MECHANICAL TECHNOLOGY INC
Form S-1/A
July 03, 2008
As filed with the Securities and Exchange Commission on July 3, 2008

Registration No. 333-149920

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

Amendment No. 2
to

Form S-1
REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

MECHANICAL TECHNOLOGY, INCORPORATED
(Exact name of registrant as specified in its charter)

New York	**3829, 3629**	**14-1462255**
(State of incorporation)	*(Primary Standard Industrial Classification Code No.)*	*(I.R.S. Employer Identification No.)*

431 New Karner Road
Albany, New York 12205
(518) 533-2200
(Address, including zip code and telephone number, including area code of registrant s principal executive offices)

Cynthia A. Scheuer
Vice President, Chief Financial Officer & Secretary
431 New Karner Road
Albany, New York 12205
(518) 533-2200
(Address, including zip code and telephone number, including area code of registrant s principal executive offices)

with copies to:

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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

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. o

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. o

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

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

Large accelerated filer o Accelerated filer o Non-accelerated filer o Smaller reporting company þ
(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Maximum Aggregate Offering Price (1)(2)	Registration Fee
Units, each consisting of convertible senior notes and warrants to purchase common stock	$13,800,000	$542
Warrants included as part of the units	(3)	(3)
Total Registration Fee	$13,800,000	542 (4)

(1) Includes the offering price of the units (consisting of convertible senior notes and warrants) that the underwriters have the option to purchase to cover over-allotments, if any.

(2) Estimated solely for the purpose of calculating the amount of the registration fee, pursuant to Rule 457(o) under the Securities act of 1933, as amended.

(3) Pursuant to Rule 457(g), no separate registration fee is required for the warrants because we are registering those securities in the same registration statement as the units.

(4) A filing fee of $1,179 was previously paid.

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.

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

Subject to Completion, Dated July 3, 2008

$12,000,000 % Convertible Senior Notes due
and
Warrants to Purchase Shares of Common Stock

Interest payable 15 and 15
Issue price: 100%

We are offering $12,000,000 principal amount of our % convertible senior notes due and warrants to purchase shares of our common stock in units. For each unit purchased in the offering, investors will receive $1,000 principal amount of notes and warrants to purchase shares of our common stock at an exercise price of $ per share. Upon the closing of the offering, the units will separate and the notes and warrants will be issued separately.

The notes will bear interest at a rate of % per year. Interest will be payable semiannually in arrears on 15 and 15 of each year, beginning 15, 2009. The notes will mature on .

Beginning , 2008, holders may convert their notes into shares of our common stock based on a conversion rate of shares of our common stock per $1,000 principal amount of notes, equivalent to a conversion price of approximately $ per share, subject to adjustment, at their option at any time prior to the close of business on the third scheduled trading day immediately preceding the maturity date.

We may not redeem any of the notes at our option prior to maturity.

For a more detailed description of the notes, see Description of Notes beginning on page 77.

The notes will not be listed on any securities exchange. Currently, there is no public market for the notes.

The warrants may be exercised at any time during the period commencing on the closing date of this offering and ending on the fifth anniversary of the closing date.

Our common stock is listed on The Nasdaq Global Market under the symbol MKTY . On July 2, 2008, the last reported sale price of our common stock on The Nasdaq Global Market was $1.60 per share.

Investing in our securities involves risks.
See Risk Factors beginning on page 8 of this prospectus.

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

	Per Unit	Total
Public offering price	100 %	$
Underwriting discounts and commissions	%	$
Proceeds to us (before expenses)	%	$

The public offering price set forth above does not include accrued interest, if any. Interest on the notes will accrue from the date of original issuance, expected to be , 2008. We have granted the underwriter a 30-day option to purchase up to an additional 1,800 units (consisting of $1,800,000 principal amount of notes and warrants) to cover over-allotments.

The underwriter expects to deliver the notes and warrants to purchasers on or about , 2008.

Merriman Curhan Ford & Co.

The date of this prospectus is , 2008

You should rely only on the information contained in this prospectus. We have not authorized anyone to provide you with information that is different. We are offering to sell, and seeking offers to buy, units only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or of any sale of units. It is important for you to read and consider all information contained in this prospectus in making your investment decision. You should also read and consider the information in the documents we have referred you to in Where You Can Find Additional Information below.

TABLE OF CONTENTS

Unless the context requires otherwise, in this prospectus the terms we, us, and our refer to Mechanical Technology, Incorporated, a New York corporation, MTI Micro refers to MTI MicroFuel Cells Inc., a Delaware corporation and our majority owned subsidiary, and MTI Instruments refers to MTI Instruments, Inc., a New York corporation and our wholly owned subsidiary. We have a registered trademark in the United States for Mobion . Other trademarks, trade names, and service marks used in this prospectus are the property of their respective owners.

PROSPECTUS SUMMARY

This summary provides an overview of selected information contained elsewhere in this prospectus and does not contain all of the information you should consider in making an investment decision. You should read carefully the entire prospectus, including the section entitled Risk Factors, beginning on page 8 and our financial statements and the related notes included elsewhere in this prospectus, before making an investment decision.

Our Company

We are developing and commercializing off-the-grid rechargeable portable power source products that generate electrical power, using up to 100% methanol as fuel, for consumer electronic devices. Our portable power source products, utilizing our patented, proprietary direct methanol fuel cell technology platform called Mobion, offer a compelling alternative to lithium-ion and similar rechargeable battery systems currently used by original equipment manufacturers, or OEMs, in many handheld electronic devices, such as mobile phones, digital cameras, and portable media players. We believe our rechargeable portable power source products will offer substantial advantages, such as smaller size, lower weight, longer power life, higher reliability, and greater convenience of use, without the environmental concerns of lithium-ion batteries. Our portable power solution can be implemented as three different product options: a compact external charging device, a snap-on or attached power accessory, or an embedded fuel cell power solution. We have strategic arrangements with Samsung Electronics, with Duracell, part of the Procter & Gamble Company, and with a global Japanese consumer electronics company. We intend to commercialize our first Mobion products in 2009. According to Frost and Sullivan, the global rechargeable battery market for portable electronic devices exceeds $5 billion.

We also design, manufacture, and sell high-performance test and measurement instruments and systems serving primarily the general dimensional gauging, semiconductor, and aviation industries. These products consist of electronic, computerized gauging instruments for position, displacement and vibration applications for the design, manufacturing and test markets; semiconductor products for wafer characterization; and engine balancing and vibration analysis systems for military and commercial aircraft.

Our Markets and Opportunities

Consumers demand portable electronics that offer an enhanced experience through expanded memory, improved display technologies, constant connectivity, robust software, and a reduced form factor. In addition, technological advances in semiconductor manufacturing, LED displays, memory costs and availability, wireless technologies, and software applications have resulted in a dramatic increase in the number of portable electronic devices, their usage, and power requirements. As a result of these consumer demands and technological advances, there are a number of handheld electronic devices that have been introduced into the market. This trend towards increased functionality in portable electronic devices has led to a power gap, which is the disparity between a device s power supply, typically a rechargeable lithium-ion battery, and its power need. This power gap leads to a need for the end user to plug-in their devices to the electrical grid on a regular basis, which limits their ability to use these electronic devices where and when the need arises.

Improvements in rechargeable battery technology have not kept pace with the evolution of consumer electronic device performance. Over the last ten years, device performance as measured by silicon processor speed has increased by a factor of 128 times, while the energy density of lithium-ion technology has only doubled. In addition to their performance shortfalls, lithium-ion battery technology poses an environmental risk as the various heavy metals incorporated in these batteries require special disposal to prevent contamination of waste disposal sites.

OEMs are actively seeking improved power sources to replace existing rechargeable lithium-ion batteries and to power additional improvements to their mobile electronic devices.

Our Solution and Strategies

At the core of our solution is our proprietary Mobion Chip engine, a design architecture that embodies a reduction in the size, complexity, and cost of fuel cell construction, which results in a reliable, manufacturable, and affordable power solution that we believe provides improved energy density and portability over competing rechargeable battery technologies. Our proprietary fuel cell power solution consists of two primary components integrated in an easily manufactured device: the direct methanol fuel cell power engine, which we refer to as our Mobion Chip, and the methanol replacement cartridge. Our current Mobion Chip weighs less than one ounce and is small enough to fit in the palm of one s hand. For these reasons, we believe that our Mobion platform is ideally suited to provide a replacement for rechargeable lithium-ion batteries. Based upon our ability to provide a compact, efficient, clean, safe, and long-lasting power source for lower power applications, we intend to initially target power solutions for handheld consumer electronic applications. Our goal is to become a leading provider of portable power for handheld electronic devices. Key elements of our strategy designed to achieve this objective include the following:

Business Focus. We are focusing our efforts on the development and commercialization of our portable power source products. We believe this business provides a higher potential, higher growth opportunity than our test and measurement instrumentation business.

