

Greiner Helen  
Form 4  
June 29, 2010

**FORM 4**

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

OMB APPROVAL

OMB Number: 3235-0287  
Expires: January 31, 2005  
Estimated average burden hours per response... 0.5

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
Greiner Helen

(Last) (First) (Middle)

C/O IROBOT CORPORATION, 8  
CROSBY DRIVE

(Street)

BEDFORD, MA 01730

(City) (State) (Zip)

2. Issuer Name and Ticker or Trading Symbol  
IROBOT CORP [IRBT]

3. Date of Earliest Transaction  
(Month/Day/Year)  
06/25/2010

4. If Amendment, Date Original Filed(Month/Day/Year)

5. Relationship of Reporting Person(s) to Issuer

(Check all applicable)

Director  10% Owner  
 Officer (give title below)  Other (specify below)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 Form filed by One Reporting Person  
 Form filed by More than One Reporting Person

**Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned**

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)	4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price
Common Stock	06/25/2010		S <sup>(1)</sup>		1,608	D	\$ 20.77
							(2)
Common Stock	06/28/2010		S <sup>(1)</sup>		6,029	D	\$ 20.82
							(3)

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

**Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.**

SEC 1474  
(9-02)



an initial conversion price of \$2.1156 per share and warrants to purchase 850,822 shares of Class A common stock at an exercise price of \$2.1156 upon the exercise of these additional investment rights which expire one year following the effective date of the registration statement of which this prospectus is a part. We agreed with the purchasers of these securities to register these securities for public resale. This prospectus has been prepared, and the registration statement of which this prospectus is a part has been filed with the SEC, in order to satisfy our obligations to the purchasers of these securities. Accordingly, this prospectus covers: o the resale by the selling stockholders of shares of our Class A common stock issued upon conversion of the selling stockholders' convertible notes o the resale by the selling stockholders of shares of our Class A common stock issuable upon exercise of the warrants and the conversion of the additional convertible notes issuable upon exercise of the additional investment rights issued in the private placement. Investing in our securities involves risks. You should carefully consider the information under "Risk Factors" beginning on page 3 of this prospectus and the other information included or incorporated by reference in this prospectus before investing in our securities. Our Class A common stock is listed on the American Stock Exchange and trades under the symbol "API." On November 5, 2004, the last reported sale price of our Class A common stock on the American Stock Exchange was \$1.69 per share. 2 Risk Factors Investing in our Class A common stock involves a high degree of risk and uncertainty. You should carefully consider the risks and uncertainties described below before investing in our Class A common stock. Our business, prospects, financial condition and results of operations could be adversely affected due to any of the following risks. In that case, the value of our Class A common stock could decline, and you could lose all or part of your investment. Risks Relating to Our Business ----- We are dependent upon several suppliers for a significant portion of raw materials used in the manufacturing of our products. The principal raw materials we use in the manufacture of our semiconductor components and sensor assemblies are silicon wafers, chemicals and gases used in processing wafers, gold wire, lead frames, and a variety of packages and substrates, including metal, printed circuit board, flex circuits, ceramic and plastic packages. All of these raw materials can be obtained from several suppliers. From time to time, particularly during periods of increased industry-wide demand, silicon wafers and other materials have been in short supply. Any significant interruption in the supply of these raw materials could have a material adverse effect on us. Customer acceptance of our products is dependent on our ability to meet changing requirements. Customer acceptance of our products is significantly dependent on our ability to offer products that meet the changing requirements of our customers, including the military, medical institutions, industrial laboratories, government agencies and industrial corporations. Any decrease in the level of customer acceptance of our products could have a material adverse effect on us. We are subject to market risk through our sales to overseas markets. A growing amount of our sales are being derived from overseas markets. These international sales are primarily focused in Europe and the Middle-East. These operations are subject to risks that are inherent in operating in foreign countries, including the following: o foreign countries could change regulations or impose currency restrictions and other restraints; o changes in foreign currency exchange rates and hyperinflation or deflation in the foreign countries in which we operate; 3 o exchange controls; o in some countries, there is a risk that the government may expropriate assets; o some countries impose burdensome tariffs and quotas; o political changes and economic crises may lead to changes in the business environment in which we operate; o international conflict, including terrorist acts, could significantly impact our financial condition and results of operations; and o economic downturns, political instability and war or civil disturbances may disrupt distribution logistics or limit sales in individual markets. In addition, we utilize third-party "Distributors" to act as our representative for the geographic region that they have been assigned. These "Distributors" are responsible for maintaining customer account management and in some cases maintaining an inventory of products for those customers within their geographic region. Our success is dependent on these "Distributors" finding new customers and receiving new orders from existing customers. Our future performance is dependent upon finding new customers and retaining our existing customers. Customers normally purchase our products and incorporate them into products that they in turn sell in their own markets on an ongoing basis. As a result, our sales are dependent upon the success of our customers' products and our future performance is dependent upon our success in finding new customers and receiving new orders from existing customers. In several of our market segments, quality and/or reliability of our products is a major concern for our customers, not only upon the initial manufacture of the product, but for the life of the product. Many of our products are used in remote locations, or higher value assembly, making servicing of our products not feasible. Any failure of the quality and/or reliability of our products could have an adverse affect on us and our ability to maintain or attract customers. Customer orders are subject to cancellation or modification at any

