we do. As a result, they may be able to adapt more quickly to new or emerging technologies and changes in customer requirements, or to devote greater resources to the promotion and sale of their products.

Technological Changes Occur Rapidly in Our Industry and Our Development of New Products is Critical to Maintain Our Revenues.

The introduction by our competitors of products embodying new technologies and the emergence of new industry standards could render our existing products obsolete and unmarketable. Our future revenue growth and operating profit will depend in part upon our ability to enhance our current products and develop innovative products to distinguish ourselves from the competition and to meet customers' changing needs in the data security industry. We cannot assure you that security-related product developments and technology innovations by others will not adversely affect our competitive position or that we will be able to successfully anticipate or adapt to changing technology, industry standards or customer requirements on a timely basis.

The Sales Cycle for Our Products and Technology is Long, and We May Incur Substantial Expenses for Sales That Do Not Occur When Anticipated.

The sales cycle for our products, which is the period of time between the identification of a potential customer and completion of the sale, is typically lengthy and subject to a number of significant risks over which we have little control. If revenue falls significantly below anticipated levels, our business would be seriously harmed.

A typical sales cycle is often three to six months and with larger banking transactions up to eighteen months. Purchasing decisions for our products and systems may be subject to delay due to many factors which are not within our control, such as:

- o the time required for a prospective customer to recognize the need for our products;
- o the significant expense of many data security products and network systems;
- o customers' internal budgeting processes; and
- o internal procedures customers may require for the approval of large purchases.

We Have a Significant Dependence On Major Customers and Losing Any of These Customers Could Result in a Significant Loss in Revenues.

If we don't find other customers who generate significant future revenues, the unforeseen loss of one or more of our major customers, or the inability to maintain reasonable profit margins on sales to any of these customers, would have a material adverse effect on our results of operations and financial condition.

Our Success Depends On Establishing and Maintaining Strategic Relationships With Other Companies to Develop, Market and Distribute Our Technology and Products and, in Some Cases, to Incorporate Our Technology Into Their Products.

Part of our business strategy is to enter into strategic alliances and other cooperative arrangements with other companies in our industry. We currently are involved in cooperative efforts with respect to incorporation of our products into products of others, research and development efforts, marketing efforts and reseller arrangements. None of these relationships are exclusive, and some of our strategic partners also have cooperative relationships with certain of our competitors. If we are unable to enter cooperative arrangements in the future or if we lose any of our current strategic or cooperative relationships, our business could be harmed. We do not control the time and resources devoted to such activities by parties with whom we have relationships. In addition, we may not have the resources available to satisfy our commitments, which may adversely affect these relationships. These relationships may not continue, may not be commercially successful, or may require our expenditure of significant financial, personnel and administrative resources from time to time. Further, certain of our products and services compete with the products and services of our strategic partners.

We May Need Additional Capital in the Future and Our Failure to Obtain Capital Would Interfere With Our Growth Strategy.

Our ability to obtain financing will depend on a number of factors, including market conditions, our operating performance and investor interest. These factors may make the timing, amount, terms and conditions of any financing unattractive. They may also result in our incurring additional indebtedness or accepting stockholder dilution. If adequate funds are not available or are not available on acceptable terms, we may have to forego strategic acquisitions or investments, defer our product development activities, or delay the introduction of new products.

We Must Continue to Attract and Retain Highly Skilled Technical Personnel for Our Research and Development Department.

The market for highly skilled technicians in Europe, Asia, Australia and the United States is highly competitive. If we fail to attract, train, assimilate and retain qualified technical personnel for our research and development department, we will experience delays in introductions of new or modified products, loss of clients and market share and a reduction in revenues.

We Face a Number of Risks Associated With Our International Operations, Any or All of Which Could Result in a Disruption in Our Business and a Decrease in Our Revenues.

Our business internationally is subject to a number of risks any or all of which could result in a disruption in our business and a decrease in our revenues. These include:

- inconsistent regulations and unexpected changes in regulatory
- difficulties and costs of staffing and managing international operations:
- potentially adverse tax consequences;
- wage and price controls; uncertain protection for intellectual property rights;
- imposition of trade barriers;
- differing technology standards;
- uncertain demand for electronic commerce;
- linguistic and cultural differences;
- political instability; and
- social unrest.

We are Subject to Foreign Exchange Risks, and Improper Management of That Risk Could Result in Large Cash Losses.

Because a significant number of our principal customers are located outside the United States, we expect that international sales will continue to generate a significant portion of our total revenue. We are subject to foreign exchange risks because the majority of our costs are denominated in U.S. dollars, whereas a significant portion of the sales and expenses of our European operating subsidiaries are denominated in various foreign currencies. A decrease in the value of any of these foreign currencies relative to the U.S. dollar could affect the profitability in U.S. dollars of our products sold in these markets. We do not currently hold forward exchange contracts or other hedging instruments to exchange foreign currencies for U.S. dollars to offset currency rate fluctuations.

We Have a Great Dependence On a Limited Number of Suppliers and the Loss of Their Manufacturing Capability Could Materially Impact Our Operations.

In the event that the supply of components or finished products is interrupted or relations with either of our principal vendors is terminated, there could be a considerable delay in finding suitable replacement sources to manufacture our products at the same cost or at all. The majority of our products are manufactured by two independent vendors, one headquartered in Europe and the other in Hong Kong. Our security tokens are assembled at facilities in mainland China. The importation of these products from China exposes us to the possibility of product supply disruption and increased costs in the event of changes in the policies of the Chinese government, political unrest or unstable economic conditions in China or developments in the United States that are adverse to trade, including enactment of protectionist legislation.

We Depend Significantly Upon Our Proprietary Technology and Intellectual Property and the Failure to Protect Our Proprietary Rights Could Require Us to Redesign Our Products or Require Us to Enter Into Royalty or Licensing Agreements, Any of Which Could Reduce Revenue and Increase Our Operating Costs.

We currently rely on a combination of patent, copyright and trademark laws, trade secrets, confidentiality agreements and contractual provisions to protect our proprietary rights. We seek to protect our software, documentation and other written materials under trade secret and copyright laws, which afford only limited protection, and generally enter into confidentiality and nondisclosure agreements with our employees and with key vendors and suppliers.

There has been substantial litigation in the technology industry regarding intellectual property rights, and we may have to litigate to protect our proprietary technology. We expect that companies in the computer and information security market will increasingly be subject to infringement claims as the number of products and competitors increases. Any such claims or litigation may be time-consuming and costly, cause product shipment delays, require us to redesign our products or require us to enter into royalty or licensing agreements, any of which could reduce revenue and increase our operating costs.

Our Patents May Not Provide Us With Competitive Advantages.

We hold several patents in the United States and a corresponding patent in some European countries, which cover multiple aspects of our technology. The U.S. patents expire between 2003 and 2010 and the patent in those European countries expires in 2008. There can be no assurance that we will continue to develop proprietary products or technologies that are patentable, that any issued patent will provide us with any competitive advantages or will not be challenged by third parties, or that patents of others will not hinder our competitive advantage.

We are Subject to Product Liability Risks.

A malfunction of or design defect in our products which results in a breach of a customer's data security could result in tort or warranty claims against us. We do not presently maintain product liability insurance for these types of claims.

There is Significant Government Regulation of Technology Exports and to the Extent We Cannot Meet the Requirements of the Regulations We May be Prohibited From Exporting Some of Our Products Which Could Negatively Impact Our Revenues.

Our international sales and operations are subject to risks such as the imposition of government controls, new or changed export license requirements, restrictions on the export of critical technology, trade restrictions and changes in tariffs. If we become unable to obtain foreign regulatory approvals on a timely basis our business in those countries would no longer exist and our revenues would decrease dramatically. Certain of our products are subject to export controls under U.S. law. The list of products and countries for which export approval is required, and the regulatory policies with respect thereto may be revised from time to time and our inability to obtain required approvals under these regulations could materially adversely affect our ability to make international sales.

We Employ Cryptographic Technology in Our Authentication Products That Uses Complex Mathematical Formulations to Establish Network Security Systems.

Many of our products are based on cryptographic technology. With cryptographic technology, a user is given a key which is required to encrypt and decode messages. The security afforded by this technology depends on the integrity of a user's key and in part on the application of algorithms, which are advanced mathematical factoring equations. These codes may eventually be broken or become subject to government regulation regarding their use, which would render our technology and products less effective. The occurrence of any one of the following could result in a decline in demand for our technology and products:

- o any significant advance in techniques for attacking cryptographic systems, including the development of an easy factoring method or faster, more powerful computers;
- publicity of the successful decoding of cryptographic messages or the misappropriation of keys; and increased government regulation limiting the use, scope or
- strength of cryptography.

Any Acquisitions We Make Could Disrupt Our Business and Harm Our Financial Condition.

We may make investments in complementary companies, products or technologies. Should we do so, our failure to successfully manage future acquisitions could seriously harm our operating results. In the event of any future purchases, we will face additional financial and operational risks, including:

- o difficulty in assimilating the operations, technology and personnel of acquired companies;
- disruption in our business because of the allocation of resources to consummate these transactions and the diversion of management's attention from our existing business;
- difficulty in retaining key technical and managerial personnel from acquired companies;
- dilution of our stockholders, if we issue equity to fund these transactions;
- assumption of operating losses, increased expenses and liabilities; and
- our relationships with existing employees, customers and business partners may be weakened or terminated as a result of these transactions.

We Experience Variations in Quarterly Operating Results and are Subject to Seasonality, Both of Which May Result in a Volatile Stock Price.

In the future, as in the past, our quarterly operating results may vary significantly resulting in a volatile stock price. Factors affecting our operating results include:

- o the level of competition;
- the size, timing, cancellation or rescheduling of significant orders;
- new product announcements or introductions by current competitors;

- o technological changes in the market for data security products including the adoption of new technologies and standards;
- o changes in pricing by current competitors;
- o our ability to develop, introduce and market new products and product enhancements on a timely basis, if at all;
- o component costs and availability;
- o our success in expanding our sales and marketing programs;
- o market acceptance of new products and product enhancements;
- changes in foreign currency exchange rates; and
- o general economic trends.

A Small Group of Persons Control a Substantial Amount of Our Common Stock and Could Delay or Prevent a Change of Control.

Our board of directors, our officers and their immediate families and related entities beneficially own approximately 36%, with Mr. T. Kendall Hunt controlling approximately 33%, of the outstanding shares of our common stock not including the shares being registered hereunder that are issuable (a) upon conversion of our Series D preferred stock, (b) upon exercise of warrants purchased in conjunction with the Series D preferred stock or (c) as dividends upon the Series D preferred stock. If the foregoing categories of shares are included as outstanding shares, the beneficial ownership percentages are 30% and 28%, respectively. As the chairman of the board of directors and our largest stockholder, Mr. Hunt may exercise substantial control over our future direction and operation and such concentration of control may have the effect of discouraging, delaying or preventing a change in control and may also have an adverse effect on the market price of our common stock.

Our Stock Price May be Volatile and You May Not be Able to Resell Your Shares At or Above Acceptable Prices.

The market price of our common stock may fluctuate significantly in response to factors, some of which are beyond our control, including the following:

- o actual or anticipated fluctuations in our operating results;
- o changes in market valuations of other technology companies;
- announcements by us or our competitors of significant technical innovations, contracts, acquisitions, strategic partnerships, joint ventures or capital commitments;
- o additions or departures of key personnel;
- o future sales of common stock;
- o any deviations in net revenues or in losses from levels expected by the investment community; and
- o trading volume fluctuations

We Have Not Paid and Do Not Intend to Pay Dividends.

We have not paid any dividends on our common stock, and we do not intend to pay cash dividends in the foreseeable future.

Certain Provisions of Our Charter and of Delaware Law Make a Takeover of Our Company More Difficult.

Our corporate charter and Delaware law contain provisions, such as a class of authorized but unissued preferred stock which may be issued by our board without stockholder approval, that might enable our management to resist a takeover of our company. Delaware law also limits business combinations with interested stockholders. These provisions might discourage, delay or prevent a change in our control or a change in our management. These provisions could also discourage proxy contests, and make it more difficult for you and other stockholders to elect directors and take other corporate actions. The existence of these provisions could limit the price that investors might be willing to pay in the future for shares of our common stock.

Future Issuances of Blank Check Preferred Stock May Reduce Voting Power of Common Stock and May Have Anti-takeover Effects That Could Prevent a Change in Control.

Our corporate charter authorizes the issuance of up to 500,000 shares of preferred stock with such designations, rights, powers and preferences as may be determined from time to time by our board of directors, including such dividend, liquidation, conversion, voting or other rights, powers and preferences as may be determined from time to time by the board of directors without further stockholder approval. The issuance of preferred stock could adversely affect the voting power or other rights of the holders of common stock. In addition, the authorized shares of preferred stock and common stock could be utilized, under certain circumstances, as a method of discouraging, delaying or preventing a change in control.

U.s. Investors May Have Difficulties in Making Claims for Any Breach of Their Rights as Holders of Shares Because Some of Our Assets and Executives are Not Located in the United States.

Several of our executives are residents of Belgium, and a substantial portion of our assets and those of some of our executives are located in Belgium. As a result, it may not be possible for investors to effect service of process on those persons located in Belgium, or to enforce judgments against some of our executives based upon the securities or other laws of jurisdictions other than Belgium. Moreover, we believe that under Belgian law there exist certain restrictions on the enforceability in Belgium in original actions, or in actions of enforcement of judgments rendered against us in courts outside jurisdictions that are a party to the Brussels Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters (as amended). Actions for enforcement of such judgments may be successful only if the Belgian court confirms the substantive correctness of the judgment of such court, and is satisfied:

- o that the judgment is not contrary to the principles of public policy in Belgium or rules of Belgian public law;
- o that the judgment did not violate the rights of the defendant;
- o that the judgment is final under applicable law;
- o that the court did not accept its jurisdiction solely on the basis of the nationality of the plaintiff; and
- o as to the authenticity of the text of the judgment submitted to it.

Judgments rendered in the courts of parties to the Brussels Convention will be enforceable by the courts of Belgium without reexamination of the merits of the case provided such judgment is final and otherwise satisfies all of the conditions provided for in this Convention. If proceedings have been brought in one country, however, new proceedings in another country may be barred.