Design for Mass Manufacturing. Our portable power source products will be manufactured using standard processes, such as injection molding and automated test and assembly, which are broadly employed throughout the electronics manufacturing industry. In preparing Mobion for commercialization, our current Mobion Chip is injection molded and is being designed for mass manufacturing.

Outsource Manufacturing. We plan to outsource manufacturing to expand rapidly and diversify our production capacity. This strategy will allow us to maintain a variable cost model in which we do not incur most of our manufacturing costs until our proprietary fuel cell power solution has been shipped and billed to our customers.

Utilize our Technology to Provide Compelling Products. We plan to utilize our intellectual property portfolio and technological expertise to develop and offer portable power source products across multiple electronic device markets. We intend to employ our technological expertise to reduce the overall size and weight of our portable power source products while increasing their ease of manufacturing, power capacity, and power duration, and decreasing their cost.

Capitalize on Growth Markets. We intend to capitalize on the growth of the electronic device markets, including new products that may be brought about by the convergence of computing, communications, and entertainment devices. We believe our portable power source products will address the growing need for portability, connectivity, and functionality in the evolving electronic device markets. We plan to offer these power solutions to OEM customers to enable them to offer products that have advantages in terms of size, weight, power duration, and environmental friendliness.

Develop Strong Customer Relationships. We plan to develop strong and long-lasting customer relationships with leading electronic device OEMs and to provide them with power solutions for their products. We believe that our portable power source products will enable our OEM customers to deliver an enhanced user experience and to differentiate their products from those of their competitors. We will attempt to enhance the competitive position of our customers by providing them with innovative, distinctive, and high-quality portable power supply products on a timely and cost-effective basis.

Our Competitive Strengths

We believe that our portable power source products will offer the following advantages:

Off-the-grid power source. Our products provide users of consumer electronic devices with extended mobility by providing power without having to attach to a wall outlet to recharge their devices.

Small size and low weight. The dimensions of our products will enable our OEM customers to reduce the overall size and weight of their products.

Power density. Our products will have power density of over 50 mW/cm^2 and high energy efficiencies of 1.4 Wh/cc of methanol.

Power duration. Our products will offer longer run time than currently available portable charging systems.

Ease of manufacturing. Our products will be manufactured using traditional injection molding techniques that will easily transfer to mass manufacturing production lines.

Safety. Our products will utilize methanol fuel, which does not require storage under pressure or at low temperatures.

Environmentally friendly. Our products will utilize fully biodegradable methanol fuel.

Corporate Information

We were incorporated in New York in 1961. We operate two businesses: our new energy business that is conducted through MTI Micro, a majority owned subsidiary, and our test and measurement instrument business that is conducted through MTI Instruments, a wholly owned subsidiary. We maintain our principal executive offices at 431 New Karner Road, Albany, New York 12205, and our telephone number is (518) 533-2200. Our website is located at www.mechtech.com. The information contained in, or that can be accessed through, our website does not constitute part of this prospectus.

The Offering

The following summary contains basic information about the notes and the warrants and is not intended to be complete. It does not contain all the information that is important to you. For a more complete understanding of the notes and the warrants, you should read the sections of this prospectus entitled Description of Notes and Description of Warrants.

Securities Offered	$12,000,000 (or $13,800,000 if the underwriter exercises its over-allotment option in full) principal amount of % convertible senior notes and warrants to purchase shares of common stock in units. Each unit will consist of $1,000 principal amount of notes and warrants to purchase shares of common stock.
% Convertible Senior Notes	$12,000,000 aggregate principal amount of % convertible senior notes due .
Warrants	Warrants to purchase shares of common stock. The warrants will be exercisable on or after the closing date of this offering through and including the fifth anniversary of the closing date and will be exercisable at a price of $ per share of common stock.
Over-allotment Option	1,800 units (consisting of $1,800,000 principal amount of notes and warrants).
Terms of Notes	
Maturity	.
Interest	%. Interest on the notes will accrue from , 2008. Interest will be payable semiannually in arrears on 15 and 15 of each year, beginning 15, 2009.
Conversion Rights	Prior to , 2008, the notes will not be convertible. On or after , 2008, holders may convert their notes into shares of our common stock at the applicable conversion rate, in integral multiples of $1,000 principal amount, at their option, at any time prior to the close of business on the third scheduled trading day immediately preceding the maturity date. The initial conversion rate for the notes is shares per $1,000 principal amount of notes (equivalent to a conversion price of approximately $ per share), subject to adjustment.

Upon conversion, we will deliver shares of our common stock and cash in lieu of any fractional share of our common stock, based on the conversion rate then in effect. See Description of Notes Conversion Rights General.

Holders will not receive any additional cash payment or additional shares representing accrued and unpaid interest and additional interest, if any, upon conversion of a note, except in limited circumstances. Instead, interest will be deemed paid by the shares of common stock issued to holders upon conversion.

Redemption of Notes	We may not redeem any of the notes at our option prior to maturity.
Covenants	Neither we nor any of our subsidiaries are subject to any financial covenants under the indenture. In addition, neither we nor any of our subsidiaries are restricted under the indenture from paying dividends, incurring debt, or issuing or repurchasing our securities.
Sinking Fund	None.
Events of Default	If there is an event of default under the notes, the principal amount of the notes, plus accrued and unpaid interest, including additional interest, if any, may be declared immediately due and payable. These amounts automatically become due and payable if an event of default relating to certain events of bankruptcy, insolvency, or reorganization occurs. See Description of Notes Events of Default.
Ranking	The notes will be our senior unsecured obligations and will rank equal in right of payment with all of our existing and future unsecured senior indebtedness and senior in right of payment to all our future subordinated indebtedness, if any. The indenture does not limit the amount of indebtedness that we or our subsidiaries may incur. The notes will effectively be subordinated to any secured indebtedness we may incur to the extent of the value of the assets securing such indebtedness. The notes will not be guaranteed by any of our subsidiaries and accordingly will be structurally subordinated to all liabilities of our subsidiaries. As of March 31, 2008, we had no outstanding indebtedness. See Description of Notes Ranking.
Use of Proceeds	We estimate that the net proceeds from this offering will be approximately $11.1 million (or $12.8 million if the underwriter exercises its over-allotment option in full), after deducting the underwriter s discount and commissions and estimated offering expenses. We expect to use the net proceeds from this offering for research, design, tooling and capital expenditures to support the commercialization of our Mobion portable power source products, and working capital needs and general corporate purposes.
Nasdaq Global Market Symbol	

	Our common stock is listed on The Nasdaq Global Market under the symbol MKTY.
No Prior Market	The notes and warrants are new securities, and there is currently no established market for the notes or warrants. Accordingly, we cannot assure you as to the development or liquidity of any market for the notes or warrants. The underwriter has advised us that it currently does not intend to make a market in the notes or warrants.
Book-entry Form	The notes will be issued in book-entry form and will be represented by permanent global

	certificates deposited with, or on behalf of, The Depository Trust Company, or DTC, and registered in the name of Cede & Co., as nominee of DTC. Beneficial interests in the notes will be shown on, and transfers will be effected only through, records maintained by DTC or its nominee, and any such interest may not be exchanged for certificated securities, except in limited circumstances. See Description of the Notes Book-entry, Settlement, and Clearance. The warrants will be certificated.
Risk Factors	Investment in the units involves risk. You should carefully consider the information under Risk Factors and all other information included in this prospectus before investing in the units.

Summary Consolidated Financial Data

The following table sets forth our summary consolidated financial data for the fiscal years ended December 31, 2005, 2006 and 2007, which was derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated balance sheet data as of March 31, 2008 and the summary consolidated statements of operations data for each of the three months ended March 31, 2007 and 2008 have been derived from the unaudited consolidated financials that are included elsewhere in this prospectus. You should read the following summary consolidated financial data together with the information under Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements (including the related notes thereto).