time. Our sales are made primarily pursuant to standard purchase orders for delivery of products. However, by industry practice, orders may be canceled or modified at any time. When a customer cancels an order, they are responsible for all finished goods, all costs, direct and indirect, incurred by us, as well as a reasonable allowance for anticipated profits. No assurance can be given that we will receive these amounts after cancellation. The current backlog contains only those orders for which we have received a confirmed purchase order and also includes contracts which have scheduled shipping dates beyond the upcoming fiscal year. As such, the current backlog represents only a portion of expected annual revenues for fiscal year 2005. At October 31, 2004, we had approximately \$9.0 million in backlog. 4 The markets for many of our products are characterized by changing technology. The markets for many of our products are characterized by changing technology, new product introductions and product enhancements, and evolving industry standards. The introduction or enhancement of products embodying new technology or the emergence of new industry standards could render existing products obsolete or result in short product life cycles. Accordingly, our ability to compete is in part dependent on our ability to continually offer enhanced and improved products. We are dependent on key in-house manufacturing equipment or processes to deliver a custom product (solution) with the highest performance and short time to market. We depend on key in-house manufacturing equipment and assembly processes. We believe that these key manufacturing and assembly process give us the flexibility and responsiveness to meet our customer delivery schedule and performance specification with a custom product. This value proposition is an important component of our offering to our customers. A loss of these capabilities could have an adverse effect on our existing operations and new business growth. Changes in the spending priorities of the federal government can materially adversely affect our business. In fiscal 2004, approximately 37.0 % of our sales was related to products purchased by military contractors. Our business depends upon continued federal government expenditures on defense, intelligence, aerospace and other programs that we support. In fiscal 2004, our sales to military contractors enjoyed a strong steady growth rate. In addition, foreign military sales are affected by U.S. Government regulations, regulations by the purchasing foreign government and political uncertainties in the U.S. and abroad. There can be no assurance that the U.S. defense and military budget will continue to grow or that sales of defense related items to foreign governments will continue at present levels. In addition, the terms of defense contracts with the U.S. Government generally permit the Government to terminate such contracts, with or without cause, at any time. Any unexpected termination of a significant U.S. Government contract with a military contractor that we sell our products to could have a material adverse effect on us. Our industry is highly competitive and fragmented. We compete with a range of companies for the custom optoelectronic and silicon photodetector requirements of customers in our target markets. We believe that our principal competitors for sales of custom devices are small to medium size companies. Because we specialize in custom devices requiring a high degree of engineering expertise to meet the requirements of specific applications, we generally do not compete to any significant degree with other large United States, European or Pacific Rim manufacturers of standard "off the shelf" optoelectronic components or silicon photodetectors. We cannot assure you that we will be able to compete successfully in our markets against these or any future competitors. 5 Our industry is sensitive to changing economic conditions. We believe that many factors affect our industry, including consumer confidence in the economy, interest rates, fuel prices and credit availability. The overall economic climate or Gross National Product growth has a direct impact on our customers and the demand for our products. We cannot assure you that our business will not be adversely affected as a result of an industry or general economic downturn. We are subject to environmental regulations. The photonics industry, as well as the semiconductor industry in general, is subject to governmental regulations for the protection of the environment, including those relating to air and water quality, solid and hazardous waste handling, and the promotion of occupational safety. Various federal, state and local laws and regulations require that we maintain certain environmental permits. We believe that we have obtained all necessary environmental permits required to conduct our manufacturing processes. Changes in the aforementioned laws and regulations or the enactment of new laws, regulations or policies could require increases in operating costs and additional capital expenditures and could possibly entail delays or interruptions of operations. If we are unable to protect our intellectual property rights adequately, the value of our products could be diminished. We utilize proprietary design rules and processing steps in the development and fabrication of our PIN photodiodes and avalanche photodiodes. In addition, we own 11 patents utilized in our products. There can be no assurance that any issued patents will provide us with significant competitive advantages, or that challenges will not be instituted against the validity or enforceability of any patent owned by us, or, if instituted, that such challenges will not be successful. The cost of litigation to uphold the validity and to prevent