FORWARD-LOOKING STATEMENTS

Some of the statements contained in, and that are or will be incorporated by reference in, this prospectus constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including without limitation, discussions of future expectations, projections of results of operation or financial condition and statements with respect to other forward-looking information. Forward-looking statements can be identified by the use of progressive terminology, such as "may," "will," "expect," "anticipate," "believe", "intend", "estimate," "continue" or other similar words. These statements are subject to known and unknown risks and uncertainties that could cause our actual results of operation or financial condition to differ materially from those contemplated by the statements. Factors that might cause a difference between future projections and actual results include those discussed in the section titled "Risk Factors" beginning on page 7. Any forward-looking statements and other information contained in this prospectus is current only as of its date, regardless of the time of delivery of this prospectus or of any sale of the Shares. Therefore, the information, and any forward-looking statements based on such information, are subject to change. You should read carefully the entire prospectus, as well as the documents incorporated by reference in the prospectus, in order to assess the merits of any forward-looking statements and to make an informed investment decision. In addition, important factors to consider in evaluating such forward-looking statements include changes in external market factors, changes in our business or growth strategy or an inability to execute our strategy due to changes in our industry or the economy generally, the emergence of new or growing competitors and various other competitive factors. In light of these risks and uncertainties, there can be no assurance that the matters referred to in the forward-looking statements contained in this prospectus will in fact occur.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the shares of our common stock by the selling stockholders. If the warrants held by the selling stockholders are exercised for cash, we intend to use the net proceeds generated by such warrant exercise for working capital and general corporate purposes in the ordinary course of business. Temporarily, we may invest the net proceeds from the exercise of the warrants, if any, in high grade short-term interest bearing investments.

SELLING STOCKHOLDERS

Under the terms of the Series D preferred stock, no holder of Series D preferred stock or related warrants is entitled to convert any Series D preferred stock into, or exercise any such warrants for, common stock, to the extent that such right to effect such conversion, exercise or disposition would result in the holder or any of its affiliates together beneficially owning more than (a) 4.95% of the outstanding shares of common stock or (b) 19.99% of the outstanding shares of common stock. Therefore, while included in the number of shares offered in the table below, shares which the selling stockholder is prevented from acquiring as a result of these provisions are not shown as beneficially owned by the stockholder. Similarly, shares of common stock acquirable upon exercise of warrants that are not exercisable within 60 days of the date of this prospectus are included in the shares being offered, but not considered to be beneficially owned pursuant to the rules promulgated by the SEC. As a result, the number of shares that the holders of Series D preferred stock may sell pursuant to this prospectus may exceed the number of shares of common stock they would otherwise be deemed to beneficially own as determined pursuant to Section 13(d) of the Exchange Act.

The table below sets forth the beneficial ownership of our common stock by the selling stockholders as of October 27, 2003. Beneficial ownership includes shares of outstanding common stock as of October 27, 2003, and shares of common stock that a selling stockholder has the right to acquire within 60 days. Unless otherwise indicated, the selling stockholders have the sole power to direct the voting and investment over the shares owned by them.

Except as indicated above, the number of shares that may be actually sold by any selling stockholder will be determined by the selling stockholder. Because the selling stockholders may sell all, some or none of the shares of common stock which they hold, and because the offering contemplated by this prospectus is not currently being underwritten, no estimate can be given as to the number of or percentage of total shares of common stock that will be held by the selling stockholders upon termination of the offering.

Name	Total Common Stock Owned Before the Offering	Number of Shares of Common Stock to be Offered
Ubizen N.V. AIG DKR SoundShore Strategic Holding Fund Ltd. BayStar Capital II, L.P. Cranshire Capital, L.P.	2,000,000(1) 57,500(2) 690,000(3) 172,500(4)	2,000,000(1) 57,500(2) 690,000(3) 172,500(4)
Crestview Capital Fund II, LP E*Capital Corporation Gryphon Master Fund LP J R Squared, LLC JAS Securities, LLC JMB Capital Partners, L.P. Langley Partners, LP Omicron Master Trust OTAPE Investments LLC Platinum Partners Value Arbitrage Fund LP Redwood Partners II, LLC SDS Merchant Fund, LP TCMP3 Partners Truk Opportunity Fund, LLC Tuva Financial Totals	460,000(5) 172,500(6) 172,500(7) 460,000(8) 86,250(9) 460,000(10) 460,000(11) 287,500(12) 143,750(13) 57,500(14) 115,000(15) 690,000(16) 46,000(17) 23,000(18) 46,000(19) 6,600,000	460,000(5) 172,500(6) 172,500(7) 460,000(8) 86,250(9) 460,000(10) 460,000(11) 287,500(12) 143,750(13) 57,500(14) 115,000(15) 690,000(16) 46,000(17) 23,000(18) 46,000(19) 6,600,000

Common Stock Owned After

the Offering

- Ubizen N.V. is a corporation organized under the laws of Belgium and is governed by a board of directors. Accordingly, no natural person exercises sole or shared voting or investment power over the shares offered by this prospectus.
- 2. Includes 50,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 7,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. DKR Capital Partners L.P. ("DKR LP") is a registered investment adviser with the Securities Exchange Commission and as such, is the investment manager to AIG DKR SoundShore Strategic Holding Fund Ltd. (the "Fund"). DKR LP has retained certain portfolio managers to act as the portfolio manager to the Fund managed by DKR LP. As such, DKR LP and certain portfolio managers have shared dispositive and voting power over the securities. For shares offered by this prospectus, DKR LP has retained Basso Securities to act as the portfolio manager to the Fund. Howard Fisher is president of Basso Securities.
- 3. Includes 600,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 90,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. BayStar Capital Management, LLC, a Delaware limited liability company, is the general partner of BayStar Capital II, LP, and has the sole voting and investment power with respect to the shares of our common stock that BayStar Capital II, LP is offering in this prospectus. By reason of such relationship, BayStar Capital Management, LLC may be deemed beneficial owner of these shares. However, BayStar Capital Management, LLC disclaims such beneficial ownership of these shares. There are three independent managing members of BayStar Capital Management, LLC. Accordingly, no person or "group" (as that term is defined in Section 13(d) of the Securities Exchange Act of 1934 or Regulation 13D-G) controls BayStar Capital Management, LLC.
- 4. Includes 150,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 22,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Mitchell P. Kopin, President of Downsview Capital, Inc., the general partner of Cranshire Capital, L.P., exercises sole voting or investment power in respect of the securities held by Cranshire Capital, L.P.
- 5. Includes 400,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 50,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Richard Levy and Mr. Stewart Flink share voting and investment power over the shares to be resold. Mr. Flink is also the principal owner of Dillon Capital, Inc., a broker-dealer. Crestview Capital Fund II, LP acquired the shares to be registered in the ordinary course of business and it had no agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities, at the time of acquisition. Crestview Capital Fund II, LP paid cash for the offered shares and did not receive the shares as transaction-based compensation for investment banking services as underwriters.
- 6. Includes 150,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 22,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. E*Capital Corporation is affiliated with Wedbush Morgan Securities, Inc., a registered broker-dealer. Wedbush Morgan Securities, Inc. is a corporation organized under the laws of California and is governed by a board of directors. Accordingly, no natural person exercises voting or investment power over the shares offered by this prospectus. E*Capital Corporation acquired the shares to be registered in the ordinary course of business and it had no agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities, at the time of acquisition. E*Capital Corporation paid cash for the offered shares and did not receive the shares as transaction-based compensation for investment banking services as underwriters.
- 7. Includes 150,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 22,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Gryphon Partners, LP is the general partner of Gryphon Master Fund, LP. Messrs. E.B. Lyon III and E.B. Lyon IV share voting and investment power over the shares to be resold.
- 8. Includes 400,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 60,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Messrs. Jeffrey Markowitz, Richard Friedman and Richard Feldman are the sole members of J R Squared, LLC, and share voting and investment power over the shares to be resold.
- 9. Includes 75,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 11,250 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Andrew Smukler, as managing member of JAS Securities, has voting and investment power over the shares to be resold. JAS Securities, LLC is a registered broker-dealer and acquired the shares to be registered in the ordinary course of business. It had no agreements, understandings or arrangements with any other persons, either directly or indirectly, to

dispose of the securities, at the time of acquisition. JAS Securities, LLC paid cash for the offered shares and did not receive the shares as transaction-based compensation for investment banking services as underwriters.

- 10. Includes 400,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 60,000 shares issuable upon exercise of warrants at a price of \$3.47 per share that expire on September 11, 2008. Smithwood Partners, LLC ("Smithwood") is the general partner of JMB Capital Partners L.P. Mr. Jonathan Brooks is the sole member and manager of Smithwood and thereby controls the voting or investment power over the shares offered by this prospectus.
- 11. Includes 400,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 60,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Langley Capital, LLC is the general partner of Langley Partners, L.P., and Mr. Jeffrey Thorp is the sole managing member of Langley Capital, LLC, and thereby controls the voting or investment power over the shares offered by this prospectus.

- 12. Includes 250,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 37,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Omicron Capital, L.P., a Delaware limited partnership ("Omicron Capital"), serves as investment manager to Omicron Master Trust, a trust formed under the laws of Bermuda ("Omicron"), Omicron Capital, Inc., a Delaware corporation ("OCI"), serves as general partner of Omicron Capital, and Winchester Global Trust Company Limited ("Winchester") serves as the trustee of Omicron. By reason of such relationships, Omicron Capital and OCI may be deemed to share dispositive power over the shares of our common stock owned by Omicron, and Winchester may be deemed to share voting and dispositive power over the shares of our common stock owned by Omicron. Omicron Capital, OCI and Winchester disclaim beneficial ownership of such shares of our common stock. Omicron Capital has delegated authority from the board of directors of Winchester regarding the portfolio management decisions with respect to the shares of common stock owned by Omicron and, as of September 30, 2003, Mr. Olivier H. Morali and Mr. Bruce T. Bernstein, officers of OCI, have delegated authority from the board of directors of OCI regarding the portfolio management decisions of Omicron Capital with respect to the shares of common stock owned by Omicron. By reason of such delegated authority, Messrs. Morali and Bernstein may be deemed to share dispositive power over the shares of our common stock owned by Omicron. Messrs. Morali and Bernstein disclaim beneficial ownership of such shares of our common stock and neither of such persons has any legal right to maintain such delegated authority. No other person has sole or shared voting or dispositive power with respect to the shares of our common stock being offered by Omicron, as those terms are used for purposes under Regulation 13D-G of the Securities Exchange Act of 1934, as amended. Omicron and Winchester are not "affiliates" of one another, as that term is used for purposes of the Securities Exchange Act of 1934, as amended, or of any other person named in this prospectus as a selling stockholder. Accordingly, no natural person controls Omicron or Winchester nor exercises sole or shared voting or investment power over the shares offered by this prospectus.
- 13. Includes 125,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 18,750 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Ira Leventhal, a United States citizen, may be deemed to have voting and dispositive power with respect to the securities offered by this prospectus. Mr. Leventhal disclaims beneficial ownership of these shares. OTAPE Investments LLC is owned by OTA Financial Group, which also owns OTA LLC, a registered broker-dealer. OTAPE Investments LLC acquired the shares to be registered in the ordinary course of business and it had no agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities, at the time of acquisition. OTAPE Investments LLC paid cash for the offered shares and did not receive the shares as transaction-based compensation for investment banking services as underwriters.
- 14. Includes 50,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 7,500 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Platinum Management (NY) LLC, as General Partner of the Platinum Partners Value Arbitrage Fund LP, exercises sole voting power over the shares being registered for resale which Platinum Partners Value Arbitrage Fund LP has invested in.
 15. Includes 100,000 shares issuable upon conversion of Series D Preferred
- 15. Includes 100,000 shares issuable upon conversion of Series D Preferred Stock at a conversion price of \$2.00 per share and 15,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Michael Schwartz is the sole managing member of Redwood Partners II, LLC, and thereby controls the voting and investment power over the shares offered by this prospectus. Redwood Partners II, LLC is an affiliate of Redwood Partners, LLC, a registered broker-dealer. Redwood Partners II, LLC acquired the shares to be registered in the ordinary course of business and it had no agreements, understandings or arrangements with any other persons, either directly or indirectly, to dispose of the securities, at the time of acquisition. Redwood Partners II, LLC paid cash for the offered shares and did not receive the shares as transaction-based compensation for investment banking services as underwriters.
- 16. Includes 600,000 shares issuable upon conversion of Series D preferred stock at a conversion price of \$2.00 per share and 90,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. SDS Capital Partners, LLC, a Delaware limited liability company, is the general partner of SDS Merchant Fund, LP, and has the sole voting and investment power with respect to the shares of our common stock that SDS Merchant Fund, LP is offering in this prospectus. By reason of such relationship, SDS Capital Partners, LLC may be deemed beneficial owner of these shares. However, SDS Capital Partners, LLC disclaims such beneficial ownership of these shares. Mr. Steve Derby is the managing member of SDS Capital Partners, LLC. Mr. Derby disclaims beneficial ownership of the shares of our common stock owned by SDS Merchant Fund, LP.
- 17. Includes 40,000 shares issuable upon conversion of Series D Preferred Stock at a conversion price of \$2.00 per share and 6,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Steven Slawson and Mr. Walter Schenker, as principals of TCMP3, exercise investment and voting control over the shares offered by this prospectus.

- 18. Includes 20,000 shares issuable upon conversion of Series D Preferred Stock at a conversion price of \$2.00 per share and 3,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008. Mr. Michael E. Fein and Mr. Stephen E. Saltzstein, as principals of Atoll Asset Management, LLC, the managing member of Truk Opportunity Fund, LLC, exercise investment and voting control over the shares offered by this prospectus. Both Mr. Fein and Mr. Saltzstein disclaim beneficial ownership of the common stock owned by this selling stockholder.
- 19. Includes 40,000 shares issuable upon conversion of Series D Preferred Stock at a conversion price of \$2.00 per share and 6,000 shares issuable upon exercise of warrants at an exercise price of \$3.47 per share that expire on September 11, 2008.

PLAN OF DISTRIBUTION

We are registering the shares of common stock on behalf of the selling stockholders identified on pages 12-14 of this prospectus. The shares being registered are owned or, with respect to some of the selling stockholders, may be acquired by the selling stockholders (a) upon exercise of warrants to purchase common stock, (b) upon conversion of our Series D preferred stock into shares of common stock or (c) as dividends paid by us on the preferred stock. The selling stockholders, as used in this prospectus, includes donees, pledgees, transferees or other successors in interest who may receive shares from the selling stockholders after the date of this prospectus. The selling stockholders will act independently of us in making decisions with respect to the timing, manner and size of each sale of the common stock covered by this prospectus. The selling stockholders may offer their shares of our common stock at various times in one or more of the following transactions:

- o in ordinary broker's transactions on the Nasdaq Small Cap Market or any national securities exchange on which our common sStock may be listed at the time of sale;
- o in the over-the-counter market;
- o in private transactions other than in the over-the-counter market;
- o in connection with short sales of other shares of our common stock in which shares are redelivered to close out positioning;
- o by pledge to secure debts and other obligations;
- o in connection with the writing of non-traded and exchange-traded call options, in hedge transactions and in settlement of other transactions in standardized or over-the-counter options; or
- o in a combination of any of the above transactions or by any other legally available means.