	Years Ended December 31,			Three Months Ended March 31,	
	2005	2006	2007	2007	2008
Statement of Operations Data (in thousands except share and per share data):					
Product revenue	$6,012	$7,667	$9,028	$1,701	$1,980
Gross profit on product revenue	3,631	4,767	5,598	963	1,140
Funded research and development revenue	1,829	489	1,556	615	173
Research and product development expenses	9,671	12,921	11,765	3,622	2,373
Operating loss	(15,098)	(17,737)	(13,349)	(4,500)	(3,678)
Net loss	$(15,094)	$(13,667)	$(9,575)	$(3,156)	$(3,187)
Net loss per share (basic and diluted)	$(3.93)	$(3.46)	$(2.01)	$(0.66)	$(0.67)
Weighted average common shares outstanding (basic and diluted)	3,842,201	3,952,793	4,763,547	4,754,868	4,771,861

	March 31, 2008	
	Actual	As Adjusted (1)
Balance Sheet Data (in thousands):		
Cash and cash equivalents	$ 4,560	$ 15,655
Securities available for sale (2)	3,537	3,537
Working capital	7,634	18,729
Total assets	14,812	25,907
Current liabilities	4,170	4,170
Long-term debt		12,000

Other long-term liabilities	572	572
Total stockholders equity (3)	10,045	10,045

(1) The as adjusted column reflects the net proceeds of $11.1 million expected to be received by us from the sale of the units offered hereby (assuming the underwriter s over-allotment option is not exercised) and the application of the net proceeds therefrom as described in Use of Proceeds.

(2) Represents shares of Plug Power Inc., or Plug Power, a Nasdaq-listed company, held for sale by us, classified as current assets, and such amount reflects the fair value of these shares. Through the sale of Plug Power shares, we generated proceeds of $6.2 million during 2006 and $5.1 million during 2007 that we have used to fund the development and commercialization of our portable power source business.

(3) Our ownership percentage of MTI Micro will increase as a result of this offering since proceeds from the offering will be used to make further investments in MTI Micro. Over the last three years, we have increased our ownership in MTI Micro from 89% in 2004 to 96% in 2008.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the following risk factors and all other information contained in this prospectus before purchasing our securities. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties of which we are unaware, or that we currently deem immaterial, also may become important factors that affect us. If any of the following risks occur, our business, financial condition, or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to Our Business and Industry

We have incurred recurring net losses and anticipate continued net losses as we execute our commercialization plan for our portable power source business.

We have incurred recurring net losses, including net losses of $15.1 million in 2005, $13.7 million in 2006, $9.6 million in 2007, and $3.2 million during the three months ended March 31, 2008, which includes a net gain of $2.5 million from the sale of securities available for sale and a net gain of $3.0 million on derivatives in 2007 and a net gain of $333,000 on derivatives during the first three months of 2008. As a result of ongoing operating losses, we had an accumulated deficit of approximately $108.3 million as of March 31, 2008. We expect to continue to make significant expenditures and incur substantial expenses as we develop and commercialize our proposed portable power source products; develop our manufacturing, sales, and distribution networks; implement internal systems and infrastructure; and hire additional personnel. As a result, we expect to continue to incur continued significant losses as we execute our plan to commercialize our portable power source business and may never achieve or maintain profitability. We will be unable to satisfy our current obligations solely from cash generated from operations or become profitable until we successfully commercialize our portable power source business. If we continue to incur substantial losses and are unable to secure additional sources of funding, we could be forced to discontinue or curtail our business operations; sell assets at unfavorable prices; or merge, consolidate, or combine with a company with greater financial resources in a transaction that may be unfavorable to us.

We have received a going concern report from our independent auditors.

Our auditors have included an explanatory paragraph in their opinion that accompanies our audited consolidated financial statements as of December 31, 2007, indicating that our recurring losses from operations, net capital deficiency, and current liquidity position raise substantial doubt about our ability to continue as a going concern. The accompanying consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

We currently derive all of our product revenue from our test and measurement instrumentation business, but our principal focus is the development and commercialization of our portable power source business.

We currently derive all of our product revenue from our test and measurement instrumentation business, but our principal focus is the development and commercialization of our portable power source business. Our test and measurement instrumentation business is subject to a number of risks, including the following:

- a slow down or cancellation of sales to the military as a result of a potential redeployment of governmental funding;

a failure to expand or maintain the business as a result of competition, a lack of brand awareness, or market saturation; and

an inability to launch new products as a result of intensive competition, uncertainty of new technology development, and developmental timelines.

In addition, our test and measurement instrumentation products can be sold in quantity to a relatively few number of customers, resulting in a customer concentration risk. The loss of any significant portion of such customers or a material adverse change in the financial condition of any one of these customers could have a material adverse effect on our business.

We have not generated any product revenue from our portable power source business and currently have no portable power source commercial products.

We have not generated any product revenue from our portable power source business and currently have no portable power source commercial products. The successful development and commercialization of our portable power source products will depend on a number of factors, including the following:

continuing our research and development efforts;

finalizing the design of our portable power source products;

securing OEM customers to incorporate our portable power source products into products sold by them;

arranging for adequate manufacturing capabilities; and

completing, refining, and managing our supply chain and distribution channels.

Additionally, our technology is new and complex, and there may be technical barriers to the development of our portable power source products. The development of our portable power source products may not succeed or may be significantly delayed. Our portable power source products will be produced through manufacturing arrangements that have not been finalized or tested on a commercial scale. If we fail to successfully develop or experience significant delays in the development of our portable power source products, or if there are significant delays in commercialization, we are unlikely to recover those losses, thus making it impossible for us to become profitable through the sales of these products. This would materially and adversely affect our business and financial condition. If adequate funds are not available, we may have to delay development or commercialization of our portable power source products or license to third parties the rights to commercialize products or technologies that we would otherwise seek to commercialize. Any of these factors could harm our business and financial condition.

Any revenue derived in the relatively near-term relating to our portable power source business likely will result from governmental contracts or other governmental funding. We can offer no assurance that we will be able to secure continued government funding. The loss of such contracts or the inability to obtain additional contracts could materially harm our business.

Although we believe the net proceeds of this offering will assist us in achieving certain milestones in commercializing our portable power source products, we will require additional funds to complete product commercialization and we have no commitments for additional financing.

Although we believe the net proceeds of this offering will assist us in achieving certain milestones in commercializing our portable power source business, we will require additional funds to complete the commercialization of our portable power source products. We have no commitments for any additional financing. If we are unable to secure any

necessary additional financing or to raise funds from the sale of our test and measurement instrumentation business should we determine to do so, we may need to delay further commercialization plans. In order to conserve cash and extend operations while we pursue any additional necessary financing, we would be required to reduce operating expenses. There is no assurance that funds raised in any such financing will be sufficient,

that the financing will be available on terms favorable to us or to existing stockholders and at such times as required, or that we will be able to obtain the additional financing required for the continued operation and growth of our business. If we raise additional funds by issuing equity securities, our stockholders will experience dilution. Debt financing, if available, may involve restrictive covenants. Any debt financing or additional equity financing may contain terms that are not favorable to us or our stockholders. If we raise additional funds through collaboration and licensing arrangements with third parties, it may be necessary to relinquish some rights to our technologies or our products, or grant licenses on terms that are not favorable to us. If we are unable to raise adequate funds, we may have to liquidate some or all of our assets or delay, reduce the scope of or eliminate some or all of our research and development programs.

A primary asset of our company is the Plug Power common stock we own. As of March 31, 2008, we owned 1,137,166 shares of Plug Power common stock. Plug Power common stock is traded on The Nasdaq Global Market. The market price of our Plug Power common stock may fluctuate as a result of market conditions and other factors over which we have no control. Fluctuations in the market price of Plug Power s common stock may result in a reduction of resources available to fund operations, which could result in our requiring additional funding sooner than anticipated.

If current airline and certain international regulations do not change, passengers will be unable to carry methanol in the passenger compartments of airplanes, which would adversely affect our sales and results of operations.

Current airline and certain international laws, regulations, and treaties limit the amount and concentration of methanol that any passenger can carry onboard passenger planes. We believe that these regulations must change for mass commercialization of Mobion technology products to be possible. There are several major markets, most notably within the European Union, that have not adopted the global regulations adopted by the International Civil Aviation Organization. If these regulations are not implemented, it would materially and adversely affect our ability to achieve mass commercialization of Mobion technology products and have a material adverse effect on our business plans, prospects, results of operations, and financial condition.

Our portable power source products may not be accepted by the market.

Any portable power source products that we develop may not achieve market acceptance. The development of a successful market for our proposed portable power source products and our ability to sell those products at favorable prices may be adversely affected by a number of factors, many of which are beyond our control, including the following:

- our failure to produce portable power source products that compete favorably against other products on the basis of price, quality, performance, and life;
- competition from conventional lithium-ion or other rechargeable battery systems;
- the ability of our technologies and product solutions to address the needs of the electronic device markets, the requirements of OEMs, and the preferences of end users;
- our ability to provide OEMs with portable power source products that provide advantages in terms of size, weight, peak power, power duration, reliability, durability, performance, and value-added features compared to alternative solutions; and

our failure to develop and maintain successful relationships with OEMs, manufacturers, distributors, and others as well as strategic partners.