the infringement of a patent could be substantial and could have a material adverse effect on our operating results. Furthermore, there can be no assurance that our APD technology will not infringe on patents or rights owned by others, licenses to which might not be available to us. Based on limited patent searches, contacts with others knowledgeable in the field of APD technology, and a review of the published materials, we believe that our competitors hold no patents, licenses or other rights to the APD technology which would preclude us from pursuing our intended operations. In some cases, we may rely on trade secrets to protect our innovations. There can be no assurance that trade secrets will be established, that secrecy obligations will be honored or that others will not independently develop similar or superior technology. To the extent that consultants, key employees or other third parties apply technological information independently developed by them or by others to our projects, disputes might arise as to the proprietary rights to such information which may not be resolved in our favor. 6 We face strong competition for skilled workers. Our success depends in large part on its ability to attract and retain highly qualified scientific, technical, management, and marketing personnel. Competition for such personnel is intense and there can be no assurance that we will be able to attract and retain the personnel necessary for the development and operation of our business. We may not be able to successfully integrate future acquisitions, which could result in our not achieving the expected benefits of the acquisition, the disruption of our business and an increase in our costs. We continually explore opportunities to acquire related businesses, some of which could be material to us. Our ability to continue to grow may depend upon identifying and successfully acquiring attractive companies, effectively integrating these companies, achieving cost efficiencies and managing these businesses as part of our company. We may not be able to effectively integrate the acquired companies and successfully implement appropriate operational, financial and management systems and controls to achieve the benefits expected to result from these acquisitions. Our efforts to integrate these businesses could be affected by a number of factors beyond our control, such as regulatory developments, general economic conditions and increased competition. In addition, the process of integrating these businesses could cause the interruption of, or loss of momentum in, the activities of our existing business. The diversion of management's attention and any delays or difficulties encountered in connection with the integration of these businesses could negatively impact our business and results of operations. Further, the benefits that we anticipate from these acquisitions may not develop. Risks Relating to Our Class A Common Stock

----- Our share price has been volatile in the past and may decline in the future. Our Class A common stock has experienced significant market price and volume fluctuations in the past and may experience significant market price and volume fluctuations in the future in response to factors such as the following, some of which are beyond our control: o quarterly variations in our operating results; o operating results that vary from the expectations of securities analysts and investors; o changes in expectations as to our future financial performance, including financial estimates by securities analysts and investors; o announcements of technological innovations or new products by us or our competitors; 7 o announcements by us or our competitors of significant contracts, acquisitions, strategic partnerships, joint ventures or capital commitments; o changes in the status of our intellectual property rights; o announcements by third parties of significant claims or proceedings against us; o additions or departures of key personnel; o future sales of our ordinary shares; and o stock market price and volume fluctuations. Stock markets often experience extreme price and volume fluctuations. Market fluctuations, as well as general political and economic conditions, such as a recession or interest rate or currency rate fluctuations or political events or hostilities in or surrounding the United States, could adversely affect the market price of our Class A common stock. In the past, securities class action litigation has often been brought against companies following periods of volatility in the market price of its securities. We may in the future be the target of similar litigation. Securities litigation could result in substantial costs and divert management's attention and resources both of which could have a material adverse effect on our business and results of operations. Future sales of our Class A common stock in the public market could lower our stock price, and conversion of our warrants and any additional capital raised by us may dilute your ownership in us. We may sell additional shares of Class A common stock in subsequent offerings. In addition, holders of warrants to purchase our Class A common stock will, most likely, exercise their warrants to purchase shares of our Class A common stock after this registration statement is declared effective. We cannot predict the size of future issuances of our Class A common stock or the effect, if any, that future issuances and sales of shares of our Class A common stock will have on the market price of our Class A common stock. Sales of substantial amounts of our Class A common stock, including shares issued in connection with the exercise of the warrants, or the perception that such sales could occur, may adversely affect prevailing market prices for our Class A