The selling stockholders may sell their shares of our common stock at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices or at fixed prices. The selling stockholders may, but need not, use broker-dealers to sell their shares of our common stock. If broker-dealers are used, such broker-dealers will either receive discounts or commissions from the selling stockholders, or they will receive commissions from purchasers of shares of our common stock for whom they acted as agents. This compensation may exceed customary commissions.

The selling stockholders also may resell all or a portion of the shares of our common stock in open market transactions in reliance upon Rule 144 under the Securities Act, provided that such selling stockholders meet the criteria and conform to the requirements of that rule. The selling stockholders and the broker-dealers to or through whom sale of the shares of our common stock may be made could be deemed to be "underwriters" within the meaning of Section 2(a)(11) of Securities Act, and their commissions or discounts and other compensation received in connection with the sale of the shares may be regarded as underwriters' compensation, if the SEC determines that they purchased the shares in order to resell them to the public. To the extent that any selling stockholder is an affiliate of a broker-dealer, and such selling stockholder did not acquire their securities in the ordinary course of business or had an agreement or understanding to dispose of the securities, such selling stockholder is designated as an "underwriter" within the meaning of the Securities Act.

The selling stockholders have not advised us of any specific plans for the distribution of the shares of our common stock covered by this prospectus. When and if we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer or underwriter for the sale of a material portion of the shares covered by this prospectus, a post-effective amendment to the registration statement will be filed with the SEC. This amendment will include the following information:

- o the name of the participating broker-dealer(s) or underwriters;
- o the number of shares involved;
- o the price or prices at which the shares were sold by the selling stockholder;
- o the commissions paid or discounts or concessions allowed by the selling stockholder to the broker-dealers or underwriters; and
- o other material information.

Under agreements which may be entered into by the selling security holders, underwriters who participate in the distribution of shares may be entitled to indemnification by the selling security holders against certain liabilities, including liabilities under the Securities Act. We have also agreed to indemnify, in certain circumstances, the selling security holders and certain control and other persons related to the foregoing persons against certain liabilities, including liabilities under the Securities Act. The selling security holders have agreed to indemnify us in certain circumstances, as well as certain related persons, against certain liabilities, including liabilities under the Securities Act.

We have advised the selling stockholders that the anti-manipulation rules promulgated under the Securities Exchange Act, including Regulation M, may apply to sales of the shares offered by the selling stockholders. We have agreed to pay all costs relating to the registration of the shares. Any commissions or other fees payable to broker-dealers or otherwise in connection with any sale of the shares will be paid by the selling stockholders or other party selling the shares.

LEGAL MATTERS

The validity of the shares of common stock offered was passed upon for us by Pepper Hamilton LLP.

EXPERTS

Our consolidated financial statements appearing in our annual report on Form 10-K for the year ended December 31, 2002, have been audited by KPMG LLP, independent accountants, as set forth in their report thereon (the "KPMG Report") included therein and incorporated herein by reference. Such consolidated financial statements are incorporated herein by reference in reliance upon the KPMG Report upon the authority of KPMG LLP as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the informational requirements of the Securities Exchange Act of 1934 (the "Exchange Act"). We file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room at the SEC's principal office at Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain information on the operation of this public reference room by calling 1-800-SEC-0330. Our SEC filings are also available to the public from the SEC's web site at http://www.sec.gov. In addition, any of our SEC filings may also be inspected and copied at the offices of The Nasdaq Stock Market, Inc., 9801 Washingtonian Blvd., Gaithersburg, MD 20878.

We have filed with the SEC a registration statement on Form S-3/A covering the securities offered by this prospectus. You should be aware that this prospectus does not contain all of the information contained or incorporated by reference in that registration statement and its exhibits and schedules, particular portions of which have been omitted as permitted by the SEC rules. For further information about us and our securities, we refer you to the registration statement and its exhibits and schedules. You may inspect and obtain the registration statement, including exhibits, schedules, reports and other information we have filed with the SEC, as described in the preceding paragraph. Statements contained in this prospectus concerning the contents of any document to which we refer you are not necessarily complete and in each instance we refer you to the applicable document filed with the SEC for more complete information.

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring to those documents. The information incorporated by reference is considered to be part of this prospectus, and the information that we file at a later date with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below as well as any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act:

- o our annual report on Form 10-K for the fiscal year ended December 31, 2002;
- o our quarterly reports on Form 10-Q for the quarters ending March 31 and June 30, 2003; and
- o the description of our Common Stock which is contained in our registration statement on Form S-4 (SEC File No. 333-35563) filed under the Exchange Act, including any amendment or reports filed for the purpose of updating this description.

You may request a copy of these filings, at no cost, by writing or telephoning us at the following address: VASCO Data Security International, Inc., 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois 60181, Attention: Corporate Secretary, (630) 932-8844.

YOU SHOULD RELY ONLY ON THE INFORMATION INCORPORATED BY REFERENCE OR PROVIDED IN THIS PROSPECTUS OR ANY PROSPECTUS SUPPLEMENT. WE HAVE NOT AUTHORIZED ANYONE ELSE TO PROVIDE YOU WITH DIFFERENT INFORMATION. THE SELLING SECURITYHOLDERS ARE NOT MAKING AN OFFER OF THESE SECURITIES IN ANY STATE WHERE THE OFFER IS NOT PERMITTED. YOU SHOULD NOT ASSUME THAT THE INFORMATION IN THIS PROSPECTUS OR ANY PROSPECTUS SUPPLEMENT IS ACCURATE AS OF ANY DATE OTHER THAN THE DATE ON THE FRONT OF THE DOCUMENT.

DEALER PROSPECTUS DELIVERY OBLIGATION

Until twenty-five days after the date of this prospectus, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealer's obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

V	ASCO DATA	SECURITY	INTERNATIONAL,	INC.
		PROSPI	ECTUS	
		7.500.000	9 SHARES	

COMMON STOCK

October 29, 2003

INFORMATION NOT REQUIRED IN PROSPECTUS

TTEM 14. OTHER EXPENSES OF ISSUANCE AND

Securities and Exchange Commission

DISTRIBUTION

The following table sets forth the various expenses payable by us in connection with the sale and distribution of the securities offered in this offering. All of the amounts shown are estimated except the Securities and Exchange Commission registration fee.

ocour reres and Exchange Commission	
Registration fee	\$ 1,753.51
Printing expenses	800.00
Legal fees and expenses	15,000.00
Accounting fees and expenses	4,000.00
Miscellaneous expenses	500.00
Total	\$22,053.51

ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS

Section 145 of the Delaware General Corporation Law ("DGCL") provides that a corporation may indemnify directors, officers, employees and agents against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement in connection with specified actions, suits, or proceedings whether civil, criminal, administrative, or investigative (other than an action by or in the right of the corporation--a "derivative action"), if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. A similar standard is applicable in the case of derivative actions, except that indemnification is permitted only for expenses (including attorneys' fees) incurred in connection with the defense or settlement of such action, and the statute requires court approval before there can be any indemnification for expenses where the person seeking indemnification has been found liable to the corporation. The statute provides that it is not exclusive of other indemnification that may be granted by a corporation's charter, bylaws, disinterested director vote, stockholder vote, agreement, or otherwise.

Article V of the Bylaws of Registrant provides that Registrant shall indemnify and hold harmless, to the fullest extent permitted by applicable law as it presently exists or may hereafter be amended, any person (an "Indemnitee") who was or is made or is threatened to be made a party or is otherwise involved in any action, suit or proceeding, whether civil, criminal, administrative or investigative (a "proceeding"), by reason of the fact that he, or a person for whom he is the legal representative, is or was a director or officer of the Registrant or, while a director or officer of the Registrant, is or was serving at the written request of the Registrant as a director, officer, employee or agent of another corporation or of a partnership, joint venture, trust, enterprise or nonprofit entity, including service with respect to employee benefit plans, against all liability and loss suffered and expenses (including attorneys' fees) reasonably incurred by such Indemnitee. Notwithstanding the preceding sentence, except as otherwise provided in Section 3 of Article V of such Bylaws, the Registrant shall be required to indemnify an Indemnitee in connection with a proceeding (or part thereof) commenced by such Indemnitee only if the commencement of such proceeding (or part thereof) by the Indemnitee was authorized by the Board of Directors.

EXHIBIT NO.	DESCRIPTION
3.1 (1)	Certificate of Incorporation
3.2 (1)	Bylaws, as amended
3.3 (2)	Certificate of Designations, Rights and Preferences of the Series D Preferred Stock
3.4 (2)	Certificate of Amendment to the Certificate of Designations, Rights and Preferences of the Series D Preferred Stock
3.5 (2)	Form of Series D Warrant
5.1 (3)	
23.1 (3)	Consent of KPMG LLP
23.2 (3)	Consent of Pepper Hamilton LLP
24.1 (2)	Power of Attorney (included in signature page)

- (1) Incorporated by reference to the Registrant's Registration Statement on Form S-4 (File No. 333-35563) filed on September 12, 1997
- (2) Filed herewith.
- (3) Previously filed.

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
- (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
- (ii) to reflect in the prospectus any facts or events arising after the effective date of this registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in this registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement;
- (iii) to include any material information with respect to the plan of distribution not previously disclosed in this registration statement or any material change to such information in the registration statement; provided, however, that the undertakings set forth in paragraphs (i) and (ii) above do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act

of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered herein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered hereby which remain unsold at the termination of the offering.

The undersigned registrant hereby undertakes that, for the purpose of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3/A and has duly caused this amended registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in DuPage County, State of Illinois, on the 29th day of October, 2003.

VASCO DATA SECURITY INTERNATIONAL, INC.

By: /s/ T. Kendall Hunt

T. Kendall Hunt

TITLE

Chief Executive Officer and Chairman of

DATE

the Board of Directors

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed below by the following persons in the capacities and on the date indicated.

Each person in so signing also makes and constitutes T. Kendall Hunt, Chairman of the Board of Directors, his true and lawful attorney-in-fact, in his name, place and stead, to execute and cause to be filed with the Securities and Exchange Commission, any or all amendment to this Registration Statement.

NAME

John R. Walter

/s/ T. Kendall Hunt T. Kendall Hunt	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer)
/s/ Clifford K. Bown Clifford K. Bown	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)
/s/ Michael P. Cullinane Michael P. Cullinane	Director
/s/ Michael A. Mulshine	Director
Michael A. Mulshine	
/s/ Forrest D. Laidley Forrest D. Laidley	Director
/s/ John R. Walter	Director

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
3.1 (1)	
3.2 (1)	
3.3 (2)	Certificate of Designations, Rights and Preferences of the Series D Preferred Stock
3.4 (2)	Certificate of Amendment to the Certificate of Designations, Rights and Preferences of the Series D Preferred Stock
3.5 (2)	Form of Series D Warrant
5.1 (3)	
23.1 (3)	
23.2 (3)	Consent of Pepper Hamilton LLP
24.1 (2)	

Incorporated by reference to the Registrant's Registration Statement on Form S-4 (File No. 333-35563) filed on September 12, 1997
 Filed herewith.
 Previously filed.

CERTIFICATE OF DESIGNATIONS, RIGHTS AND PREFERENCES
OF THE
SERIES D 5% CUMULATIVE CONVERTIBLE VOTING PREFERRED STOCK
OF
VASCO DATA SECURITY INTERNATIONAL, INC.

(Pursuant to Section 151 of the General Corporation Law of the State of Delaware)

The undersigned, being the Chief Executive Officer of VASCO Data Security International, Inc., a Delaware corporation (the "CORPORATION"), does hereby certify, that the following resolution has been duly adopted by the board of directors of the Corporation:

RESOLVED, that pursuant to the authority expressly granted to and vested in the board of directors of the Corporation (the "BOARD") pursuant to the General Corporation Law of the State of Delaware, as amended, and by the provisions of the Corporation's Certificate of Incorporation, as amended to date (the "CERTIFICATE OF INCORPORATION"), the Board hereby creates a series of preferred stock of the Corporation, par value \$0.01 per share, each share having a stated value (the "STATED VALUE") of \$10,000.00, such series consisting of 800 shares (which shall not be subject to increase without the consent of the Holders (as defined below) of a majority of the outstanding Preferred Stock, which shall be designated as the "Series D 5% Cumulative Convertible Voting Preferred Stock" (the "CONVERTIBLE PREFERRED Stock"), which series shall have the following powers, designations, preferences and relative participating, optional, voting or other rights, and the following qualifications, limitations or restrictions:

- I. DIVIDENDS. The holders of the Convertible Preferred Stock (each, a "HOLDER" and collectively, the "HOLDERS") shall be entitled to receive, when, if and as declared by the Board, out of funds legally available therefor, cumulative dividends payable as set forth in this Section I.
- A. Accrual and Payment. Dividends on the Convertible Preferred Stock shall accrue and shall be cumulative from the date of issuance of the shares of Convertible Preferred Stock (the "DATE OF ORIGINAL ISSUE"), whether or not earned or declared by the Board. Until paid, the right to receive dividends on the Convertible Preferred Stock shall accumulate, and shall be payable in arrears in cash or shares of the Corporation's class of common stock, par value \$0.001 per share (the "COMMON STOCK"), or stock of any other class into which such shares may hereafter have been reclassified or changed, on March 31, June 30, September 30 and December 31 of each year (a "DIVIDEND PAYMENT DATE"), commencing on December 31, 2003 (the "INITIAL DIVIDEND PAYMENT DATE") except that if such Dividend Payment Date is not a Business Day, then the Dividend Payment Date will be the immediately preceding Business Day. The dividend payment to be made on the Initial Dividend Payment Date shall include a prorated accrued dividend for the period between the Date of Original Issue and September 30, 2003. The decision whether to pay dividends hereunder in Common Stock or cash shall be at the sole discretion of the Corporation; provided, however, that if the Corporation elects to pay a dividend in Common Stock and the receipt thereof by a Holder would be in excess of the Beneficial Ownership Cap (as hereinafter defined), then such dividend shall cumulate for up to 10 years after the Date of Original Issue (the "FINAL DISTRIBUTION DATE") and shall be paid, in whole or in part, on the first date when such payment would not be in excess of

the Beneficial Ownership Cap, and the unpaid portion of any such dividend shall continue to cumulate and be paid thereafter on the next date when such payment would not be in excess of the Beneficial Ownership Cap. Any dividends not paid pursuant to the preceding sentence shall be paid on the Final Distribution Date. Without limiting the foregoing, it shall be the responsibility of the Corporation to determine compliance with the Nasdaq Cap (as hereinafter defined). If at any time the Corporation determines that the Nasdaq Cap is likely to be exceeded, whether as a result of a dividend paid in Common Stock or otherwise, the Corporation shall pay all subsequent dividends in cash, until such time as the Corporation determines that the Nasdaq Cap is no longer likely to be exceeded. Subject to the foregoing, each such dividend declared by the Board shall be paid to the Holders of record as they appear on the stock register of the Corporation on the Record Date (defined below). Dividends in arrears for any past dividend period may be declared by the Board and, subject to the provisions with respect to the Beneficial Ownership Cap and the Nasdaq Cap, paid on shares of the Convertible Preferred Stock on any date fixed by the Board, whether or not a regular Dividend Payment Date, to Holders of record as they appear on the Corporation's stock register on the record date. The record date (the "RECORD DATE"), shall be fixed in advance by the Board, or, to the extent not fixed, shall be the Business Day immediately preceding the date such dividend is paid. Any dividend payment made on shares of the Convertible Preferred Stock shall first be credited against the dividends accumulated with respect to the earliest dividend period for which dividends have not been paid. Dividends not paid on a Dividend Payment Date shall bear interest, whether or not such dividend has been declared, at the Dividend Rate (or such lesser rate equal to the highest rate permitted by applicable law) until paid. For purposes hereof, a "BUSINESS DAY" is any day that is not a Saturday or Sunday or a day on which banks are required or permitted to be closed in the State of Delaware.