Target markets for our proposed portable power source products, such as those for mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, personal digital assistants, or PDAs, and global positioning systems, or GPS devices, are volatile, cyclical, and rapidly changing and could continue to utilize existing technology or adopt

other new competing technologies. The market for certain of these products depends in part upon the development and deployment of wireless and other technologies, which may or may not address the needs of users of these new products.

Many manufacturers of portable electronic devices have well-established relationships with competitive suppliers. Penetrating these markets will require us to offer better performance alternatives to existing solutions at competitive costs. The failure of any of our target markets to continue to expand, or our failure to penetrate these markets to a significant extent, will impede our sales growth. We cannot predict the growth rate of these markets or the market share we will achieve in these markets in the future.

If our proposed portable power source products fail to gain market acceptance, it could materially and adversely affect our business and financial condition.

Market acceptance of our customers products that utilize our portable power source products may decline or may not develop and, as a result, our sales will be harmed.

We currently do not anticipate selling our portable power source products directly to end users. Instead, we plan to produce portable power source products that our OEM customers incorporate into their products. As a result, the success of our proposed portable power source products will depend upon the widespread market acceptance of the products of our OEM customers. We will not control or influence the manufacture, promotion, distribution, or pricing of the products that incorporate our portable power source products. Instead, we will depend on our OEM customers to manufacture and distribute products incorporating our portable power source products and to generate consumer demand through their marketing and promotional activities. Even if our technologies and products successfully meet our customers price and performance goals, our sales would be harmed if our OEM customers do not achieve commercial success in selling their products to consumers that incorporate our portable power source products.

Any lack of adoption in the use of our portable power source products by OEM customers in the electronic device markets, the reduced demand for our OEM customers products, or a slowdown in their markets would adversely affect our sales.

If we fail to build and maintain relationships with our customers and do not satisfy our customers, we may lose future sales and our revenue may stagnate or decline.

Because our success depends on the widespread market acceptance of our customers products, we must develop and maintain our relationships with leading global OEMs of electronic devices, such as mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, PDAs, and GPS devices. In addition, we must identify areas of significant growth potential in other markets, establish relationships with OEMs in those markets, and assist them in developing products that use our portable power source products and technologies. Our failure to identify potential growth opportunities, particularly in new markets, or establish and maintain relationships with OEMs in those markets, would prevent our business from growing in those markets.

Our ability to meet the expectations of our customers will require us to provide portable power source products for customers on a timely and cost-effective basis and to maintain customer satisfaction with our product solutions. We must match our design and production capacity with customer demand, maintain satisfactory delivery schedules, and meet specific performance goals. If we are unable to achieve these goals for any reason, our customers could reduce their purchases from us and our sales would decline or fail to develop.

Our customer relationships also can be affected by factors affecting our customers that are unrelated to our performance. These factors can include a myriad of situations, including business reversals of customers, determinations by customers to change their product mix or abandon business segments, or mergers, consolidations, or acquisitions involving our customers.

We have no experience manufacturing portable power source products on a commercial scale.

To date, we have focused primarily on research, development, and pilot production, and we have no experience manufacturing any portable power source products on a commercial scale. Our pilot production efforts to date have been limited in scale. It is our intent to manufacture our portable power source products through OEM customers and third-party manufacturers. Failure to secure manufacturing capabilities could materially and adversely affect our business and financial condition.

We will rely on others for our production, and any interruptions of these arrangements could disrupt our ability to fill our customers orders.

We plan to rely on others for all of our production requirements for our portable power source products. The majority of this manufacturing is anticipated to be conducted in Asia by manufacturing subcontractors that also perform services for numerous other companies. We do not expect to have a guaranteed level of production capacity with any of our manufacturing subcontractors. Qualifying new manufacturing subcontractors is time consuming and might result in unforeseen manufacturing and operating problems. The loss of any relationships with our manufacturing subcontractors or assemblers or their inability to conduct their manufacturing and assembly services for us as anticipated in terms of cost, quality, and timeliness could adversely affect our ability to fill customer orders in accordance with required delivery, quality, and performance requirements. If this were to occur, the resulting decline in revenue would harm our business.

We will depend on third parties to maintain satisfactory manufacturing yields and delivery schedules, and their inability to do so could increase our costs, disrupt our supply chain, and result in our inability to deliver our portable power source products, which would adversely affect our results of operations.

We will depend on our manufacturing subcontractors to maintain high levels of productivity and satisfactory delivery schedules for our portable power source products from manufacturing and assembly facilities likely located primarily in Asia. We plan to provide our manufacturing subcontractors with rolling forecasts of our production requirements. We do not, however, anticipate having long-term agreements with any of our manufacturing subcontractors that guarantee production capacity, prices, lead times, or delivery schedules. Our manufacturing subcontractors will serve other customers, many of which will have greater production requirements than we do. As a result, our manufacturing subcontractors could determine to prioritize production capacity for other customers or reduce or eliminate deliveries to us on short notice. We may experience lower than anticipated manufacturing yields and lengthening of delivery schedules. Lower than expected manufacturing yields could increase our costs or disrupt our supply chain. We may encounter lower manufacturing yields and longer delivery schedules while commencing volume production of any new products. Any of these problems could result in our inability to deliver our product solutions in a timely manner and adversely affect our operating results.

We plan to rely on third-party suppliers for most of our manufacturing equipment.

We plan to rely on third-party suppliers for most of the manufacturing equipment necessary to produce our portable power source products. The failure of suppliers to supply manufacturing equipment in a timely manner or on commercially reasonable terms could delay our commercialization plans and otherwise disrupt our production schedules or increase our manufacturing costs. Further, our orders with certain of our suppliers may represent a very

small portion of their total orders. As a result, they may not give priority to our business, leading to

potential delays in or cancellation of our orders. If any single-source supplier were to fail to supply our needs on a timely basis or cease providing us with key components, we would be required to substitute suppliers. We may have difficulty identifying a substitute supplier in a timely manner and on commercially reasonable terms. If this were to occur, our business would be harmed.

Shortages of components and raw materials may delay or reduce our sales and increase our costs, thereby harming our results of operations.

The inability to obtain sufficient quantities of components and other materials, including platinum and ruthenium, necessary for the production of our portable power source products could result in reduced or delayed sales or lost orders. Any delay in or loss of sales could adversely impact our operating results. Many of the materials used in the production of our portable power source products will be available only from a limited number of foreign suppliers, particularly component suppliers located in Asia. In most cases, neither we nor our manufacturing subcontractors will have long-term supply contracts with these suppliers. As a result, we will be subject to economic instability in these Asian countries as well as to increased costs, supply interruptions, and difficulties in obtaining materials. Our customers also may encounter difficulties or increased costs in obtaining the materials necessary to produce their products into which our product solutions are incorporated.

From time to time, materials and components necessary for our portable power source products or in other aspects of our customers products may be subject to allocation because of shortages of these materials and components. Shortages in the future could cause delayed shipments, customer dissatisfaction, and lower revenue.

We will be subject to lengthy development periods and product acceptance cycles, which can result in development and engineering costs without any future revenue.

We plan to provide portable power source solutions that are incorporated by OEMs into the products they sell. OEMs will make the determination during their product development programs whether to incorporate our portable power source solutions or pursue other alternatives. This process may require us to make significant investments of time and resources in the design of portable customer-specific power source solutions well before our customers introduce their products incorporating our product solutions and before we can be sure that we will generate any significant sales to our customers or even recover our investment. During a customer s entire product development process, we will face the risk that our portable power source products will fail to meet our customer s technical, performance, or cost requirements or that our products will be replaced by competing products or alternative technological solutions. Even if we complete our design process in a manner satisfactory to our customer, the customer may decide to delay or terminate its product development efforts. The occurrence of any of these events could cause sales to not materialize, to be deferred, or to be cancelled, which would adversely affect our operating results.

We will not have long-term purchase commitments from our customers, and their ability to cancel, reduce, or delay orders could reduce our revenue and increase our costs.