common stock. Shares eligible for public sale in the future could decrease the price of our Class A common stock and reduce our future ability to raise capital. Sales of substantial amounts of our Class A common stock in the public market could decrease the prevailing market price of our Class A common stock, which would have an adverse affect on our ability to raise equity capital in the future. We do not intend to pay dividends. We have never declared or paid any cash dividends on our Class A common stock. We currently intend to retain future earnings, if any, to finance operations and expand our business and, therefore, do not expect to pay any dividends in the foreseeable future. 8 Use of Proceeds We will not receive any proceeds from the sale of the shares offered pursuant to this prospectus. All of the proceeds will be payable solely to the selling stockholders. We will, however, receive the proceeds from the exercise of the additional investment rights and the warrants issued to the selling stockholders if and when they are exercised. We anticipate that the net proceeds from the exercise of the additional investment rights and the warrants would be used for future acquisitions, working capital and general corporate purposes. The selling stockholders will pay any expenses customarily borne by selling stockholders (including underwriting discounts, commissions and fees and expenses of counsel to the extent not required to be paid by us). We will bear all other costs, fees and expenses incurred in effecting the registration of the shares covered by this prospectus, including, but not limited to, all registration and filing fees, listing fees and expenses of our counsel and our accountants. Selling Stockholders The shares of Class A common stock being offered by the selling stockholders are issuable upon conversion of the convertible notes (including convertible notes issuable upon exercise of additional investment rights which were issued pursuant to a Securities Purchase Agreement dated as of October 11, 2004) and upon exercise of the warrants. For additional information regarding the issuance of those convertible notes, warrants and additional investment rights, see "Prospectus Summary -- The Private Placement" above. We are registering the shares of Class A common stock in order to permit the selling stockholders to offer the shares for resale from time to time. Except for the ownership of the convertible notes, the warrants and the additional investment rights issued pursuant to the Securities Purchase Agreement, the selling stockholders have not had any material relationship with us within the past three years. The term "selling stockholders" includes the stockholders listed below and their respective transferees, assignees, pledgees, donees or other successors. The table below lists the selling stockholders and other information regarding the beneficial ownership of the shares of Class A common stock by each of the selling stockholders. The second column lists the number of shares of Class A common stock beneficially owned by each selling stockholder, based on its ownership of the convertible notes, warrants and additional investment rights, as of November 5, 2004, assuming conversion of all convertible notes (including convertible notes issuable upon exercise of all of the additional investment rights held by the selling stockholders) and exercise of the warrants held by the selling stockholders on that date, without regard to any limitations on conversions or exercise. The third column lists the shares of Class A common stock being offered by this prospectus by the selling stockholders. 9 In accordance with the terms of registration rights agreements with the selling stockholders, this prospectus generally covers the resale of at least 130% of the sum of (i) the number of shares of Class A common stock issuable upon conversion of the convertible notes (including convertible notes issuable upon exercise of all of the additional investment rights which were issued pursuant to a Securities Purchase Agreement) as of the trading day immediately preceding the date the registration statement is initially filed with the SEC and (ii) the number of shares of Class A common stock issuable upon exercise of the related warrants as of the trading day immediately preceding the date the registration statement is initially filed with the SEC. Because the conversion price of the convertible notes and the exercise price of the warrants and the additional investment rights may be adjusted, the number of shares that will actually be issued may be more or less than the number of shares being offered by this prospectus. The fourth column assumes the sale of all of the shares offered by the selling stockholders pursuant to this prospectus. Under the terms of the convertible notes and the warrants, a selling stockholder may not convert the convertible notes or exercise the warrants to the extent such conversion or exercise would cause such selling stockholder, together with its affiliates, to beneficially own a number of shares of Class A common stock which would exceed 4.99% of our then outstanding shares of Class A common stock following such conversion or exercise, excluding for purposes of such determination shares of Class A common stock issuable upon conversion of the convertible notes which have not been converted and upon exercise of the warrants and additional investment rights which have not been exercised. The number of shares in the second column does not reflect this limitation. The selling stockholders may sell all, some or none of their shares in this offering. See "Plan of Distribution." -----

----- Number of Shares Beneficially Owned Maximum Number of Shares Number of Shares to be

Edgar Filing: Greiner Helen - Form 4

Prior to the to be Sold Pursuant to Beneficially Owned Name of Selling Stockholder Offering this Prospectus After the Offering -----