B. Dividend Rate. The dividend rate (the "DIVIDEND RATE") on each share of Convertible Preferred Stock shall be five percent (5%) per share per annum compounded quarterly on the Stated Value of each such share for the period from

the Date of Original Issue until the Initial Dividend Payment Date and, for each dividend period thereafter, which shall commence on the last day of the preceding dividend period and shall end on the next Dividend Payment Date, shall be at the Dividend Rate on such Stated Value. The amount of dividends per share of the Convertible Preferred Stock payable for each dividend period or part thereof (the "DIVIDEND VALUE") shall be computed by multiplying the Dividend Rate for such dividend period by a fraction the numerator of which shall be the number of days in the dividend period or part thereof (calculated by counting the first day thereof but excluding the last day thereof) on which such share was outstanding and the denominator of which shall be 360 and multiplying the result by the Stated Value. If a dividend is to be paid in Common Stock, the Common Stock shall be valued at the Current Market Price as of the Business Day immediately preceding the date on which the dividend is paid. In furtherance thereof, the Corporation shall reserve out of the authorized but unissued shares of Common Stock, solely for issuance in respect of the payment of dividends as herein described, a sufficient number of shares of Common Stock to pay such dividends, when, if and as declared by the Board of Directors.

For purposes hereof, "CURRENT MARKET PRICE" means, in respect of any share of Common Stock on any date herein specified:

- 1. if there shall not then be a public market for the Common Stock, ninety percent (90%) multiplied by the Appraised Value (as hereinafter defined) per share of Common Stock at such date, or
- 2. if there shall then be a public market for the Common Stock, ninety percent (90%) multiplied by the average of the daily market prices for the 20 consecutive trading days immediately before such date. The daily market price for each such trading day shall be (a) the last sale price on such day on the principal stock exchange (including the Nasdaq Stock Market, Inc. ("NASDAQ")) on which such Common Stock is then listed or admitted to trading, or quoted, as applicable, (b) if no sale takes place on such day on any such exchange, the average of the last reported closing bid and asked prices on such day as officially quoted on any such exchange (including Nasdaq), (c) if the Common Stock is not then listed or admitted to trading on any stock exchange, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by Nasdaq or the National Quotation Bureau, Inc., (d) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business, or (e) if there is no such firm, as furnished by any member of the National Association of Securities Dealers, Inc. ("NASD") selected mutually by the Holders of a majority of the Preferred Stock and the Corporation or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by a majority of the Holders and one of which shall be selected by the Corporation.

For purposes hereof, "APPRAISED VALUE" means, in respect of any share of Common Stock on any date herein specified, the fair saleable value of such share of Common Stock (determined without giving effect to the discount for (i) a minority interest or (ii) any lack of liquidity of the Common Stock or to the fact that the Corporation may have no class of equity registered under the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT")) as of the last day of the most recent fiscal month end prior to such date specified, based on the value of the Corporation, as determined by a nationally recognized investment banking firm selected by the Board and having no prior relationship with the Corporation, and reasonably acceptable to the holders of at least a majority of the then outstanding shares of Convertible Preferred Stock (the "MAJORITY HOLDERS").

C. Except as hereinafter provided, no dividends shall be declared or paid or set apart for payment on the shares of Common Stock or any other class or series of capital stock of the Corporation for any dividend period unless full cumulative dividends have been or contemporaneously are declared and paid on the Convertible Preferred Stock through the most recent Dividend Payment Date. If full cumulative dividends have not been paid on shares of the Convertible Preferred Stock, all dividends declared on shares of the Convertible Preferred Stock shall be paid pro rata to the Holders in proportion to the full accrued but unpaid dividends attributable to each such Holder's Convertible Preferred Stock. No dividend on any other class or series of capital stock of the Corporation shall be paid unless, at the time of such payment, all accrued dividends on the Convertible Preferred Stock have been paid.

II. VOTING RIGHTS.

- A. General. Except as otherwise provided herein or by law, the Holders shall have full voting rights and powers, subject to the Beneficial Ownership Cap and the Nasdaq Cap (as defined in Section V.F), equal to the voting rights and powers of holders of Common Stock and shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote, with respect to any question upon which holders of Common Stock have the right to vote, including, without limitation, the right to vote for the election of directors, voting together with the holders of Common Stock as one class. Each Holder shall be entitled to a number of votes equal to the number of shares of Common Stock into which such shares of Convertible Preferred Stock could be converted on the record date for the taking of a vote at the then current Conversion Value (as hereinafter defined), subject to the Beneficial Ownership Cap and the Nasdaq Cap, or, if no record date is established, at the day prior to the date such vote is taken or any written consent of shareholders is first executed. Fractional votes shall not be permitted, and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Convertible Preferred Stock held by each Holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward), subject to the Beneficial Ownership Cap and the Nasdag Cap.
- B. Special. The Corporation shall not, without the affirmative vote of the Majority Holders:
- 1. authorize, create (by way of reclassification or otherwise) or issue any additional shares of Convertible Preferred Stock, or any Senior Securities (as hereinafter defined) or Pari Passu Securities (as hereinafter defined) or any obligation or security convertible into, exchangeable for or evidencing the right to purchase any Senior Securities or Pari Passu Securities;
- 2. alter or change the rights, preferences or privileges of the Convertible Preferred Stock, or increase the authorized number of shares of Convertible Preferred Stock;
- alter or change the rights, preferences or privileges of any capital stock of the Corporation so as to affect adversely the Convertible Preferred Stock;
- $\hbox{4. redeem, repurchase or otherwise acquire, or declare or pay} \\ \hbox{any cash dividend or distribution on, any Junior Securities;}$
 - 5. increase the par value of the Common Stock;
- 6. other than (A) a credit facility with an Eligible Lender (as that term is defined below); or (B) any financing with any lender where (x) the interest rate, per annum, applicable to such financing is no greater than the highest rate of interest published as the "Prime Rate" in the "Money Rates" section of the Wall Street Journal from time to time (or, in the event such rate of interest is no longer reported in the Wall Street Journal, any other commercially reasonable method of determining such rate of interest as is satisfactory to the Majority Holders), plus 5%, and (y) the facility fees, up-front fees, commitment fees, set up fees or other similar fees applicable to such financing are no more than such customary and reasonable fees pursuant to such financing, issue any debt securities or incur any indebtedness that would

have any preferences over the Convertible Preferred Stock upon liquidation of the Corporation, or redeem, repurchase, prepay or otherwise acquire any outstanding debt securities or indebtedness of the Corporation, except as expressly required by the terms of such securities or indebtedness;

- 7. enter into any agreement, commitment, understanding or other arrangement to take any of the foregoing actions; or
- $\,$ 8. cause or authorize any subsidiary of the Corporation to engage in any of the foregoing actions.

Notwithstanding the foregoing, no change pursuant to this Section II.B shall be effective to the extent that, by its terms, it applies to less than all of the holders of shares of Convertible Preferred Stock then outstanding. For the purposes of this Section, "ELIGIBLE LENDER" means a commercial bank, a savings and loan association, a savings bank, a finance company, insurance company or other financial institution that is engaged in making, purchasing or otherwise investing in commercial loans in the ordinary course of its business and having a combined capital and surplus or total assets of at least \$500,000,000.000.00

III. RANK.

All shares of the Convertible Preferred Stock shall rank (i) prior to the Common Stock and any class or series of capital stock of the Corporation hereafter created (unless, with the consent of the Majority Holders obtained in accordance with Section II.B hereof, such class or series of capital stock specifically, by its terms, ranks senior to or pari passu with the Convertible Preferred Stock) (collectively with the Common Stock, "JUNIOR SECURITIES"); (ii) pari passu with any class or series of capital stock of the Corporation hereafter created (with the written consent of the Majority Holders obtained in accordance with Section II.B hereof) specifically ranking, by its terms, on parity with the Convertible Preferred Stock (the "PARI PASSU SECURITIES"); and (iii) junior to any class or series of capital stock of the Corporation hereafter created (with the written consent of the Majority Holders obtained in accordance with Section II.B hereof) specifically ranking, by its terms, senior to the Convertible Preferred Stock (collectively, the "SENIOR SECURITIES"), in each case as to distribution of assets upon liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary.

IV. RIGHTS ON LIQUIDATION.

A. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation (any such event being hereinafter referred to as a "LIQUIDATION"), before any distribution of assets of the Corporation shall be made to or set apart for the holders of Common Stock or of any securities of the Corporation which are junior to the Convertible Preferred Stock as to dividends, distributions or distributions upon Liquidation, the Holders shall be entitled to receive payment out of such assets of the Corporation in an amount equal to the greater of (i) the Liquidation Preference, or (ii) the cash or other property distributable upon such Liquidation with respect to the shares of Common Stock into which such shares of Convertible Preferred Stock, including any accrued dividends thereon, could have been converted immediately prior to such payment. The "LIQUIDATION PREFERENCE" for the Convertible Preferred Stock shall be an amount equal to 100% of the Stated Value plus any accumulated and

unpaid dividends thereon (whether or not earned or declared). If the assets of the Corporation available for distribution to the Holders shall not be sufficient to make in full the payment herein required, such assets shall be distributed pro-rata among the Holders based on the aggregate Liquidation Preferences of the shares of Convertible Preferred Stock held by each such Holder

B. If the assets of the Corporation available for distribution to shareholders exceed the aggregate amount payable pursuant to Section IV.A with respect to all shares of Convertible Preferred Stock then outstanding, then, after the payment required by Section IV.A above shall have been made or irrevocably set aside, the holders of Common Stock shall be entitled to receive with respect to each share of Common Stock payment of a pro rata portion of such assets based on the aggregate number of shares of Common Stock held by each such holder.

V. CONVERSION BY THE HOLDER.

- A. Right to Convert. Subject to the limitation set forth in Section V.F hereof, each Holder shall have the right at any time, at such Holder's option, to convert all or any whole number of such Holder's shares of Convertible Preferred Stock into such number of fully paid and non-assessable shares of Common Stock as is determined by dividing (i) the aggregate Stated Value of the shares of Convertible Preferred Stock to be converted plus any accrued but unpaid dividends thereon by (ii) the Conversion Value (as hereinafter defined) then in effect. No fractional shares or scrip representing fractional shares shall be issued upon the conversion of any Convertible Preferred Stock. With respect to any fraction of a share of Common Stock called for upon any conversion, the Corporation shall pay to the Holder an amount in cash equal to such fraction multiplied by the Current Market Price.
- B. Mechanics of Conversion. Such right of conversion shall be exercised by any Holder by delivering to the Corporation a conversion notice in the form ${\sf Conversion}$ attached hereto as Exhibit A (the "CONVERSION NOTICE"), appropriately completed and duly signed and specifying the number of whole shares of Convertible Preferred Stock that the Holder elects to convert (the "CONVERTING SHARES") into shares of Common Stock on the date specified in the Conversion Notice (which date shall not be earlier than the date on which the Conversion Notice`is delivered to the Corporation), and by surrender of the certificate or certificates representing such Converting Shares. The Conversion Notice shall also contain a statement of the name or names (with addresses and tax identification or social security numbers) in which the certificate or certificates for Common Stock shall be issued, if other than the name in which the Converting Shares are registered. Promptly, but in no event more than five (5) Business Days, after the receipt of the Conversion Notice and surrender of the Converting Shares, the Corporation shall issue and deliver, or cause to be delivered, to the holder of the Converting Shares or such holder's nominee, a certificate or certificates for the number of shares of Common Stock issuable upon the conversion of such Converting Shares together with cash in lieu of any fractional interest in a share of Common Stock together with a new certificate covering the number of shares of Convertible Preferred Stock representing the unconverted portion of the shares represented by the Convertible Preferred Stock certificate surrendered. Such conversion shall be deemed to have been effected as of the close of business on the date specified in the Conversion Notice in accordance with the terms hereof (the "CONVERSION DATE"), and the person or persons entitled to receive the shares of Common Stock issuable upon conversion shall be treated for all purposes as the holder or holders of record of such shares of Common Stock as of the close of business on the Conversion Date.