Customers for our portable power source products will not provide us with firm, long-term volume purchase commitments, but instead will issue purchase orders to buy a specified number of units. As a result, customers may be able to cancel purchase orders or reduce or delay orders at any time. The cancellation, delay, or reduction of customer purchase orders could result in reduced revenue, excess inventory, and unabsorbed overhead. We currently have no presence in the electronic device markets. Our success in the electronic device markets will require us to establish the value added proposition of our products to OEMs that have traditionally used other portable power solutions. All of the markets we plan to serve are subject to severe competitive pressures, rapid technological change and product obsolescence, which may increase our inventory and overhead risks, resulting in increased costs.

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Variability of customer requirements resulting in cancellations, reductions, or delays may adversely affect our operating results.

We will be required to provide rapid product turnaround and respond to short lead times. A variety of conditions, both specific to individual customers and generally affecting the demand for OEMs products, may cause customers to cancel, reduce, or delay orders. Cancellations, reductions, or delays by a significant customer or by a group of customers could adversely affect our operating results. Customers may require rapid increases in production, which could strain our resources and reduce our margins.

If we are unable to adequately protect our intellectual property, our competitors and other third parties could produce products based on our intellectual property, which would substantially impair our ability to compete.

Our success and ability to compete depends in part upon our ability to maintain the proprietary nature of our technologies. We rely on a combination of patent, trade secret, copyright, and trademark law and license agreements, as well as nondisclosure agreements, to protect our intellectual property. These legal means, however, afford only limited protection and may not be adequate to protect our intellectual property rights. We cannot be certain that we were the first creator of inventions covered by pending patent applications or the first to file patent applications on these inventions. In addition, we cannot be sure that any of our pending patent applications will issue. The United States Patent and Trademark Office, or other foreign patent and trademark offices may deny or significantly narrow claims made under our patent applications and, even if issued, these patents may be successfully challenged, designed around, or may otherwise not provide us with any commercial protection.

We may in the future need to assert claims of infringement against third parties to protect our intellectual property. Regardless of the final outcome, any litigation to enforce our intellectual property rights in patents, copyrights, or trademarks could be highly unpredictable and result in substantial costs and diversion of resources, which could have a material and adverse effect on our business and financial condition. In the event of an adverse judgment, a court could hold that some or all of our asserted intellectual property rights are not infringed, or are invalid or unenforceable, and could award attorneys fees to the other party.

We may become subject to claims of infringement or misappropriation of the intellectual property rights of others, which could prohibit us from selling our products, require us to obtain licenses from third parties or to develop non-infringing alternatives, and subject us to substantial monetary damages and injunctive relief.

We may receive notices from third parties that the manufacture, use, or sale of any products we develop infringes upon one or more claims of their patents. Moreover, because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that materially and adversely affect our business. Third parties could also assert infringement or misappropriation claims against us with respect to our future product offerings, if any. Whether or not such claims are valid, we cannot be certain that we have not infringed the intellectual property rights of such third parties. Any infringement or misappropriation claim could result in significant costs, substantial damages, and our inability to manufacture, market, or sell any of our product offerings that are found to infringe. Even if we were to prevail in any such action, the litigation could result in substantial cost and diversion of resources that could materially and adversely affect our business. If a court determined, or if we independently discovered, that our product offerings violated third-party proprietary rights, there can be no assurance that we would be able to re-engineer our product offerings to avoid those rights or obtain a license under those rights on commercially reasonable terms, if at all. As a result, we could be prohibited from selling products that are found to infringe upon the rights of others. Even if obtaining a license were feasible, it may be costly and time-consuming. A court could also enter

orders that temporarily, preliminarily, or permanently enjoin us from making, using, selling, offering to sell, or importing our portable power source products, or could enter orders mandating that we undertake certain remedial activities. Further, a court could order us to pay compensatory damages for such infringement, plus prejudgment interest, and could in addition treble the compensatory damages and award attorneys fees. These damages could materially and adversely affect our business and financial condition.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information, which could limit our ability to compete.

We rely on trade secrets to protect our proprietary technology and processes. Trade secrets are difficult to protect. We enter into confidentiality and intellectual property assignment agreements with our employees, consultants, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties confidential information developed by the party or made known to the party by us during the course of the party s relationship with us. However, these agreements may not be honored and enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time-consuming, and the outcome is unpredictable. The failure to obtain and maintain trade secret protection could adversely affect our competitive position.

Our efforts to develop new technologies may not result in commercial success, which could cause a decline in our revenue and could harm our business.

Our research and development efforts with respect to our technologies may not result in customer or market acceptance. Some or all of those technologies may not successfully make the transition from the research and development lab to cost-effective production as a result of technology problems, competitive cost issues, yield problems, and other factors. Even when we successfully complete a research and development effort with respect to a particular technology, our customers may decide not to introduce or may terminate products utilizing the technology for a variety of reasons, including the following:

- difficulties with other suppliers of components for the products;
- superior technologies developed by our competitors and unfavorable comparisons of our solutions with these technologies;
- price considerations; and
- lack of anticipated or actual market demand for the products.

The nature of our business will require us to make continuing investments for new technologies. Significant expenses relating to one or more new technologies that ultimately prove to be unsuccessful for any reason could have a material adverse effect on us. In addition, any investments or acquisitions made to enhance our technologies may prove to be unsuccessful. If our efforts are unsuccessful, our business could be harmed.

We may not be able to enhance our product solutions and develop new product solutions in a timely manner.

Our future operating results will depend to a significant extent on our ability to provide new portable power source products that compare favorably with alternative solutions on the basis of time to introduction, cost, performance, and end-user preferences. Our success in attracting customers and developing business will depends on various factors, including the following:

- innovative development of new portable power source products for customer products;

utilization of advances in technology;

maintenance of quality standards;

efficient and cost-effective solutions; and

timely completion of the design and introduction of new portable power source products.

Our inability to commercialize our proposed portable power source solutions and develop new product solutions on a timely basis could harm our operating results and impede our growth.

If we do not keep pace with technological innovations, our products may not be competitive and our revenue and operating results may suffer.

Technological advances, the introduction of new products, and new design techniques could adversely affect our business prospects unless we are able to adapt to the changing conditions. Technological advances could render our proposed portable power source products obsolete, and we may not be able to respond effectively to the technological requirements of evolving markets. As a result, we will be required to expend substantial funds for and commit significant resources to

continue research and development activities on portable power source products;

hire additional engineering and other technical personnel; and

purchase advanced design tools and test equipment.

Our business could be harmed if we are unable to develop and utilize new technologies that address the needs of our customers, or our competitors do so more effectively than we do.

New technology solutions that achieve significant market share could harm our business.

New portable power source solutions could be developed. Existing electronic devices also could be modified to allow for a different power source solution. Our business could be harmed if our products become noncompetitive as a result of a technological breakthrough that allows a new power source solution to displace our solution and achieve significant market acceptance.

Our inability to respond to changing technologies will harm our business.

The electronics industry is subject to constant technological change. Our future success will depend on our ability to respond appropriately to changing technologies and changes in product function and quality. If we rely on products and technologies that are not attractive to consumers, we may not be successful in capturing or retaining any significant market share. In addition, any new technologies utilized in our portable power source products may not perform as expected or as desired, in which event our adoption of such products or technologies may harm our business.

International sales and manufacturing risks could adversely affect our operating results.

We anticipate that the manufacturing and assembly operations for our portable power source products will be conducted primarily in Asia by manufacturing subcontractors. We also believe that many of our OEM customers will be located and much of our sales and distribution operations will be conducted in Asia. These international operations

will expose us to various economic, political, and other risks that could adversely affect our operations and operating results, including the following:

difficulties and costs of staffing and managing a multi-national organization;

unexpected changes in regulatory requirements;

differing labor regulations;

potentially adverse tax consequences;

tariffs and duties and other trade barrier restrictions;

possible employee turnover or labor unrest;

greater difficulty in collecting accounts receivable;

the burdens and costs of compliance with a variety of foreign laws;

potentially reduced protection for intellectual property rights; and

political or economic instability in certain parts of the world.

The risks associated with international operations could negatively affect our operating results.

Our business may suffer if international trade is hindered, disrupted, or economically disadvantaged.

Political and economic conditions abroad may adversely affect the foreign production and sale of our portable power source products. Protectionist trade legislation in either the United States or foreign countries, such as a change in the current tariff structures, export or import compliance laws, or other trade policies, could adversely affect our ability to sell our portable power source products in foreign markets and to obtain materials or equipment from foreign suppliers.

Changes in policies by the U.S. or foreign governments resulting in, among other things, higher taxation, currency conversion limitations, restrictions on the transfer of funds, or the expropriation of private enterprises also could have a material adverse effect on us. Any actions by countries in which we conduct business to reverse policies that encourage foreign investment or foreign trade also could adversely affect our operating results. In addition, U.S. trade policies, such as most favored nation status and trade preferences for certain Asian nations, could affect the attractiveness of our products to our U.S. customers and adversely impact our operating results.