Smithfield Fiduciary LLC (1) 4,982,468 4,982,468 0 -----

----- Iroquois Capital LP (2) 332,164 332,164 0

----- Bluegrass Growth Fund, LP (3) 664,329 664,329 0 -----

----- Bluegrass Growth Fund, Ltd (4) 664,329 664,329 0 -----

----- (1) Highbridge Capital Management, LLC

("Highbridge"), is the trading manager of Smithfield Fiduciary LLC ("Smithfield") and consequently has voting control and investment discretion over the shares of Class A common stock held by Smithfield. Glenn Dubin and Henry Swieca control Highbridge. Each of Highbridge and Messrs. Dubin and Swieca disclaims beneficial ownership of the shares held by Smithfield. 10 (2) Joshua Silverman has voting control and investment discretion over securities held by Iroquois Capital LP. Mr. Silverman disclaims beneficial ownership of the Class A common stock held by Iroquois Capital LP. (3) Brian Shatz has voting control and investment discretion over securities held by Bluegrass Growth Fund, LP. Mr. Shatz disclaims beneficial ownership of the Class A common stock held by Bluegrass Growth Fund, LP. (4) Brian Shatz has voting control and investment discretion over securities held by Bluegrass Growth Fund, Ltd. Mr. Shatz disclaims beneficial ownership of the Class A common stock held by Bluegrass Growth Fund, Ltd. Plan of Distribution We are registering the shares of Class A common stock issuable upon conversion of the convertible notes (including convertible notes issuable upon exercise of the additional investment rights) and upon exercise of the warrants to permit the resale of these shares of Class A common stock by the holders of the convertible notes, warrants and additional investment rights from time to time after the date of this prospectus. We will not receive any of the proceeds from the sale by the selling stockholders of the shares of Class A common stock. We will bear all fees and expenses incident to our obligation to register the shares of Class A common stock. We will not be paying any underwriting discounts or commissions in this offering. We have also agreed with the selling stockholders to reimburse them for fees and disbursement in an amount not to exceed \$10,000 incurred in connection with this registration statement The selling stockholders may sell all or a portion of the shares of Class A common stock beneficially owned by them and offered hereby from time to time directly or through one or more underwriters, broker-dealers or agents. If the shares of Class A common stock are sold through underwriters or broker-dealers, the selling stockholders will be responsible for underwriting discounts or commissions or agent's commissions. The shares of Class A common stock may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of the sale, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected in transactions, which may involve crosses or block transactions, such as: o sales on any national securities exchange or quotation service on which the securities may be listed or quoted at the time of sale; o sales in the over-the-counter market; o transactions otherwise than on these exchanges or systems or in the over-the-counter market; o the writing of options, whether such options are listed on an options exchange or otherwise; o ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers; o block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction; 11 o purchases by a broker-dealer as principal and resale by the broker-dealer for its account; o an exchange distribution in accordance with the rules of the applicable exchange; o privately negotiated transactions; o short sales; o sales pursuant to Rule 144; o sales through broker-dealers who may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share; o a combination of any such methods of sale; and o any other method permitted pursuant to applicable law. If the selling stockholders effect such transactions by selling shares of Class A common stock to or through underwriters, broker-dealers or agents, such underwriters, broker-dealers or agents may receive commissions in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of the shares of Class A common stock for whom they may act as agent or to whom they may sell as principal (which discounts, concessions or commissions as to particular underwriters, broker-dealers or agents may be in excess of those customary in the types of transactions involved). In connection with sales of the shares of Class A common stock or otherwise, the selling stockholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the shares of Class A common stock in the course of hedging in positions they assume. The selling stockholders may also sell shares of Class A common stock short and deliver shares of Class A common stock covered by this prospectus to close out short positions and to return borrowed