C. Common Stock Reserved.

- 1. The Corporation shall at all times reserve and keep available out of its authorized but unissued Common Stock, solely for issuance upon the conversion of shares of Convertible Preferred Stock as herein provided, such number of shares of Common Stock as shall from time to time be issuable upon the conversion of all the shares of Convertible Preferred Stock at the time outstanding (the "RESERVED AMOUNT").
- 2. If the Reserved Amount for any three consecutive trading days (the last of such three trading days being the "AUTHORIZATION TRIGGER DATE") shall be less than one hundred percent (100%) of the number of shares of Common Stock issuable upon full conversion of the then outstanding shares of Convertible Preferred Stock (without giving effect to the limitations contained in Section V.F), the Corporation shall immediately notify the holders of Convertible Preferred Stock of such occurrence and shall take immediate action (including, if necessary, seeking stockholder approval to authorize the issuance of additional shares of Common Stock) to increase the Reserved Amount to one hundred percent (100%) of the number of shares of Common Stock then issuable upon full conversion of all of the outstanding Convertible Preferred Stock at the then current Conversion Price (without giving effect to the limitations contained in Section V.F). In the event the Corporation fails to so increase the Reserved Amount within 90 days after an Authorization Trigger Date, each Holder of Convertible Preferred Stock shall thereafter have the option, exercisable in whole or in part at any time and from time to time, by delivery of a Redemption Notice to the Corporation, to require the Corporation to redeem for cash, at an amount per share equal to the Redemption Amount (as defined in Section VII), a number of the holder's shares of Convertible Preferred Stock such that, after giving effect to such redemption, the then unissued portion of such holder's Reserved Amount is at least equal to one hundred percent (100%) of the total number of shares of Common Stock issuable upon conversion of such holder's shares of Convertible Preferred Stock. If the Corporation fails to redeem any of such shares within five business days after its receipt of such Redemption Notice, then such holder shall be entitled to the remedies provided in Section VII.
- D. Conversion Value. The initial conversion value for the Convertible Preferred Stock shall be \$2.00 per share of Common Stock, such value to be subject to adjustment in accordance with the provisions of this Section V. Such conversion value in effect from time to time, as adjusted pursuant to this Section V, is referred to herein as a "CONVERSION VALUE." All of the remaining provisions of this Section V shall apply separately to each Conversion Value in effect from time to time with respect to Convertible Preferred Stock.
- E. Stock Dividends, Subdivisions and Combinations. If at any time while the Convertible Preferred Stock is outstanding, the Corporation shall:
- 1. take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend payable in, or other distribution of, additional shares of Common Stock,

- 2. subdivide its outstanding shares of Common Stock into a larger number of shares of Common Stock, or
- $\,$ 3. combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock,

then in each such case the Conversion Value shall be multiplied by a fraction of which the numerator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately before such event and of which the denominator shall be the number of shares of Common Stock (excluding treasury shares, if any) outstanding immediately after such event. Any adjustment made pursuant to clause (1) of this Section V.E shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clause (2) or (3) of this Section V.E shall become effective immediately after the effective date of such subdivision or combination. If any event requiring an adjustment under this paragraph occurs during the period that a Conversion Value is calculated hereunder, then the calculation of such Conversion Value shall be adjusted appropriately to reflect such event.

F. Blocking Provisions. Notwithstanding any contrary or inconsistent provision hereof, the number of shares of Common Stock that may be acquired by any Holder upon any conversion of Convertible Preferred Stock or that shall be entitled to voting rights under Section II hereof, and for which the Corporation may issue Common Stock to any holder of Convertible Preferred Stock as payment of any dividend, shall be limited to the extent necessary to insure that, following such conversion, the number of shares of Common Stock then owned of record by such Holder and any other persons or entities whose record ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act (including shares held by any "group" of which the Holder is a member) does not exceed (i) 4.95% of the total number of shares of $\hbox{Common Stock then issued and outstanding (the "BENEFICIAL OWNERSHIP CAP"); or } \\$ (ii) 19.9% of the total number of shares of Common Stock issued and outstanding as of the Date of Original Issue times a fraction the numerator of which is the maximum number of shares of Common Stock issuable upon conversion by such Holder of all of its shares of Convertible Preferred Stock and the denominator of which is the aggregate maximum amount of shares of Common Stock issuable upon conversion by all Holders of all outstanding shares of the Convertible Preferred Stock (the "NASDAQ CAP"); provided, however, that the Convertible Preferred Stock shall remain subject to the mandatory conversion provisions set forth in Section VI, notwithstanding the fact that, but for this proviso, such mandatory conversion of the Preferred Stock would exceed the Beneficial Ownership Cap. For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Securities and Exchange Commission, and the percentage held by the Holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. Each delivery of a Conversion Notice by a Holder will constitute a representation by such Holder that it has evaluated the limitation set forth in this Section V.F and determined, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person or entity other than such Holder with respect to the outstanding Common Stock (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), that the issuance of the full number of shares of Common Stock requested in such Conversion Notice is permitted under this Section V.F, and the Corporation shall have no obligations to such Holder to verify

compliance with the Beneficial Ownership Cap or the Nasdaq Cap. This Section V.F shall be construed and administered in such manner as shall be consistent with the intent of the first sentence of this Section V.F. Any provision hereof which would require a result that is not consistent with such intent shall be deemed severed herefrom and of no force or effect with respect to the conversion contemplated by a particular Conversion Notice. The restriction contained in this Subsection (i) of this Section V.F may not be altered, amended, deleted or changed in any manner whatsoever unless a majority of the outstanding shares of Common Stock and the Majority Holders shall approve, in writing, such alteration, amendment, deletion or change. In the event the Corporation is prohibited from issuing Common Stock to any holder of Convertible Preferred Stock as payment of any dividend, it shall pay such dividend to such holder in cash.

$\hbox{\tt VI.} \quad \hbox{\tt MANDATORY CONVERSION AT THE CORPORATION'S ELECTION.}$

A. Subject to the Required Conditions contained in Section VI.C, the Corporation may call for conversion of all or any portion of the Convertible Preferred Stock no earlier than the later of the first anniversary of the issuance of the first share of the Convertible Preferred Stock (the "FIRST ANNIVERSARY") or the effective date of a registration statement filed with the Commission for the registration of the Common Stock into which the Preferred Stock is convertible (the "REGISTRATION DATE"), upon the occurrence of any of the following:

- 1. the Common Stock is traded on any national securities exchange or quoted on the Nasdaq National Market or Nasdaq SmallCap Market, and the closing price per share of the Common Stock is greater than 200% multiplied by the Conversion Value for at least twenty (20) out of thirty (30) consecutive trading days since the later of the First Anniversary and the Registration Date; or
- 2. the sale by the Corporation of its Common Stock in a firm commitment public underwritten offering in which (a) the per share offering price of the Common Stock is greater than 200% multiplied by the Conversion Value and (b) the aggregate gross proceeds of such offering exceeds \$15,000,000; or
- 3. the closing of a transaction that results in a Change of Control (as hereinafter defined), pursuant to which the Common Stock is valued at a per share price equal to or greater than 200% multiplied by the Conversion Value;

provided, however, that, if the mandatory conversion contemplated by this Section VI.A is based on the satisfaction of the conditions set forth in clause 1 of this Section VI.A, the Corporation shall be permitted to require conversion in any quarter of no more than 25% of the total number of shares of Convertible Preferred Stock issued on the Date of Original Issue.

B. If the Corporation elects to call for the mandatory conversion of the Convertible Preferred Stock in accordance with Section VI.A, the Corporation shall give written notice thereof to the Holders (the "CALL FOR CONVERSION"), signed by the Chief Executive Officer or Chief Financial Officer of the Convertible Preferred Stock. The Call for Conversion shall (A) specify on which of the three bases for mandatory conversion set forth in Section VI.A the call is based and (B) include information reasonably sufficient for the Holder to confirm compliance with Section VI.A. No more than two (2) Business Days following receipt of a Call for Conversion, Holder shall convert the shares of Convertible Preferred Stock subject to such Call for Conversion, in the manner set forth in Section V.B.

- C. The "Required Conditions" shall consist of the following:
- 1. Each Registration Statement required to be filed by the Corporation pursuant to the Purchase Agreement shall have been declared effective by the Securities and Exchange Commission (it being understood that the Corporation shall comply with its obligations under the Purchase Agreement relating to the effectiveness of the Registration Statements) and shall have been kept effective in accordance with the Purchase Agreement;
- 2. No Redemption Event (as defined in Section VII.A below) shall have occurred without having been cured;
- 3. All amounts, if any, then accrued and payable under this Certificate of Designation or the Purchase Agreement shall have been paid.

VII. REDEMPTION DUE TO CERTAIN EVENTS.

- A. Redemption by Holder. In the event (each of the events described below after expiration of the applicable cure period (if any) being a "REDEMPTION EVENT"):
- 1. the Corporation fails to remove any restrictive legend on any certificate or any shares of Common Stock issued to the Holders of Convertible Preferred Stock upon conversion of the Convertible Preferred Stock upon written request of any Purchaser pursuant to Rule 144(k) promulgated under the Securities Act or the Corporation fails to cause an opinion of counsel to be delivered to the Corporation's transfer agent with respect to the subsequent transfer of Common Stock issued to the Holders of the Convertible Preferred Stock upon conversion to the effect that the certificates representing any such Common Stock sold and transferred pursuant to an effective registration statement filed with the SEC shall be issued without a restrictive legend (a "LEGEND REMOVAL FAILURE"), and any such failure continues uncured for five business days after the Corporation has been notified thereof in writing by the Holder;
- 2. the Corporation provides written notice (or otherwise indicates) to any Holder of Convertible Preferred Stock, or states by way of public announcement distributed via a press release, at any time, of its intention not to issue, or otherwise refuses to issue, shares of Common Stock to any Holder of Convertible Preferred Stock upon conversion in accordance with the terms of this Certificate of Designations, other than a refusal related to the Beneficial Ownership Cap or Nasdaq Cap;
- 3. the Corporation or any subsidiary of the Corporation shall make a voluntary assignment for the benefit of creditors in an amount exceeding \$1.0 million in the aggregate, or voluntarily apply for or consent to the appointment of a receiver or trustee for it or for a substantial part of its property or business;

4. Except with respect to matters covered by subparagraphs 1-3 above, as to which such applicable subparagraphs shall apply, the Corporation otherwise shall breach any material term hereunder or under the Purchase Agreement, or the Warrants, including, without limitation, the representations and warranties contained therein relating to corporate existence, power and authorization or compliance with its charter documents or solvency (i.e., in the event of a material breach as of the date such representation and warranty was made) and if such breach is curable, shall fail to cure such breach within ten business days after the Corporation has been notified thereof in writing by the holder:

then, upon the occurrence of any such Redemption Event, each Holder of shares of Convertible Preferred Stock shall thereafter have the option, exercisable in whole or in part at any time and from time to time by delivery of a written notice to such effect (a "REDEMPTION NOTICE") to the Corporation while such Redemption Event continues, to require the Corporation to purchase for cash any or all of the then outstanding shares of Convertible Preferred Stock held by such Holder for an amount per share equal to the Redemption Amount (as defined in Section VII.B below) in effect at the time of the redemption hereunder. For the avoidance of doubt, the occurrence of any event described in clauses 2 and 3 above shall immediately constitute a Redemption Event and there shall be no cure period. Upon the Corporation's receipt of any Redemption Notice hereunder (other than during the three trading day period following the Corporation's delivery of a Redemption Announcement (as defined below) to all of the Holders in response to the Corporation's initial receipt of a Redemption Notice from a Holder of Convertible Preferred Stock), the Corporation shall immediately (and in any event within three business days following such receipt) deliver a written notice (a "REDEMPTION ANNOUNCEMENT") to all Holders of Convertible Preferred Stock stating the date upon which the Corporation received such Redemption Notice and the amount of Convertible Preferred Stock covered thereby. The Corporation shall not redeem any shares of Convertible Preferred Stock during the three trading day period following the delivery of a required Redemption Announcement hereunder. At any time and from time to time during such three trading day period, each Holder of Convertible Preferred Stock may request (either orally or in writing) information from the Corporation with respect to the instant redemption (including, but not limited to, the aggregate number of shares of Convertible Preferred Stock covered by Redemption Notices received by the Corporation) and the Corporation shall furnish (either orally or in writing) as soon as practicable such requested information to such requesting Holder.

B. Definition of Redemption Amount. The "REDEMPTION AMOUNT" with respect to a share of Preferred Stock means an amount equal to the greater of:

and

(ii) V x R

where:

"V" means the Face Amount thereof plus all accrued dividends thereon through the date of payment of the Redemption Amount;

"CP" means the Conversion Price in effect on the date on which the Corporation receives the Redemption Notice;

"M" means (i) the highest Closing Sales Price of the Common Stock during the period beginning on the date on which the Corporation receives the Redemption Notice and ending on the date immediately preceding the date of payment of the Redemption Amount; and

"R" means 120%.

C. Redemption Defaults. If the Corporation fails to pay any Holder the Redemption Amount with respect to any share of Convertible Preferred Stock within five business days after its receipt of a Redemption Notice, then the Holder of the Convertible Preferred Stock entitled to redemption shall be entitled to interest on the Redemption Amount at a per annum rate equal to the lower of twenty-four percent (24%) and the highest interest rate permitted by applicable law from the date on which the Corporation receives the Redemption Notice until the date of payment of the Redemption Amount hereunder. In the event the Corporation is not able to redeem all of the shares of Convertible Preferred Stock subject to Redemption Notices delivered prior to the date upon which such redemption is to be effected, the Corporation shall redeem shares of Convertible Preferred Stock from each Holder pro rata, based on the total number of shares of Convertible Preferred Stock outstanding at the time of redemption included by such Holder in all Redemption Notices delivered prior to the date upon which such redemption is to be effected relative to the total number of shares of Convertible Preferred Stock outstanding at the time of redemption included in all of the Redemption Notices delivered prior to the date upon which such redemption is to be effected.

VIII. OTHER PROVISIONS APPLICABLE TO ADJUSTMENTS.

The following provisions shall be applicable to the making of adjustments of the number of shares of Common Stock into which the Convertible Preferred Stock is convertible and the current Conversion Value provided for in Section V:

- A. When Adjustments to Be Made. The adjustments required by Section V shall be made whenever and as often as any specified event requiring an adjustment shall occur, except that any adjustment to the Conversion Value that would otherwise be required may be postponed up to, but not beyond the Conversion Date if such adjustment either by itself or with other adjustments not previously made adds or subtracts less than 1% of the shares of Common Stock into which the Convertible Preferred Stock is convertible immediately prior to the making of such adjustment. Any adjustment representing a change of less than such minimum amount (except as aforesaid) which is postponed shall be carried forward and made as soon as such adjustment, together with other adjustments required by Section V and not previously made, would result in a minimum adjustment on the Conversion Date. For the purpose of any adjustment, any specified event shall be deemed to have occurred at the close of business on the date of its occurrence.
- B. Fractional Adjustments. In computing adjustments under Section V, fractional adjustments to the Conversion Value shall be taken into account to the nearest 1/100th of a cent.
- C. Escrow of Stock. If after any property becomes distributable pursuant to Section V by reason of the taking of any record of the holders of Common Stock, but prior to the occurrence of the event for which such record is taken, a Holder converts the Convertible Preferred Stock, such Holder shall continue to be entitled to receive any shares of Common Stock issuable upon conversion under

Section V by reason of such adjustment and such shares or other property shall be held in escrow for the Holder by the Corporation to be issued to Holder upon and to the extent that the event actually takes place. Notwithstanding any other provision to the contrary herein, if the event for which such record was taken fails to occur or is rescinded, then such escrowed shares shall be canceled by the Corporation and escrowed property returned to the Corporation.