Our operating results could be adversely affected by fluctuations in the value of the U.S. dollar against foreign currencies.

We plan to transact our portable power source business predominantly in U.S. dollars and bill and collect our sales in U.S. dollars. A weakening of the dollar could cause our overseas vendors to require renegotiation of either the prices or currency we pay for their goods and services. In the future, customers may negotiate pricing and make payments in non-U.S. currencies.

If our overseas vendors or customers require us to transact business in non-U.S. currencies, fluctuations in foreign currency exchange rates could affect our cost of goods, operating expenses, and operating margins and could result in exchange losses. In addition, currency devaluation can result in a loss to us if we hold deposits of that currency. Hedging foreign currencies can be difficult, especially if the currency is not freely traded. We cannot predict the impact of future exchange rate fluctuations on our operating results.

We expect that a majority of our manufacturing subcontractors will be located in Asia, increasing the risk that a natural disaster, labor strike, war, or political unrest in those countries would disrupt our operations.

We expect that a majority of our manufacturing subcontractors will be located in Asia. Events out of our control, such as earthquakes, fires, floods, or other natural disasters, or political unrest, war, labor strikes, or work stoppages in Asia could disrupt their operations, which would impact our business. In addition, there is political tension between Taiwan and China that could lead to hostilities. If any of these events occur, we may not be able to obtain alternative

manufacturing capacity. Failure to secure alternative manufacturing capacity could cause a delay in the shipment of our products, which would cause our revenue to fluctuate or decline.

Continuing uncertainty of the U.S. economy may have serious implications for the growth and stability of our business and may negatively affect our stock price.

The revenue growth and profitability of our business will depend significantly on the overall demand for electronic devices. Softening demand in these markets caused by ongoing economic uncertainty may result in decreased revenue or earnings levels or growth rates. The U.S. economy has been historically cyclical, and market conditions continue to be challenging, which has resulted in individuals and companies delaying or reducing expenditures. Further delays or reductions in spending could have a material adverse effect on demand for our products, and consequently on our business, financial condition, results of operations, prospects, and stock price.

The electronics industry is cyclical and may result in fluctuations in our operating results.

The electronics industry has experienced significant economic downturns at various times. These downturns are characterized by diminished product demand, accelerated erosion of average selling prices, and production overcapacity. In addition, the electronics industry is cyclical in nature. We will seek to reduce our exposure to industry downturns and cyclicality by providing design and production services for leading companies in rapidly expanding industry segments. We may, however, experience substantial period-to-period fluctuations in future operating results because of general industry conditions or events occurring in the general economy.

Our strategic alliances may not achieve their objectives, and their failure to do so could impede our growth.

Our prospects depends to a significant extent on our strategic alliances with Samsung and Duracell. In addition, we plan to explore additional strategic alliances designed to enhance or complement our technology or to work in conjunction with our technology; to provide necessary know-how, components, or supplies; and to develop, introduce, and distribute products utilizing our technology. Any strategic alliances may not achieve their intended objectives, may be cancelled by either party, and parties to our strategic alliances may not perform as contemplated. The failure of our current alliances or our inability to form additional alliances may impede our ability to introduce new products and enter new markets.

Product liability claims against us could result in adverse publicity and potentially significant monetary damages.

As a seller of consumer products using a flammable material such as methanol, we will face an inherent risk of exposure to product liability claims in the event that injuries result from product usage by customers. It is possible that our products could result in injury, whether by product malfunctions, defects, improper installation, or other causes. If such injuries or claims of injuries were to occur, we could incur monetary damages and our business could be adversely affected by any resulting negative publicity. The successful assertion of product liability claims against us could result in potentially significant monetary damages and, if our insurance protection is inadequate to cover these claims, could require us to make significant payments from our own resources.

We expect to face intense competition that could result in failing to gain market share and suffering reduced revenue from our portable power source products.

We plan to serve intensely competitive markets that are characterized by price erosion, rapid technological change, and competition from major domestic and international companies. This intense competition could result in pricing pressures, lower sales, reduced margins, and lower market share. Most of our competitors have greater market recognition, larger customer bases, and substantially greater financial, technical, marketing, distribution, and other resources than we possess and that afford them competitive advantages. As a result, they may be able to devote greater resources to the promotion and sale of products, to negotiate lower prices for raw materials and

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components, to deliver competitive products at lower prices, and to introduce new product solutions and respond to customer requirements more quickly than we can. Our competitive position could suffer if one or more of our customers determine not to utilize our portable power source products and instead decide to contract with our competitors or to use alternative technologies.

Our ability to compete successfully will depend on a number of factors, both within and outside our control. These factors include the following:

- our success in designing and introducing new portable power source products;
- our ability to predict the evolving needs of our customers and to assist them in incorporating our technologies into their new products;
- our ability to meet our customer s requirements for small size, low weight, peak power, long power duration, ease of use, reliability, durability, and small form factor;
- the quality of our customer services;
- the rate at which customers incorporate our products into their own products;
- product or technology introductions by our competitors; and
- foreign currency fluctuations, which may cause a foreign competitor s products to be priced significantly lower than our products.

We depend on key personnel who would be difficult to replace, and our business will likely be harmed if we lose their services or cannot hire additional qualified personnel.

Our success will depend substantially on the efforts and abilities of our senior management and key personnel. The competition for qualified management and key personnel, especially engineers, is intense. Although we maintain non-competition and non-disclosure covenants with most of our key personnel, we do not have employment agreements with most of them. The loss of services of one or more of our key employees or the inability to hire, train, and retain key personnel, especially engineers and technical support personnel, and capable sales and customer-support employees outside the United States, could delay the development and sale of our products, disrupt our business, and interfere with our ability to execute our business plan.

Our operating results may experience significant fluctuations.

In addition to the variability resulting from the short-term nature of our customers commitments, other factors will contribute to significant periodic and seasonal quarterly fluctuations in our results of operations. These factors include the following:

- the cyclicality of the markets we serve;
- the timing and size of orders;
- the volume of orders relative to our capacity;
- product introductions and market acceptance of new products or new generations of products;

evolution in the life cycles of our customers products;

timing of expenses in anticipation of future orders;

changes in product mix;

availability of manufacturing and assembly services;

changes in cost and availability of labor and components;

timely delivery of product solutions to customers;

pricing and availability of competitive products;

introduction of new technologies into the markets we serve;

pressures on reducing selling prices;

our success in serving new markets; and

changes in economic conditions.

Accordingly, you should not rely on period-to-period comparisons as an indicator of our future performance. Negative or unanticipated fluctuations in our operating results may result in a decline in the price of our stock.

Risks Related to this Offering

We may incur substantially more debt or take other actions that may affect our ability to satisfy our obligations under the notes.

We will not be restricted under the terms of the notes or the indenture from incurring additional indebtedness, including secured debt. In addition, the limited covenants applicable to the notes do not require us to achieve or maintain any minimum financial results relating to our financial position or results of operations. Our ability to recapitalize, incur additional debt, and take a number of other actions that are not limited by the terms of the notes could have the effect of diminishing our ability to make payments on the notes when due, and could reduce the availability of cash flow to fund our operations, working capital, and capital expenditures. In addition, we are not restricted from repurchasing common stock by the terms of the notes. From time to time we and our subsidiaries may incur additional indebtedness, including secured indebtedness, which could adversely affect our ability to pay our obligations under the notes.

The notes are unsecured and, therefore, will be effectively subordinated to any secured debt we may incur.

The notes are not secured by any of our assets or those of our subsidiaries. Although we do not currently have any secured debt, the notes will be effectively subordinated to any secured debt we may incur in the future. In any liquidation, dissolution, bankruptcy or other similar proceeding, the holders of our secured debt may assert rights against the secured assets in order to receive full payment of their debt before the assets may be used to pay the holders of the notes. In such an event, we may not have sufficient assets remaining to pay amounts due on any or all of the notes.

The conversion rate of the notes may not be adjusted for all dilutive events.

The conversion rate of the notes will be subject to adjustment for certain events, including the issuance of stock dividends on our common stock; the issuance of certain rights or warrants; subdivisions; combinations; distributions of capital stock, indebtedness or assets; cash dividends; and certain issuer tender or exchange offers as described under Description of Notes Conversion Rights Conversion Rate Adjustments. However, the conversion rate will not be adjusted for other events, such as a third-party tender or exchange offer or an issuance of common stock for cash, that may adversely affect the trading price of the notes or the common stock. An event that adversely affects the value of the notes may occur, and that event may not result in an adjustment to the conversion rate.