shares in connection with such short sales. The selling stockholders may also loan or pledge shares of Class A common stock to broker-dealers that in turn may sell such shares. The selling stockholders may pledge or grant a security interest in some or all of the convertible notes, warrants, additional investment rights or shares of Class A common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of Class A common stock from time to time pursuant to this prospectus or any amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933, as amended, amending, if necessary, the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus. The selling stockholders also may transfer and donate the shares of Class A common stock in other circumstances in which case the transferees, donees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus. 12 The selling stockholders and any broker-dealer participating in the distribution of the shares of Class A common stock may be deemed to be "underwriters" within the meaning of the Securities Act, and any commission paid, or any discounts or concessions allowed to, any such broker-dealer may be deemed to be underwriting commissions or discounts under the Securities Act. At the time a particular offering of the shares of Class A common stock is made, a prospectus supplement, if required, will be distributed which will set forth the aggregate amount of shares of Class A common stock being offered and the terms of the offering, including the name or names of any broker-dealers or agents, any discounts, commissions and other terms constituting compensation from the selling shareholders and any discounts, commissions or concessions allowed or reallocated or paid to broker-dealers. Under the securities laws of some states, the shares of Class A common stock may be sold in such states only through registered or licensed brokers or dealers. In addition, in some states the shares of Class A common stock may not be sold unless such shares have been registered or qualified for sale in such state or an exemption from registration or qualification is available and is complied with. There can be no assurance that any selling stockholder will sell any or all of the shares of Class A common stock registered pursuant to the registration statement, of which this prospectus forms a part. The selling stockholders and any other person participating in such distribution will be subject to applicable provisions of the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder, including, without limitation, Regulation M of the Exchange Act, which may limit the timing of purchases and sales of any of the shares of Class A common stock by the selling stockholders and any other person participating in this offering. Regulation M may also restrict the ability of any person engaged in the distribution of the shares of Class A common stock to engage in market-making activities with respect to the shares of Class A common stock. All of the foregoing may affect the marketability of the shares of Class A common stock and the ability of any person or entity to engage in market-making activities with respect to the shares of Class A common stock. We will pay all expenses of the registration of the shares of our Class A common stock pursuant to the registration rights agreement, estimated to be \$44,000 in total, including, without limitation, SEC filing fees and expenses of compliance with state securities or "blue sky" laws. However, the selling stockholders will pay all underwriting discounts and selling commissions, if any. We have agreed to indemnify the selling stockholders against liabilities, including some liabilities under the Securities Act, in accordance with the registration rights agreements, or the selling shareholders will be entitled to contribution. We may be indemnified by the selling stockholders against civil liabilities, including liabilities under the Securities Act that may arise from any written information furnished to us by the selling stockholder specifically for use in this prospectus, in accordance with the related registration rights agreements or we may be entitled to contribution. Once sold under the registration statement, of which this prospectus forms a part, the shares of Class A common stock will be freely tradable in the hands of persons other than our affiliates. 13 Legal Matters Dornbush Schaeffer Strongin & Weinstein, LLP, New York, New York, will pass on certain legal matters in connection with the offering, including the validity of the issuance of the shares being offered hereby. Experts The consolidated financial statements incorporated in this prospectus by reference from our Annual Report on Form 10-K for the year ended March 28, 2004 have been audited by Farber & Hass LLP, an independent registered public accounting firm, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing. Where You Can Find More Information We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any public offering document we file, including a copy of the registration statement on Form S-3 of which this prospectus is a part, without charge at the SEC's Public Reference Room, 450 Fifth Street, N.W., Room 204, Washington, D.C. 20549. You can also request copies of all or any portion of these documents by writing the Public

Reference Section and paying certain prescribed fees. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Section. Additionally, these documents are available to the public from the SEC's web site at <http://www.sec.gov>. The SEC allows us to "incorporate by reference" into this prospectus the information we file with the SEC. This means that we are disclosing important information to you by referring to other documents. The information incorporated by reference is considered to be part of this prospectus, except for any information superceded by information contained directly in this prospectus. Information that we file later with the SEC under the Exchange Act will automatically update information in this prospectus. In all cases, you should rely on the later information over different information included in this prospectus. We incorporate by reference the documents listed below and any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed:

- o Annual Report on Form 10-KSB for the fiscal year ended March 28, 2004;
- o Current Report on Form 8-K, filed on August 11, 2004;
- o Quarterly Report on Form 10-QSB for the quarter ended June 27, 2004; and
- o Current Report on Form 8-K, filed on October 12, 2004; and

14 o The description of our Class A common stock contained in our Registration Statement on Form 8-A dated January 16, 1991 filed under the Exchange Act, including any amendments or reports filed for the purposes of updating such description. You may request a copy of these filings, or any other documents or other information referred to in, or incorporated by reference in, this prospectus, at no cost, by writing or calling us at the following address or telephone number: Advanced Photonix, Inc. 1240 Avenida Acaso Camarillo, California 93012 Attention: Secretary (805) 987-0146 Exhibits to any documents incorporated by reference in this prospectus will not be sent, however, unless those exhibits have been specifically referenced in this prospectus.