IX. MERGER, CONSOLIDATION OR DISPOSITION OF ASSETS.

If, while the Preferred Stock is outstanding, there occurs: (i) an acquisition by an individual or legal entity or group (as defined in Rule 13d-3 of the Exchange Act) of more than one-half of the voting rights or equity interests in the Corporation; or (ii) a merger or consolidation of the Corporation or a sale, transfer or other disposition of all or substantially all the Corporation's property, assets or business to another corporation where the holders of the Corporation's voting securities prior to such transaction fail to continue to hold at least a majority of the voting power of the surviving or acquiring corporation (a "CHANGE OF CONTROL"), and, pursuant to the terms of such Change of Control, shares of common stock of the surviving or acquiring corporation, or any cash, shares of stock or other securities or property of any nature whatsoever (including warrants or other subscription or purchase rights) in addition to or in lieu of common stock of the successor or acquiring corporation ("OTHER PROPERTY"), are to be received by or distributed to the holders of Common Stock, then the certificates evidencing the Convertible Preferred Stock shall, as of and after the Change of Control, evidence only the right to receive, at each Holder's election, which must be delivered by each Holder to the Corporation within 20 days after receiving notice from the Corporation of the right to make such election, either:

- A. the number of shares of common stock of the successor or acquiring corporation or of the Corporation, if it is the surviving corporation, and Other Property receivable upon or as a result of such Change of Control by a Holder of the number of shares of Common Stock into which the Convertible Preferred Stock is convertible immediately prior to such event, or
- B. at the effective time of such Change of Control, such Holder's Liquidation Preference multiplied by 150%.

If a timely election is not made pursuant to this Section IX, the Holder shall receive the benefit of Section IX.A and shall not be entitled to the benefit of Section IX.B. If notice of a Change of Control is given but the Change of Control transaction is not, for any reason, consummated, the elections of the Holders given in connection with such notice shall be of no force or effect, ab initio.

X. OTHER ACTION AFFECTING COMMON STOCK.

In case at any time or from time to time the Corporation shall take any action in respect of its Common Stock, other than the payment of dividends permitted by Section V or any other action described in Section V, then, unless such action will not have a materially adverse effect upon the rights of the Holder of Convertible Preferred Stock, the number of shares of Common Stock or other stock into which the Convertible Preferred Stock is convertible exercisable and/or the purchase price thereof shall be adjusted in such manner as may be equitable in the circumstances.

XI. CERTAIN LIMITATIONS.

Notwithstanding anything herein to the contrary, the Corporation agrees not to enter into any transaction that, by reason of any adjustment hereunder, would cause the current Conversion Value to be less than the par value per share of Common Stock.

${\sf XII.}$ TRANSFER OF PREFERRED STOCK.

A. Transfer. Subject to compliance with all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Corporation, if such are requested by the Corporation; provided that such letters and legal opinions shall not be unreasonably requested with respect to a transfer to an affiliate of a Holder) and any shareholders agreement to which the transferor is a party, the Preferred Stock and all rights therein may be transferred or assigned in whole or in part.

B. Prohibited Transfers. Notwithstanding anything to the contrary herein, the Holder shall at all times be prohibited from transferring any Preferred Stock or right therein to a person or entity who, at the time of such determination, is currently engaging, or is reasonably likely to engage, in the same or a substantially similar business as that of the Corporation.

XIII. STOCK TRANSFER TAXES.

The issue of stock certificates upon conversion of the Convertible Preferred Stock shall be made without charge to the converting Holder for any tax in respect of such issue; provided, however, that the Corporation shall be entitled to withhold any applicable withholding taxes with respect to such issue, if any.

XIV. CERTIFICATE AS TO ADJUSTMENTS.

Upon the occurrence, if any, of each adjustment or readjustment of the Conversion Value, the Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the reasonable written request at any time of any Holder, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Value at the time in effect for the Convertible Preferred Stock and (iii) the number of shares of Common Stock and the amount, if any, or other property which at the time would be received upon the conversion of Convertible Preferred Stock owned by such Holder.

XV. PAYMENT OF CASH; DEFAULTS.

Whenever the Corporation is required to make any cash payment to a Holder under this Certificate of Designation (as payment of any dividend, upon redemption or otherwise), such cash payment shall be made to the Holder within five business days after delivery by such Holder of a notice specifying that the Holder elects to receive such payment in cash and the method (e.g., by check, wire transfer) in which such payment should be made and any supporting documentation reasonably requested by the Corporation to substantiate the Holder's claim to such cash payment or the amount thereof. If such payment is not delivered within such five business day period, such Holder shall thereafter be entitled to interest on the unpaid amount at a per annum rate equal to the lower of eighteen percent (18%) and the highest interest rate permitted by applicable law until such amount is paid in full to the Holder.

XVI. ALLOCATION OF NASDAQ CAP AMOUNT AND RESERVED AMOUNT. The initial Nasdaq Cap and Reserved Amount shall be allocated pro rata among the Holders of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, the holders of such other securities issued pursuant to the Purchase Agreement or other agreements entered into in connection therewith) based on the number of shares of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, such other securities) issued to each such Holder. Each increase to the Nasdaq Cap and the Reserved Amount shall be allocated pro rata among the Holders of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, the holders of such other securities issued pursuant to the Purchase Agreement or other agreements entered into in connection therewith) based on the number of shares of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, such other securities) held by each Holder at the time of the increase in the Nasdaq Cap or Reserved Amount. In the event a Holder shall sell or otherwise transfer any of such Holder's shares of Convertible Preferred Stock (or, in the case of the Nasdaq Cap, such other securities), each transferee shall be allocated a pro rata portion of such transferor! s Nasdaq Cap and Reserved Amount. Any portion of the Nasdaq Cap or Reserved Amount which remains allocated to any person or entity which does not hold any Convertible Preferred Stock (or, in the case of the Nasdaq Cap, such other securities) shall be allocated to the remaining Holders of shares of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, the holders of such other securities issued pursuant to the Purchase Agreement or other agreements entered into in connection therewith), pro rata based on the number of shares of Convertible Preferred Stock (and, in the case of the Nasdaq Cap, such other securities) then held by such Holders.

XVII. NOTICES OF RECORD DATE. In the event of any fixing by the Corporation of a record date for the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any shares of Common Stock or other securities, or any right to subscribe for, purchase or otherwise acquire, or any option for the purchase of, any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall mail to each Holder at least twenty (20) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.

XVIII. NOTICES. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (a) the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section XVIII prior to 4:00 p.m. (Chicago time) on a Business Day, (b) the next Business Day after the date of transmission, if such notice or communication is delivered via facsimile at the facsimile number specified in this Section on a day that is not a Business Day or later than 4:00 p.m. (Chicago time) on any Business Day, or (c) the Business Day following the date of mailing, if sent by U.S. nationally recognized overnight courier service such as Federal Express. The address for such notices and communications shall be as follows: (i) if to the Corporation, to 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois 60181, facsimile: 630.932.8852, Attention: Chief Executive Officer, with a copy to Pepper Hamilton LLP, 600 Fourteenth Street, N.W., Washington, D.C. 20005-2004, Fax No. 202.220.1665, Att'n Robert B. Murphy,

Esquire or (ii) if to a Holder, to the address or facsimile number appearing on the Corporation's stockholder records or, in either case, to such other address or facsimile number as the Corporation or a Holder may provide to the other in accordance with this Section.

IN WITNESS WHEREOF, the undersigned has executed this Certificate of Designation on behalf of the Corporation this 9th day of September, 2003.

/s/ T. Kendall Hunt

Name: T. Kendall Hunt

Chairman of the Board and Chief Executive Officer Title:

EXHIBIT A

FORM OF CONVERSION NOTICE

(To be executed by the registered Holder in order to convert shares of Convertible Preferred Stock)

The undersigned hereby irrevocably elects to convert the number of shares of Series D 5% Cumulative Convertible Voting Preferred Stock (the "Convertible Preferred Stock") indicated below into shares of common stock, par value \$.001 per share (the "Common Stock"), of VASCO Data Security International, Inc., a Delaware corporation (the "Company"), according to the Certificate of Designations, Rights and Preferences of the Convertible Preferred Stock and the conditions hereof, as of the date written below. The undersigned hereby requests that certificates for the shares of Common Stock to be issued to the undersigned pursuant to this Conversion Notice be issued in the name of, and delivered to, the undersigned or its designee as indicated below. A copy of the certificate representing the Convertible Preferred Stock being converted is attached hereto.

Date to Effect Conversion
Number of shares of Convertible Preferred Stock owned prior to Conversion
Number of shares of Convertible Preferred Stock to be Converted
Stated Value of Convertible Preferred Stock to be Converted
Amount of accumulated and unpaid dividends on shares of Convertible Preferred Stock to be Converted
Number of shares of Common Stock to be Issued (including conversion of accrued but unpaid dividends on shares of Convertible Preferred Stock to be Converted)
Applicable Conversion Value
Number of shares of Convertible Preferred Stock owned subsequent to Conversion

Conversion Information: [NAME OF HOLDER]	
Ву:	
Name: Title:	
Address of Holder:	
Issue Common Stock to (if different than above):	
Name:	
Address:	
The undersigned represents, subject to the accuracy of information filed under the Securities Act and the Exchange Act by any person other than such holder with respect to the outstanding Common Stock of the Company (including securities or property convertible into or exchangeable for Common Stock, with or without the payment of consideration), as of the date hereof that, after giving effect to the conversion of Convertible Preferred Shares pursuant to the Conversion Notice, the undersigned will not exceed the "Beneficial Ownership Cap" contained in Section V.F of the Certificate of Designations, Rights and Preferences of the Convertible Preferred Stock.	
Name of Holder	
Ву:	
Name: Title:	

CERTIFICATE OF AMENDMENT TO THE
CERTIFICATE OF DESIGNATIONS, RIGHTS AND PREFERENCES
OF THE
SERIES D 5% CUMULATIVE CONVERTIBLE VOTING PREFERRED STOCK
OF

VASCO DATA SECURITY INTERNATIONAL, INC.

VASCO Data Security International, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "DGCL"), does hereby certify:

FIRST: That the board of directors of the Corporation (the "Board"), by unanimous written consent filed with the minutes of proceedings of the Board, duly adopted a resolution declaring advisable the amendment of the Certificate of Designations, Rights and Preferences (the "Certificate") of the Series D 5% Cumulative Convertible Voting Preferred Stock of the Corporation (the "Preferred Stock"), and submitting the same to the record holders of the Preferred Stock for approval. The resolution setting forth the proposed amendment is as follows:

RESOLVED, that Section II.A of the Certificate of Designations, Rights and Preferences of the Series D 5% Cumulative Convertible Voting Preferred Stock be, and it hereby is, deleted in its entirety and amended and restated as follows:

"II.A General. Except as otherwise provided herein or by law, the Holders shall have full voting rights and powers, subject to the Beneficial Ownership Cap and the Nasdaq Cap (as defined in Section V.F), equal to the voting rights and powers of holders of Common Stock and shall be entitled to notice of any stockholders meeting in accordance with the Bylaws of the Corporation, and shall be entitled to vote, with respect to any question upon which holders of Common Stock have the right to vote, including, without limitation, the right to vote for the election of directors, voting together with the holders of Common Stock as one class. Each Holder shall be entitled to a number of votes, subject to the Beneficial Ownership Cap and the Nasdaq Cap, equal to the product of: (1) the number of shares of Common Stock into which such shares of Convertible Preferred Stock could be converted on the record date for the taking of a vote at the then current Conversion Value (as hereinafter defined), or, if no record date is established, at the day prior to the date such vote is taken or any written consent of stockholders is first executed; and (2) 0.6826. Fractional votes shall not be permitted, and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Convertible Preferred Stock held by each Holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward), subject to the Beneficial Ownership Cap and the Nasdag Cap.

SECOND: That the holders of at least a majority of the outstanding shares of Preferred Stock have duly consented in writing to the aforesaid amendment in accordance with the provisions of ss. 228 of the DGCL and Section II.B.2 of the Certificate.

THIRD: That the amendment was duly adopted in accordance with the provisions ofss.242 of the DGCL.

IN WITNESS WHEREOF, VASCO Data Security International, Inc. has caused this certificate to be signed by T. Kendall Hunt, its Chairman and Chief Executive Officer, this 17th day of October, 2003.

VASCO DATA SECURITY INTERNATIONAL, INC.

By: /s/ T. Kendall Hunt

Name: T. Kendall Hunt

Title: Chairman and Chief Executive Officer

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WARRANT	NO	
WARRANI	NO.	

THIS WARRANT AND THE SECURITIES REPRESENTED BY, OR ACQUIRABLE UPON CONVERSION OR EXERCISE OF SECURITIES EVIDENCED BY, THIS WARRANT HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT UNLESS THE ISSUER OF THIS WARRANT RECEIVES AN OPINION OF LEGAL COUNSEL REASONABLY ACCEPTABLE TO THE ISSUER AND ITS LEGAL COUNSEL THAT SUCH SALE IS EXEMPT FROM REGISTRATION UNDER SUCH ACT AND IS IN COMPLIANCE WITH APPLICABLE STATE SECURITIES OR BLUE SKY LAWS UNLESS SUCH REGISTRATION IS NOT REQUIRED.

SERIES D WARRANT

TO PURCHASE _____ SHARES OF COMMON STOCK OF

VASCO DATA SECURITY INTERNATIONAL, INC.

THIS IS TO CERTIFY THAT _______, or registered assigns (the "HOLDER"), is entitled, at any time prior to the Expiration Date (as hereinafter defined), to purchase from VASCO Data Security International, Inc. a Delaware corporation (the "COMPANY"), the Warrant Shares (as hereinafter defined and subject to adjustment as provided herein), in whole or in part, at a purchase price of \$3.47 per share (initially and as adjusted, if at all, pursuant to the terms and conditions of this Warrant, the "EXERCISE PRICE"), all on and subject to the terms and conditions hereinafter set forth.

1. DEFINITIONS. As used in this Warrant, the following terms have the respective meanings set forth below:

"AFFILIATE" means any Person that, directly or indirectly through one or more intermediaries, controls or is controlled by or is under common control with a Person, as such terms are used in and construed under Rule 144 under the Securities Act. With respect to a Holder of Warrants, any investment fund or managed account that is managed on a discretionary basis by the same investment manager as such Holder will be deemed to be an Affiliate of such Holder.

"APPRAISED VALUE" means, in respect of any share of Common Stock on any date herein specified, the fair saleable value of such share of Common Stock (determined without giving effect to the discount for (i) a minority interest or (ii) any lack of liquidity of the Common Stock or to the fact that the Company may have no class of equity registered under the Exchange Act) as of the last day of the most recent fiscal month ending prior to such date specified, based on the value of the Company, as determined by a nationally recognized investment banking firm selected by the Company's Board of Directors and having no prior relationship with the Company.

"BUSINESS DAY" means any day that is not a Saturday or Sunday or a day on which banks are required or permitted to be closed in the State of Delaware.