If the market price of our common stock decreases, the market price of the notes may similarly decrease.

We expect that the market price of the notes will be significantly affected by the market price of our common stock. This may result in greater volatility in the market price of the notes than

would be expected for debt securities. The market price of our common stock will likely continue to fluctuate in response to factors, including the factors discussed elsewhere in the sections of this prospectus titled Risk Factors and Special Note Regarding Forward-Looking Statements, many of which are beyond our control. For instance, the price of our common stock could be affected by sales of our common stock by investors who view the notes as a more attractive means of equity participation in our company than our common stock, or by other hedging or arbitrage trading activity that may develop involving our common stock. This hedging or arbitrage could, in turn, affect the trading price of the notes.

The notes may not have an active market and their price may be volatile. You may be unable to sell your notes at the price you desire or at all.

There is no existing trading market for the notes. As a result, there can be no assurance that a liquid market will develop or be maintained for the notes, that you will be able to sell any of the notes at a particular time (if at all) or that the prices you receive if or when you sell the notes will be above their initial offering price. The underwriter has advised us that it currently does not intend to make a market in the notes after this offering is completed. In addition, market making will be subject to the limits imposed by the Securities Act, and the Exchange Act, and may be limited during the pendency of any shelf registration statement or exchange offer. The liquidity of the trading market in the notes, and the market price quoted for the notes, may be adversely affected by various factors, including the following:

changes in the overall market for debt securities;

changes in our financial performance or prospects;

the prospects for companies in our industry generally;

the number of holders of the notes;

the interest of securities dealers in making a market for the notes; and

prevailing interest rates.

Conversion of the notes will dilute the ownership interest of existing shareholders, including holders who had previously converted their notes.

The conversion of some or all of the notes will dilute the ownership interests of existing shareholders. Any sales in the public market of the common stock issuable upon such conversion could adversely affect prevailing market prices of our common stock. In addition, the existence of the notes may encourage short selling by market participants because the conversion of the notes could depress the price of our common stock.

If you hold notes, you will not be entitled to any rights with respect to our common stock, but you will be subject to all changes made with respect to our common stock.

If you hold notes, you will not be entitled to any rights with respect to our common stock (including voting rights and rights to receive any dividends or other distributions on our common stock), but if you subsequently convert your notes into common stock, you will be subject to all changes affecting the common stock. You will have rights with respect to our common stock only if and when we deliver shares of common stock to you upon conversion of your notes and, to a limited extent, under the conversion rate adjustments applicable to the notes. For example, in the event that an amendment is proposed to our certificate of incorporation or by-laws requiring stockholder approval and the

record date for determining the stockholders of record entitled to vote on the amendment occurs prior to delivery of common stock to you, you will not be entitled to vote on the amendment, although you will nevertheless be subject to any changes in our common stock that result from such amendment.

You may not be able to sell the shares of our common stock issuable upon conversion of the notes and exercise of the warrants when you want to, and, if you do, you may not be able to receive the price that you want.

Our common stock is currently traded on The Nasdaq Global Market. The daily trading volume of our common stock is relatively low. During the year ended December 31, 2007, the daily volume for our common stock was as low as 3,844 and as high as 155,701 and averaged 19,994 shares per day as reported by Nasdaq. Because of this limited trading volume, you may be unable to sell the shares of our common stock issuable upon conversion of the notes and exercise of the warrants.

Moreover, the market price of our common stock has fluctuated substantially in the past and is likely to continue to be highly volatile and subject to wide fluctuations in the future. For example, as of June 30, 2008, the 52-week high closing sales price of our common stock was $10.72 per share, which compares to a 52-week low closing sales price of our common stock of $1.25 per share. These fluctuations have occurred in the past and may occur in the future in response to various factors, many of which we cannot control, including the following:

- actual or anticipated changes in our operating results;
- variations in our quarterly results;
- changes in expectations relating to our products, plans, and strategic position or those of our competitors or customers;
- announcements of technological innovations or new products by our competitors, our customers, or us;
- market conditions within our market;
- price and volume fluctuations in the overall stock market from time to time;
- significant volatility in the market price and trading volume of technology companies in general and alternative energy companies in particular;
- changes in investor perceptions;
- the level and quality of any research analyst coverage of our common stock;
- changes in earnings estimates or investment recommendations by securities analysts or our failure to meet such estimates;
- the financial guidance we may provide to the public, any changes in such guidance, or our failure to meet such guidance;
- various market factors or perceived market factors, including rumors, whether or not correct, involving us, our customers, our subcontractors, or our competitors;
- introductions of new products or new pricing policies by us or by our competitors;
- acquisitions or strategic alliances by us or by our competitors;

litigation involving us, our industry, or both;

regulatory developments in the United States or abroad;

the gain or loss of significant customers;

the gain or loss of significant orders;

recruitment or departure of key personnel;

developments with respect to intellectual property rights;

market conditions in our industry, the industries of our customers, and economy as a whole;

acquisitions or strategic alliances by us or our competitors; and

general global economic and political instability.

In addition, the market prices of securities of technology companies have experienced significant price and volume fluctuations that often have been unrelated or disproportionate to their operating performance. In the past, companies that have experienced volatility in the market price of their securities have been the subject of securities class action litigation. If we were the object of a securities class action litigation, it could result in substantial losses and divert management s attention and resources from other matters. If the price of our common stock falls below the minimum price requirement of The Nasdaq Global Market, you may not be able to sell the shares issuable upon conversion of the notes and exercise of the warrants when you want to and if you do, you may not receive the price that you want.

Furthermore, because the notes are convertible into shares of our common stock, volatility or depressed prices of our common stock could have a similar effect on the trading price of our notes. Holders who receive common stock upon conversion also will be subject to the risk of volatility and depressed prices of our common stock. In addition, the existence of the notes may encourage short selling in our common stock by market participants because the conversion of the notes could depress the price of our common stock.

Sales of a significant number of shares of our common stock in the public markets, or the perception of such sales, could depress the market price of the notes and our common stock.

Sales of a substantial number of shares of our common stock or other equity-related securities in the public markets could depress the market price of the notes, our common stock, or both, and impair our ability to raise capital through the sale of additional equity securities. We cannot predict the effect that future sales of our common stock or other equity-related securities would have on the market price of our common stock or the value of the notes. The price of our common stock could be affected by possible sales of our common stock by investors who view the notes as a more attractive means of equity participation in our company and by hedging or arbitrage trading activity that may occur involving our common stock. This hedging or arbitrage could, in turn, affect the market price of the notes and our common stock.

We may not be able to refinance the notes if required or if we so desire.

We may need or desire to refinance all or a portion of the notes or any other future indebtedness that we incur on or before the maturity of the notes. There can be no assurance that we will be able to refinance any of our indebtedness on commercially reasonable terms, if at all.

The notes will initially be held in book-entry form and, therefore, you may be forced to rely on the procedures of the relevant clearing systems to exercise your rights and remedies.

Unless and until certificated notes are issued in exchange for book-entry interests in the notes, owners of the book-entry interests will not be considered owners or holders of notes. Instead, the depository, or its nominee, will be the sole holder of the notes. Payments of principal, interest, and other amounts owing on or in respect of the notes in

global form will be made to the paying agent, which will make payments to The Depository Trust Company, or DTC. Thereafter, such payments will be credited to DTC participants accounts that hold book-entry interests in the notes in global form and credited by such participants to indirect participants. Unlike holders of the notes

themselves, owners of book-entry interests will not have the direct right to act upon our solicitations for consents or requests for waivers or other actions from holders of the notes. Instead, if you own a book-entry interest, you will be permitted to act only to the extent you have received appropriate proxies to do so from DTC or, if applicable, a participant. We cannot assure you that procedures implemented for the granting of such proxies will be sufficient to enable you to vote on any requested actions on a timely basis.

The notes could be treated as contingent payment debt instruments for U.S. federal income tax purposes.