Indemnification Our Certificate of Incorporation allows us to indemnify our officers and directors to the maximum extent allowed under Delaware law. This includes indemnification for liabilities which could arise under the Securities Act. Insofar as we are permitted to indemnify our officers and directors, we have been informed that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

15 ADVANCED PHOTONIX, INC. 8,636,276 Shares of Class A Common Stock PROSPECTUS

\_\_\_\_\_, 2004 Prospective investors may rely only on the information contained in this prospectus. Neither Advanced Photonix, Inc. nor any selling stockholder has authorized anyone to provide prospective investors with information different from that contained or incorporated by reference in this prospectus. This prospectus is not an offer to sell nor is it seeking an offer to buy the shares of our Class A common stock being offered hereby in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus is correct only as of the date of this prospectus, regardless of the times of the delivery of this prospectus or any sale of the shares of our Class A common stock.

PART II Information Not Required in Prospectus

Item 14. Other Expenses of Issuance and Distribution We have agreed to bear all expenses relating to the registration of our Class A common stock registered pursuant to the registration statement of which this prospectus is a part (other than underwriter's discounts and commissions to be paid by the selling stockholders). We estimate these expenses to be approximately \$43,964.45, which include the following categories of expenses:

Amount SEC Registration Fee.....	\$1,964.45	Printing fees.....	\$4,000.00
Accounting Fees and Expenses.....	\$3,000.00	Legal Fees and Expenses.....	\$30,000.00
Miscellaneous Expenses.....	\$5,000.00	----- Total.....	\$43,964.45

The foregoing, except for the SEC registration fee, are estimates. We will pay all of the above expenses. The selling stockholders will be responsible for all expenses customarily borne by selling stockholders (including underwriting discounts, commissions and fees and expenses of counsel).

Item 15. Indemnification of Directors and Officers Our Certificate of Incorporation contains a provision permitted by Delaware General Corporation Law that generally eliminates the personal liability of directors for monetary damages for breaches of their fiduciary duty, including breaches involving negligence or gross negligence in business combinations, unless the director has breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or a knowing violation of law, paid a dividend or approved a stock repurchase in violation of the Delaware General Corporation Law or obtained an improper personal benefit. This provision does not alter a director's liability under the federal securities laws. Also this provision does not affect the availability of equitable remedies, such as an injunction or rescission, for breach of fiduciary duty.

II-1 Our By-Laws also provide that directors and officers shall be indemnified against liabilities arising from their service as directors or officers to the fullest extent permitted by law, which generally requires that the individual act in good faith and in a manner he or she reasonably believes to be in or not opposed to Advanced Photonix's best interests.

Item 16. Exhibits (a) Exhibits

Exhibit No.	Description	-----	-----
3.1	Certificate of Incorporation of the Registrant, as amended - incorporated by reference to Exhibit 3.1 to the Registrant's		

Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 23, 1990 3.1.1 Amendment to Certificate of Incorporation of the Registrant, dated October 29, 1992-incorporated by reference to the Registrant's March 31, 1996 Annual Report on Form 10-K 3.1.2 Amendment to Certificate of Incorporation of the Registrant, dated September 9, 1992-incorporated by reference to the Registrant's March 31, 1996 Annual Report on Form 10-K 3.2 By-laws of the Registrant, as amended - incorporated by reference to Exhibit 3.2 to the Registrant's March 30, 2003 Annual Report on Form 10-KSB 4.1 Rights Agreement, dated September 19, 2002 by and between the Company and Continental Stock Transfer and Trust Company, Certificate of Designations for the Company's Series B Junior Preferred Stock - incorporated by reference to Exhibits 4.1 and 4.2 to the Registrant's Form 8-K filed with the Securities and Exchange Commission on September 26, 2002 5.1 Opinion of Dornbush Schaeffer Strongin & Weinstein, LLP. II-2 10.1 Advanced Photonix, Inc. 1991 Special Directors Stock Option Plan - incorporated by reference to Exhibit 10.9 to the Registrant's March 31, 1991 Annual Report on Form 10-K 10.2 Advanced Photonix, Inc. 1990 Incentive Stock Option and Non-Qualified Stock Option Plan - incorporated by reference to Exhibit No. 10.11 to the Registrant's Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 23, 1990 10.3 Advanced Photonix, Inc. 1997 Employee Stock Option Plan - incorporated by reference to Exhibit 10.13 to the Registrant's March 30, 1997 Annual Report on Form 10-K 10.4 Amendment No. 1 to 1997 Employee Stock Option Plan of Advanced Photonix, Inc. - incorporated by reference to Exhibit 10.14 to the Registrant's December 28, 1997 Quarterly report on Form 10-Q 10.5 Advanced Photonix, Inc. 2000 Stock Option Plan - incorporated by reference to Exhibit 10.1 to the Registrant's Registration Statement on Form S-8, filed with the Securities and Exchange Commission on March 15, 2001 10.9 Lease Agreement dated February 23, 1998 between Advanced Photonix, Inc. and High Tech No. 1, Ltd. - incorporated by reference to Exhibit 10.9 to the Registrant's March 29, 1998 Annual Report on Form 10-K 10.10 Form of Indemnification Agreement provided to Directors and Principal Officers of Advanced Photonix, Inc. - incorporated by reference to Exhibit 10.15 to the Registrant's December 28, 1997 Quarterly report on Form 10-Q 10.11 Employment Agreement dated August 21, 2002 between Advanced Photonix, Inc. and Paul D. Ludwig - incorporated by reference to Exhibit 10.1 to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on September 5, 2002 II-3 10.12 Employment Agreement dated February 10, 2003 between Advanced Photonix, Inc. and Richard D. Kurtz - incorporated by reference to Exhibit 10.12 to the Registrant's March 30, 2003 Annual Report on Form 10-KSB 10.13 Securities Purchase Agreement dated October 11, 2004 between Advanced Photonix, Inc. and Smithfield Fiduciary LLC, Iroquois Capital LP, Bluegrass Growth Fund, LP and Bluegrass Growth Fund, Ltd. (the "Buyers") - incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on October 12, 2004. 10.13.1 Registration Rights Agreement dated October 11, 2004 between Advanced Photonix, Inc. and the Buyers - incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on October 12, 2004. 10.13.2 Form of Senior Subordinated Convertible Note - incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on October 12, 2004. 10.13.3 Form of Warrant - incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on October 12, 2004. 10.13.4 Form of Additional Investment Right - incorporated by reference to the Registrant's Form 8-K as filed with the Securities and Exchange Commission on October 12, 2004. 21.1 List of Subsidiaries of Registrant - incorporated by reference to Exhibit 21.1 to the Registrant's March 30, 2003 Annual Report on Form 10-KSB. 23.1 Consent of Farber & Hass LLP. 23.2 Consent of Dornbush Schaeffer Strongin & Weinstein, LLP. Included in Exhibit 5.1. II-4 24.1 Power of Attorney (contained on Page II-8). Item 17. Undertakings The Registrant hereby undertakes: (1)(A) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to: (i) include any prospectus required by Section 10(a)(3) of the Securities Act; (ii) reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the 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; and (iii) include any additional or changed material information on the plan of distribution. (2) That, for determining any liability under the Securities Act of 1933, treat each post-effective amendment as a new registration statement of the securities offered, and the

offering of the securities at that time to be the initial bona fide offering. (3) To file a post-effective amendment to remove from registration any of the securities that remain unsold at the end of the offering. (4) That, for determining any liability under the Securities Act of 1933, treat the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant under Rule 424(b)(1), or (4), or 497(h) under the Securities Act as part of this registration statement as of the time the Commission declared it effective.. (5) That for determining any liability under the Securities Act, treat each post-effective amendment that contains a form of prospectus as a new registration statement for the securities offered in the registration statement, and that offering of the securities at that time as the initial bona fide offering of these securities. II-5 (6) Insofar as indemnification for liabilities arising under the Securities Act of 1933 (the "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 Act and is, therefore, unenforceable. II-6 SIGNATURES Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Camarillo, State of California on the 9th day of November, 2004. ADVANCED PHOTONIX, INC. By: /s/ Richard D. Kurtz

----- Name: Richard D. Kurtz Title: Chairman of the Board and Chief Executive Officer II-7  
POWER OF ATTORNEY KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard D. Kurtz and Susan A. Schmidt, and each of them, his true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their substitutes may lawfully do or cause to be done by virtue hereof. Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated. SIGNATURE TITLE DATE PRINCIPAL EXECUTIVE OFFICER: /s/ Richard D. Kurtz Chairman of the Board November 9, 2004 ----- and Chief Executive Officer Richard D. Kurtz PRINCIPAL FINANCIAL AND ACCOUNTING OFFICER: /s/ Susan A. Schmidt Chief Financial Officer November 9, 2004 ----- and Secretary Susan A. Schmidt DIRECTORS: /s/ M. Scott Farese Director November 9, 2004 ----- M. Scott Farese II-8 /s/ Ward Harper Director November 9, 2004 ----- Ward Harper /s/ Stephen P. Soltwedel Director November 9, 2004 ----- Stephen P. Soltwedel /s/ Paul D. Ludwig Director November 9, 2004 ----- and President Paul D. Ludwig II-9