"CHANGE OF CONTROL" means the (i) acquisition by an individual or legal entity or group (as defined in Rule 13d-3 of the Exchange Act) of more than one-half of the voting rights or equity interests in the Company; (ii) sale, conveyance, or other disposition of all or substantially all of the assets, property or business of the Company, (iii) reorganization of the Company's capital, or (iv) merger into or consolidation with any other corporation (other than a wholly owned subsidiary corporation) or effectuation of any transaction or series of related transactions where holders of the Company's voting securities prior to such transaction or series of transactions fail to continue to hold at least 50% of the voting power of the Company.

"CLOSING DATE" means September 10, 2003.

"COMMISSION" means the Securities and Exchange Commission or any other federal agency then administering the Securities Act and other federal securities laws.

"COMMON STOCK" means (except where the context otherwise indicates) the class of common stock, \$0.001 par value per share, of the Company as constituted on the Closing Date, and any capital stock into which such Common Stock may thereafter be changed or converted, and shall also include (i) capital stock of the Company of any other class (regardless of how denominated) issued to the holders of shares of Common Stock upon any reclassification thereof which is also not preferred as to dividends or assets on liquidation over any other class of stock of the Company and which is not subject to redemption and (ii) shares of common stock of any successor or acquiring corporation received by or distributed to the holders of Common Stock in the circumstances contemplated by Section 4.C.

"EXCHANGE ACT" means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder, all as the same shall be in effect from time to time.

"EXERCISE PERIOD" means the period during which this Warrant is exercisable pursuant to Section 2.a. $\,$

"EXPIRATION DATE" means September 10, 2008.

"MARKET PRICE" means, in respect of any share of Common Stock, if there shall not be a public market for the Common Stock on the Business Day immediately preceding the Closing Date, the higher of (a) the book value per share of Common Stock on such date and (b) the Appraised Value per share of Common Stock on such date, or if there shall then be a public market for the Common Stock on the Business Day immediately preceding the Closing Date, the higher of (a) the book value per share of Common Stock on such date, and (b) the average of the daily market prices for 20 consecutive Trading Days immediately preceding such date. The daily market price for each such Trading Day shall be (i) the last sale price on such day on the principal stock exchange on which such Common Stock is then listed or admitted to trading (including Nasdaq), (ii) if no sale takes place on such day on any such exchange, the average of the last reported closing bid and asked prices on such day as officially quoted on any

such exchange (including Nasdaq), (iii) if the Common Stock is not then listed or admitted to trading on any stock exchange, the average of the last reported closing bid and asked prices on such day in the over-the-counter market, as furnished by Nasdaq or the National Quotation Bureau, Inc., (iv) if neither such corporation at the time is engaged in the business of reporting such prices, as furnished by any similar firm then engaged in such business reasonably acceptable to holders of at least a majority of the then outstanding shares of the Company's Series D 5% Cumulative Convertible Voting Preferred Stock, or (v) if there is no such firm, as furnished by any member of the NASD selected mutually by the Holder and the Company or, if they cannot agree upon such selection, as selected by two such members of the NASD, one of which shall be selected by the Holder and one of which shall be selected by the Company.

"NASD" means the National Association of Securities Dealers, Inc., or any successor corporation thereto. $\,$

"NASDAQ" means the Nasdaq Stock Market, Inc.

"OTHER PROPERTY" has the meaning set forth in Section 4.b.i.

"PERSON" means any individual, sole proprietorship, partnership, joint venture, trust, incorporated organization, association, corporation, limited liability company, institution, public benefit corporation, entity or government (whether federal, state, county, city, municipal or otherwise, including, without limitation, any instrumentality, division, agency, body or department thereof).

"SECURITIES ACT" means the Securities Act of 1933, as amended, and the rules and regulations of the Commission thereunder, all as the same shall be in effect at the time.

"TRADING DAY" means any day on which the primary market on which shares of Common Stock are listed is open for trading.

"TRANSFER" means any disposition of any Warrant or Warrant Shares or of any interest in either thereof, which would constitute a sale thereof within the meaning of the Securities Act.

"WARRANTS" means this Warrant and all warrants issued upon transfer, division or combination of, or in substitution for, any thereof. All Warrants shall at all times be identical as to terms and conditions and date, except as to the number of shares of Common Stock for which they may be exercised.

"WARRANT PRICE" means an amount equal to (i) the number of shares of Common Stock being purchased upon exercise of this Warrant pursuant to Section 2.a, multiplied by (ii) the Exercise Price.

"WARRANT SHARES" means any one or more of the 600,000 shares of Common Stock to be purchased upon the exercise hereof, subject to adjustment as provided herein.

2. EXERCISE OF WARRANT.

a. Manner of Exercise.

i. From and after the Closing Date, and until 5:00 P.M., Delaware time, on the Expiration Date (the "EXERCISE PERIOD"), the Holder may exercise this Warrant, on any Business Day, for all or any part of the number of Warrant Shares purchasable hereunder.

ii. In order to exercise this Warrant, in whole or in part, the Holder shall deliver to the Company at its principal office or at the office or agency designated by the Company pursuant to Section I, (i) a written notice of Holder's election to exercise this Warrant, which notice shall specify the number of Warrant Shares to be purchased, (ii) payment of the Warrant Price as provided herein, and (iii) this Warrant. Such notice shall be substantially in the form of the subscription form (the "SUBSCRIPTION FORM") appearing at the end of this Warrant as Exhibit A, duly executed by the Holder or its agent or attorney. Upon receipt thereof, the Company shall, as promptly as reasonably practicable, and in any event within five (5) Business Days thereafter (the "DELIVERY PERIOD"), execute or cause to be executed and deliver or cause to be delivered to the Holder a certificate or certificates representing the aggregate number of Warrant Shares issuable upon such exercise, together with cash in lieu of any fraction of a share, as hereinafter provided. The stock certificate or certificates so delivered shall be in such denomination or denominations as the Holder may reasonably request in the notice and shall be registered in the name of the Holder or such other name as shall be designated in the notice and, following the date on which the Warrant Shares have been sold and transferred pursuant to an effective resale registration statement filed with the Commission or otherwise may be sold by the Holder pursuant to Rule 144(k) promulgated under the Securities Act (or a successor rule), shall not bear any restrictive legend. This Warrant shall be deemed to have been exercised and such certificate or certificates shall be deemed to have been issued, and the Holder or any other Person so designated to be named therein shall be deemed to have become a Holder of record of such shares for all purposes, as of the date when the notice, together with the payment of the Warrant Price and this Warrant, is received by the Company as described above. If this Warrant shall have been exercised in part, the Company shall, at the time of delivery of the certificate or certificates representing Warrant Shares, deliver to the Holder a new Warrant evidencing the rights of the Holder to purchase the unpurchased shares of Common Stock called for by this Warrant, which new Warrant shall in all other respects be identical with this Warrant, or at the request of the Holder, appropriate notation may be made on this Warrant and the same returned to the Holder.

iii. Payment of the Warrant Price may be made at the option of the Holder by: (i) certified or official bank check payable to the order of the Company, or (ii) wire transfer to the account of the Company. All shares of Common Stock issuable upon the exercise of this Warrant pursuant to the terms hereof shall be validly issued and, upon payment of the Warrant Price, shall be fully paid and nonassessable and not subject to any preemptive rights. The Company shall pay all expenses in connection with, and all transfer, stamp or similar taxes and other governmental charges that may be imposed with respect to, the issue or delivery thereof, provided, however, that the Company shall not be required to pay any tax which may be payable in respect of any transfer

involved in the issuance of any certificates for Warrant Shares or Warrants in a name other than the name of the Holder.

iv. Prior to the exercise of this Warrant, the Holder shall not be entitled to any rights as a stockholder of the Company with respect to the Warrant Shares, including, without limitation, the right to vote such Warrant Shares, receive dividends or other distributions thereon or to be notified of stockholder meetings, except as set forth herein.

V. If the Company's transfer agent is participating in the Depository Trust Company ("DTC") Fast Automated Securities Transfer program, and so long as the certificates therefor do not bear a legend (pursuant to the terms of that certain Preferred Stock and Warrant Purchase Agreement, dated September 10, 2003, by and among the Company and the signatories thereto (the "PURCHASE AGREEMENT"), the Company shall cause its transfer agent to electronically transmit the Warrant Shares so purchased to the Holder or the Holder's designee by crediting the account of the Holder or the Holder's designee or its respective nominee with DTC through its Deposit Withdrawal Agent Commission system ("DTC TRANSFER"). If the aforementioned conditions to a DTC Transfer are not satisfied, the Company shall deliver to the Holder or the Holder's designee physical certificates representing the Warrant Shares so purchased. Notwithstanding the foregoing, the Holder or the Holder's designee may instruct the Company to deliver to the Holder or such designee physical certificates representing the Warrant Shares so purchased in lieu of delivering such shares by way of DTC Transfer.

vi. If, at any time, a Holder of this Warrant submits this Warrant, a Subscription Form and payment to the Company of the Exercise Price for each of the Warrant Shares specified in the Subscription Form (including pursuant to a Cashless Exercise), and the Company fails for any reason (other than the reasons contemplated by Section 2.a hereof) to deliver, on or prior to the fourth business day following the expiration of the Delivery Period for such exercise, the number of shares of Common Stock to which the Holder is entitled upon such exercise (an "EXERCISE DEFAULT"), then the Company shall pay to the Holder payments ("EXERCISE DEFAULT PAYMENTS") for an Exercise Default in the amount of (i) (N/365), multiplied by (ii) the amount by which the Market Price of the Common Stock on the date the Exercise Agreement giving rise to the Exercise Default is transmitted in accordance with this Section 2 (the "EXERCISE DEFAULT DATE") exceeds the Exercise Price in respect of such Warrant Shares, multiplied by (iii) the number of shares of Common Stock the Company failed to so deliver in such Exercise Default, multiplied by (iv) .24, where N equals the number of days from the Exercise Default Date to the date that the Company effects the full exercise of this Warrant which gave rise to the Exercise Default. The accrued Exercise Default Payment for each calendar month shall be paid in cash and shall be made to the Holder by the fifth day of the month following the month in which it has accrued. Nothing herein shall limit the Holder's right to pursue actual damages for the Company's failure to maintain a sufficient number of authorized shares of Common Stock as required pursuant to the terms of Section 6 hereof or to otherwise issue shares of Common Stock upon exercise of this Warrant in accordance with the terms hereof, and the Holder shall have the right to pursue all remedies available at law or in equity (including a decree of specific performance and/or injunctive relief).

b. Restrictions on Exercise Amount. Notwithstanding any contrary or inconsistent provision hereof, the Holder may not acquire a number of Warrant Shares to the extent that, upon such exercise, the number of shares of Common Stock then owned of record by such Holder and its Affiliates and any other Persons or entities whose record ownership of Common Stock would be aggregated with the Holder's for purposes of Section 13(d) of the Exchange Act (including shares held by any "group" of which the Holder is a member) exceeds 4.95% of the total number of shares of Common Stock then issued and outstanding (such limitation being herein referred to as the "BENEFICIAL OWNERSHIP CAP"). For purposes hereof, "group" has the meaning set forth in Section 13(d) of the Exchange Act and applicable regulations of the Commission, and the percentage held by the Holder shall be determined in a manner consistent with the provisions of Section 13(d) of the Exchange Act. The restriction contained in this Section 2.b may not be altered, amended, deleted or changed in any manner whatsoever unless the holders of a majority of the outstanding shares of Common Stock and the Holder hereof shall approve, in writing, such alteration, amendment, deletion or change.

3. TRANSFER, DIVISION AND COMBINATION.

- a. Transfer. The Warrants and the Warrant Shares may not be transferred or assigned in whole or in part without compliance with all applicable federal and state securities laws by the transferor and the transferee (including the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, if such are requested by the Company; provided that such letters and legal opinions shall not be unreasonably requested with respect to a transfer to an Affiliate of the Holder) and any stockholders agreement to which the transferor is a party. Subject to the foregoing, Transfer of this Warrant and all rights hereunder, in whole or in part, shall be registered on the books of the Company to be maintained for such purpose, upon surrender of this Warrant at the principal office of the Company referred to in Section 10.b or the office or agency designated by the Company pursuant to Section 9, together with a written assignment of this Warrant substantially in the form of Exhibit B hereto duly executed by the Holder or its agent or attorney and funds sufficient to pay any transfer taxes payable upon the making of such Transfer. Upon such surrender and, if required, such payment, the Company shall execute and deliver a new Warrant or Warrants in the name of the assignee or assignees and in the denomination specified in such instrument of assignment, and shall issue to the assignor a new Warrant evidencing the portion of this Warrant not so assigned, and this Warrant shall promptly be cancelled. The acceptance of the new Warrant or Warrants by the transferee thereof shall be deemed the acceptance by such transferee of all of the rights and obligations of a Holder. Following a transfer that complies with the requirements of this Section 3.a, the Warrant may be exercised by a new Holder for the purchase of shares of Common Stock regardless of whether the Company issued or registered a new Warrant on the books of the Company.
- b. Prohibited Transfers. Notwithstanding anything to the contrary herein, the Holder shall at all times be prohibited from transferring any Warrant and any Warrant Shares to any Person who, at the time of such determination, is currently engaging, or is reasonably likely to engage, in the same or a substantially similar business as that of the Company.

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c. Restrictive Legend. Each certificate for Warrant Shares initially issued upon the exercise of this Warrant unless such Warrant Shares may otherwise be sold by the Holder pursuant to Rule 144(k) promulgated under the Securities Act (or a successor rule), each certificate for Warrant Shares issued to any subsequent transferee of any such certificate, shall be stamped or otherwise imprinted with a legend in substantially the following form:

"THE SECURITIES REPRESENTED BY, OR ACQUIRABLE UPON CONVERSION OR EXERCISE OF SECURITIES EVIDENCED BY, THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED IN THE ABSENCE OF AN EFFECTIVE REGISTRATION STATEMENT UNDER SAID ACT UNLESS THE ISSUER OF THIS CERTIFICATE RECEIVES AN OPINION OF LEGAL COUNSEL REASONABLY ACCEPTABLE TO THE ISSUER AND ITS LEGAL COUNSEL THAT SUCH SALE IS EXEMPT FROM REGISTRATION UNDER SUCH ACT AND IS IN COMPLIANCE WITH APPLICABLE STATE SECURITIES OR BLUE SKY LAWS UNLESS SUCH REGISTRATION IS NOT REQUIRED."

- d. Division and Combination; Expenses; Books. This Warrant may be divided or combined with other Warrants upon presentation hereof at the aforesaid office or agency of the Company, together with a written notice specifying the names and denominations in which new Warrants are to be issued, signed by the Holder or its agent or attorney. Subject to compliance with Section 3.a as to any transfer which may be involved in such division or combination, the Company shall execute and deliver a new Warrant or Warrants in exchange for the Warrant or Warrants to be divided or combined in accordance with such notice. The Company shall prepare, issue and deliver at its own expense the new Warrant or Warrants under this Section 3. The Company agrees to maintain, at its aforesaid office or agency, books for the registration and the registration of transfer of the Warrants.
- 4. ADJUSTMENTS. The number of shares of Common Stock for which this Warrant is exercisable, and the Exercise Price, shall be subject to adjustment from time to time as set forth in this Section 4. The Company shall give the Holder notice of any event described below which requires an adjustment pursuant to this Section 4 in accordance with Sections 5.a and 5.b.
- a. Stock Dividends, Subdivisions and Combinations. If at any time while this Warrant is outstanding the Company shall:
- i. take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend payable in, or other distribution of, additional shares of Common Stock,

- ii. subdivide its outstanding shares of Common Stock into a larger number of shares of Common Stock, or
- $\hbox{iii. combine its outstanding shares of Common Stock into a smaller number of shares of Common Stock, then:}\\$
- (1) the number of shares of Common Stock acquirable upon exercise of this Warrant immediately after the occurrence of any such event shall be adjusted to equal the number of shares of Common Stock which a record holder of the same number of shares of Common Stock that would have been acquirable under this Warrant immediately prior to the occurrence of such event would own or be entitled to receive after the happening of such event, and
 - (2) the Exercise Price shall be adjusted to equal:
- (A) the Exercise Price in effect immediately prior to the occurrence of such event multiplied by the number of shares of Common Stock into which this Warrant is exercisable immediately prior to the adjustment, divided by
- (B) the number of shares of Common Stock into which this Warrant is exercisable immediately after such adjustment.

Any adjustment made pursuant to clause (i) of this Section 4.a shall become effective immediately after the record date for the determination of stockholders entitled to receive such dividend or distribution, and any adjustment pursuant to clauses (ii) or (iii) of this Section 4.a shall become effective immediately after the effective date of such subdivision or combination.

- $\mbox{\sc b.}$ Reorganization, Reclassification, Merger, Consolidation or Disposition of Assets.
- i. If, during the Exercise Period, there shall occur a Change of Control and, pursuant to the terms of such Change of Control, shares of common stock of the successor or acquiring corporation, or any cash, shares of stock or other securities or property of any nature whatsoever (including warrants or other subscription or purchase rights) in addition to or in lieu of common stock of the successor or acquiring corporation ("OTHER PROPERTY"), are to be received by or distributed to the holders of Common Stock, then the Holder shall have the right thereafter to receive, upon the exercise of the Warrant, the number of shares of common stock of the successor or acquiring corporation or of the Company, if it is the surviving corporation, and the Other Property receivable upon or as a result of such Change of Control by a holder of the number of shares of Common Stock into which this Warrant is exercisable immediately prior to such event.
- ii. In case of any such Change of Control, the successor or acquiring corporation (if other than the Company) shall expressly assume the due and punctual observance and performance of each and every covenant and condition contained in this Warrant to be performed and observed by the Company and all the obligations and liabilities hereunder, subject to such modifications as may be deemed appropriate (as determined by resolution of the Board of Directors of

the Company) in order to provide for adjustments of shares of the Common Stock into which this Warrant is exercisable which shall be as nearly equivalent as practicable to the adjustments provided for in this Section 4.

- c. Other Action Affecting Common Stock. In case at any time or from time to time the Company shall take any action in respect of its Common Stock, then, unless such action will not have a materially adverse effect upon the rights of the Holder, the number of shares of Common Stock or other stock into which this Warrant is exercisable and/or the Exercise Price shall be adjusted in such manner as may be equitable in the circumstances.
- d. Certain Limitations. Notwithstanding anything herein to the contrary, the Company agrees not to enter into any transaction which, by reason of any adjustment hereunder, would cause the Exercise Price to be less than the par value per share of Common Stock.
- e. Stock Transfer Taxes. The issue of stock certificates upon exercise of this Warrant shall be made without charge to the Holder for any tax in respect of such issue.
- f. Fractional Interests. The Company shall not be required to issue a fractional share of Common Stock upon exercise of any Warrant. If an adjustment made pursuant to this Section 4 entitles the Holder to any fraction of a share, such fraction shall be rounded to the nearest whole number and the Holder shall be entitled to that number of shares.

5. NOTICES TO WARRANT HOLDERS.

a. Certificate as to Adjustments. Upon the occurrence, if any, of each adjustment or readjustment of the Exercise Price, or the number of shares of Common Stock and the amount, if any of Other Property which at the time would be received upon exercise of the Warrants owned by such Holder, the Company, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to the Holder a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the reasonable written request at any time of the Holder, furnish or cause to be furnished to such Holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Exercise Price at the time in effect and (iii) the number of shares of Common Stock and the amount, if any, or Other Property which at the time would be received upon the exercise of Warrants owned by such Holder.

b. Notice of Corporate Action. If at any time:

- i. the Company shall take a record of the holders of its Common Stock for the purpose of entitling them to receive a dividend or other distribution, or any right to subscribe for or purchase any evidences of its indebtedness, any shares of stock of any class or any other securities or property, or to receive any other right, or
- ii. there shall be any capital reorganization of the Company, any reclassification or recapitalization of the capital stock of the Company or any consolidation or merger of the Company with, or any sale, transfer or other

disposition of all or substantially all the property, assets or business of the Company to, another corporation, or

iii. there shall be a voluntary or involuntary dissolution, liquidation or winding up of the Company;

then, in any one or more of such cases, the Company shall give to the Holder (i) at least 15 days' prior written notice of the record date that shall be selected for such dividend, distribution or right or for determining rights to vote in respect of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, and (ii) in the case of any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up, at least 15 days' prior written notice of the date when the same shall take place. Such notice in accordance with the foregoing clause also shall specify (1) the date on which any such record is to be taken for the purpose of such dividend, distribution or right, the date on which the holders of Common Stock shall be entitled to any such dividend, distribution or right, and the amount and character thereof, and (2) the date on which any such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up is to take place and the time, if any such time is to be fixed, as of which the holders of Common Stock shall be entitled to exchange their shares of Common Stock for securities or Other Property deliverable upon such reorganization, reclassification, merger, consolidation, sale, transfer, disposition, dissolution, liquidation or winding up. Each such written notice shall be sufficiently given if addressed to the Holder at the last address of the Holder appearing on the books of the Company and delivered in accordance with Section 10.b. The failure to give any notice required by this Section 5.b shall not invalidate any such corporate action.

- c. Notice to Stockholders. The Holder shall be entitled to the same rights to receive notice of corporate action as any holder of Common Stock. Subject to the foregoing, the Holder, as such, shall not be entitled to vote or receive dividends or be deemed the holder of Common Stock or any other securities of the Company that may at any time be issuable on the exercise hereof for any purpose, nor shall anything contained herein be construed to confer upon the Holder, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value, or change of stock to no par value, consolidation, merger, conveyance, or otherwise) or to receive dividends or subscription rights or otherwise until this Warrant shall have been exercised as provided herein.
- 6. RESERVATION AND AUTHORIZATION OF COMMON STOCK: REGISTRATION WITH APPROVAL OF ANY GOVERNMENTAL AUTHORITY. From and after the Closing Date until the Expiration Date, the Company shall at all times reserve and keep available for issue upon the exercise of the Warrants such number of its authorized but unissued shares of Common Stock as will be sufficient to permit the exercise in full of all outstanding Warrants. All shares of Common Stock which shall be so issuable, when issued upon exercise of any Warrant and payment therefor in

accordance with the terms of such Warrant, shall be duly and validly issued and fully paid and nonassessable, and not subject to preemptive rights.

- 7. TAKING OF RECORD; STOCK AND WARRANT TRANSFER BOOKS. In the case of all dividends or other distributions by the Company to the holders of its Common Stock with respect to which any provision of Section 4 refers to the taking of a record of such holders, the Company will in each such case take such a record and will take such record as of the close of business on a Business Day. The Company will not at any time, except upon dissolution, liquidation or winding up of the Company, close its stock transfer books or Warrant transfer books so as to result in preventing or delaying the exercise or transfer of any Warrant.
- 8. LOSS OR MUTILATION. Upon receipt by the Company from the Holder of evidence reasonably satisfactory to the Company of the ownership of and the loss, theft, destruction or mutilation of this Warrant and indemnity reasonably satisfactory to the Company (it being understood that the written agreement of the original Holder shall be sufficient indemnity) and in case of mutilation upon surrender and cancellation hereof, the Company, at its expense, will execute and deliver in lieu hereof a new Warrant of like tenor to the Holder; provided, however, that in the case of mutilation, no indemnity shall be required if this Warrant in identifiable form is surrendered to the Company for cancellation. Applicants for a replacement Warrant under such circumstances shall also comply with such other reasonable regulations and procedures and pay such other reasonable charges as the Company may prescribe.
- 9. OFFICE OF THE COMPANY. As long as any of the Warrants remain outstanding, the Company shall maintain an office or agency (which may be the principal executive offices of the Company) where the Warrants may be presented for exercise, registration of transfer, division or combination as provided in this Warrant.

10. MISCELLANEOUS.

- a. Nonwaiver and Expenses. No course of dealing or any delay or failure to exercise any right hereunder on the part of the Holder shall operate as a waiver of such right or otherwise prejudice Holder's rights, powers or remedies. If the Company fails to make, when due, any payments provided for hereunder, or fails to comply with any other provision of this Warrant, the Company shall pay to the Holder such amounts as shall be sufficient to cover any costs and expenses including, but not limited to, reasonable attorneys' fees, including those of appellate proceedings, incurred by the Holder in collecting any amounts due pursuant hereto or in otherwise enforcing any of its rights, powers or remedies hereunder.
- b. Notice Generally. All notices, requests, demands or other communications provided for herein shall be in writing and shall be deemed to have been given the next Business Day after being deposited with a nationally recognized overnight courier such as Federal Express, or, when personally delivered, or successfully sent by facsimile transmission as evidenced by a fax machine confirmation report thereof, addressed, as the case may be, to the Holder at the address on the books and records of the Company; or to the Company, VASCO Data Security International, Inc., 1901 South Meyers Road, Suite 210, Oakbrook Terrace, Illinois 60181, Att'n: Clifford K. Bown, Chief Financial

Officer, Fax No. 630.932.8852; with a copy to Pepper Hamilton LLP, 600 Fourteenth Street, N.W., Washington, D.C. 20005-2004, Fax No. 202.220.1665, Att'n Robert B. Murphy, Esquire, or to such other Person or address as either party shall designate to the other from time to time in writing forwarded in like manner.

- c. Successors and Assigns. Subject to compliance with the provisions of Section 3.a, this Warrant and the rights evidenced hereby shall inure to the benefit of and be binding upon the successors of the Company and the successors and assigns of the Holder. The provisions of this Warrant are intended to be for the benefit of all Holders from time to time of this Warrant, and shall be enforceable by any such Holder, but nothing in this Warrant shall be construed to give any Person, other than the Company and the Holder and their respective successors and assigns, any legal or equitable right, remedy or cause under this Warrant.
- d. Amendment. This Warrant may be modified or amended or the provisions of this Warrant waived with the written consent of the Company and the Holder.
- e. Severability. Wherever possible, each provision of this Warrant shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Warrant shall be prohibited by or invalid under applicable law, such provision shall be modified to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Warrant.
- f. Headings. The headings used in this Warrant are for the convenience of reference only and shall not, for any purpose, be deemed a part of this Warrant $\,$
- g. Governing Law. This Warrant and the transactions contemplated hereby shall be deemed to be consummated in the State of Delaware and shall be governed by and interpreted in accordance with the local laws of the State of Delaware without regard to the provisions thereof relating to conflict of laws.

[REMAINDER OF PAGE LEFT INTENTIONALLY BLANK. SIGNATURE PAGES FOLLOW].

	F, the Company has caused this Series D Warrant to rized officer and attested by its Secretary.	be
Dated: September 11, 2003	VASCO DATA SECURITY INTERNATIONAL. INC.	

By: Name: T. Kendall Hunt Title: Chairman of the Board and Chief Executive Officer

Attest:

By:

Name: Clifford K. Bown Title: Corporate Secretary

EXHIBIT A

SUBSCRIPTION FORM

[To be executed only upon exercise of Warrant]

The undersigned registered owner of this Warrant hereby exercises this Warrant for the purchase of _______ shares of Common Stock of VASCO Data Security International, Inc., a Delaware corporation (the "Company"), and herewith makes payment therefor, all at the price and on the terms and conditions specified in this Warrant and requests that certificates for the shares of Common Stock hereby purchased (and any securities or Other Property issuable upon such exercise) be issued in the name of and delivered to and whose address is ______. And, if such shares of Common Stock shall not include all of the shares of Common Stock issuable as provided in this Warrant, that a new Warrant of like tenor and date for the balance of the shares of Common Stock issuable hereunder be delivered to the undersigned.

As of the date hereof, and assuming the accuracy of all information filed by the Company with the Securities and Exchange Commission, the undersigned Holder hereby certifies that the exercise of the referenced Warrant for the number of Warrant Shares herein indicated will not put the undersigned Holder out of compliance with the Beneficial Ownership Cap (as defined in the Warrant).

By signing below, the Holder warrants and represents that the Holder is an "accredited investor" as that term is defined under Regulation D of the Securities and Exchange Commission promulgated under the Securities Act of 1933, as amended.

(Name of Registered Owner)
(Signature of Registered Owner)
(Street Address)
(City, State and Zip Code)

 ${\tt NOTICE:}$ The signature on this subscription must correspond with the name as written upon the face of the Warrant.

EXHIBIT B

ASSIGNMENT FORM

FOR VALUE RECEIVED the undersigned registered owner of this Warrant for the purchase of shares of the Common Stock of VASCO Data Security International, Inc., a Delaware corporation (the "Company"), hereby sells, assigns and transfers unto the Assignee named below all of the rights of the undersigned under this Warrant, with respect to the number of shares of Common Stock set forth below:

Name and Address of Assignee:	
Ç	
No. of Shares of Common Stock:	
and does hereby irrevocably constitu	ite and appoint
attorney-in-fact to register such tr maintained for the purpose, with full \ensuremath{T}	ansfer on the books of the Company, .l power of substitution in the premises.
Dated:	
Print Name:	
Signature:	
Witness:	
withess.	

 ${\tt NOTICE:} \ \, {\tt The \ signature \ on \ this \ assignment \ must \ correspond \ with \ the \ name \ as \ written \ upon \ the \ face \ of \ the \ Warrant \ in \ every \ particular.}$