It is possible that the IRS could assert that the additional interest which we would be obligated to pay in connection with an event of default relating to the failure to file any documents or reports that we are required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act, and for any failure to comply with the requirements of Section 314(a)(1) of the Trust Indenture Act or of certain covenants described herein, constitutes a contingent payment for U.S. federal income tax purposes. If so treated, the notes would be treated as contingent payment debt instruments and certain adverse U.S. federal income tax consequences could result (including a requirement that U.S. Holders (as defined below under Material U.S. Federal Income Tax Considerations) report such additional interest as OID (as defined below under Material U.S. Federal Income Tax Considerations Consequences to Holders of Notes Consequences to U.S. Holders of Notes Interest) and the treatment of any gain from the sale of a note as ordinary income for U.S. federal income tax purposes). However, the Treasury Regulations issued by the IRS regarding debt instruments that provide for one or more contingent payments provide that, for purposes of determining whether a debt instrument is a contingent payment debt instrument, remote or incidental contingencies are ignored. We believe that the possibility of the payment of additional interest is remote and, accordingly, we do not intend to treat the notes as contingent payment debt instruments.

You may be subject to U.S. federal income tax if we make or fail to make certain adjustments to the conversion rate of the notes even though you do not receive a corresponding cash distribution.

The conversion rate of the notes is subject to adjustment in certain circumstances, including the payment of certain cash dividends. If the conversion rate is adjusted as a result of a distribution that is taxable to our common stockholders, such as a cash dividend, you may be deemed to have received a taxable dividend subject to U.S. federal income tax without the receipt of any cash. In addition, a failure to adjust (or to adjust adequately) the conversion rate after an event that increases your proportionate interest in our company could be treated as a deemed taxable dividend to you. See Material U.S. Federal Income Tax Considerations.

We have broad discretion over the use of the net proceeds from this offering and could spend the proceeds in ways with which you might not agree.

We have broad discretion to allocate the net proceeds of this offering, and you will be relying on the judgment of our management regarding the application of those proceeds. We currently expect to use these proceeds to conduct research and development, and the commercialization of our portable power source products. The timing and amount of our actual expenditures, however, are subject to change and will be based on many factors, including the following:

- the results of our research and development and product testing;
- manufacturing, marketing, and other costs associated with commercialization of our products; and
- the costs involved in preparing, filing, prosecuting, maintaining and enforcing patents or defending ourselves against competing technological and market developments.

We may experience an ownership change in connection with this offering (or in the future), which would result in a limitation of the use of our net operating losses.

As of March 31, 2008, we had approximately $57 million of net operating loss, or NOL, carryforwards. Our ability to utilize these NOL carryforwards, including any future NOL carryforwards that may arise, may be limited by Section 382 of the Internal Revenue Code of 1986, as amended, if we undergo an ownership change as a result of subsequent changes in the ownership of our outstanding common stock pursuant to the exercise of the warrants, the conversion of the notes, or otherwise. A corporation generally undergoes an ownership change when the ownership of its stock, by value, changes by more than 50 percentage points over any three-year testing period. In the event of an ownership change, Section 382 imposes an annual limitation on the amount of post-ownership change taxable income a corporation may offset with pre-ownership change NOL carryforwards and certain recognized built-in losses.

The warrants could adversely affect our stock price and future financings.

We are offering senior convertible notes and warrants to purchase shares of our common stock in units. We are also granting the underwriter a 30-day option to purchase up to an additional 1,800 units (consisting of $1,800,000 principal amount of notes and warrants) to cover over-allotments. As part of its compensation, the underwriter will also receive a warrant to purchase shares of our common stock equal to 6% of the number of shares issuable upon conversion of the notes and exercise of the warrants included in the units. The existence of such warrants may adversely affect the market price of our common stock and terms on which we can obtain additional financing, and the holders of such warrants can be expected to exercise them at a time when we, in all likelihood, would be able to obtain additional capital by offering shares of our common stock on terms more favorable to us than those provided by the exercise of such warrants.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements that are forward-looking in nature. Examples of forward-looking statements include statements regarding our belief that the fuel cell industry will continue to develop, our future financial results, operating results, business strategies, projected costs, products under development, competitive positions, and our plans and objectives for future operations. Words such as may, will, should, would, expects, anticipates, intends, believes, estimates, predicts, potential, continue, or the negative of these terms or other comparable terminology, as well as statements in future tense, identify forward-looking statements. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including the Risk Factors discussed herein. These and many other factors could affect our future operating results and financial condition and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by us or on our behalf.

Forward-looking statements should not be read as a guarantee of future performance or results, and will not necessarily be accurate indications of the times at, or by which, that performance or those results will be achieved. Forward-looking statements are based on information available at the time they are made or our good faith belief as of that time with respect to future events, and are subject to risks and uncertainties that could cause actual performance or results to differ materially from those expressed in or suggested by the forward-looking statements. Important factors that could cause these differences include the following:

- our history of recurring net losses and the risk of continued net losses;
- our independent auditors raising substantial concern about our ability to continue as a going concern;
- sales revenue growth of our test and measurement instrumentation business may not be achieved;
- the dependence of our test and measurement instrumentation business on a small number of customers and potential loss of government funding;
- risks related to developing Mobion direct methanol fuel cells and whether we will ever successfully develop reliable and commercially viable Mobion fuel cell solutions;
- our need to raise additional financing;
- risks relating to the market price of Plug Power common stock;
- the risk that certain European Union regulations will not be changed to permit methanol to be carried onto airplanes;
- our portable power source products or our customers products that utilize our portable power source products may not be accepted by the market;
- our inability to build and maintain relationships with our customers;
- our limited experience in manufacturing fuel cell systems on a commercial basis;
- our dependence on others for our production requirements for our portable power source products;

our dependence on our manufacturing subcontractors to provide high levels of productivity and satisfactory delivery schedules for our portable power source products;

our dependence on third-party suppliers for most of the manufacturing equipment necessary to produce our portable power source products;

our inability to obtain sufficient quantities of components and other materials, including platinum and ruthenium, necessary for the production of our portable power source products;

our dependence on OEMs integrating Mobion fuel cell systems into their devices;

our lack of long-term purchase commitments from our customers and the ability of our customers to cancel, reduce, or delay orders for our products;

risks related to protection and infringement of intellectual property;

our new technologies may not result in customer or market acceptance;

our ability to commercialize our proposed portable power source solutions and develop new product solutions on a timely basis;

our ability to develop and utilize new technologies that address the needs of our customers;

intense competition in the direct methanol fuel cell and instrumentation businesses;

change in policies by U.S. or foreign governments that hinder, disrupt, or economically disadvantage international trade;

the impact of future exchange rate fluctuations;

uncertainty of the U.S. economy;

the historical volatility of our stock price;

the cyclical nature of the electronics industry;

failure of our strategic alliances to achieve their objectives or perform as contemplated and the risk of cancellation or early termination of such alliance by either party;

product liability or defects;

risks related to the flammable nature of methanol as a fuel source;

the loss of services of one or more of our key employees or the inability to hire, train, and retain key personnel;

significant periodic and seasonal quarterly fluctuations in our results of operations; and

other factors discussed under the headings Risk Factors, Management s Discussion and Analysis of Financial Condition and Results of Operations , and Business.

Forward-looking statements speak only as of the date they are made. You should not put undue reliance on any forward-looking statements. We assume no obligation to update forward-looking statements to reflect actual results, changes in assumptions, or changes in other factors affecting forward-looking information, except to the extent

required by applicable securities laws. If we do update one or more forward-looking statements, no inference should be drawn that we will make additional updates with respect to those or other forward-looking statements.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of units in this offering will be approximately $11.1 million (or $12.8 million if the underwriter exercises its over-allotment option in full), after deducting the underwriter s discount and commissions and estimated offering expenses payable by us.

We intend to use the net proceeds from this offering as follows:

Commercialization of our portable power source products (1)	$	8,408,000
Capital equipment (2)		1,487,000
General corporate purposes, including working capital		1,200,000
Total	$	11,095,000

(1) Expected to consist of activities to commercialize our portable power source products for portable handheld electronic devices (including further enhancements to our Mobion Chip) and activities to achieve manufacturing readiness (including design for manufacturability, design for assembly, design for testability, and design for serviceability).

(2) Expected to consist of expenditures for equipment and tooling to support engineering design and commercialization of our Mobion portable power source products.

We believe the net proceeds of this offering will assist us in achieving certain milestones in commercializing our portable power source products. We will, however, require capital above the net proceeds of this offering to complete the commercialization of our portable power source business. We may raise this additional capital through one or more financings or by selling our test and measurement instrumentation business should we determine to do so.

The amounts and timing of our actual expenditures will depend upon numerous factors, including the amount of proceeds actually raised in this offering, cash flows from operations, and the growth of our business. We will, from time to time, evaluate these and other factors to determine if the allocation of our resources, including the proceeds of this offering, is being optimized and we must therefore retain broad discretion to allocate the net proceeds from this offering.

Pending use of the net proceeds as described above, we intend to invest the net proceeds of this offering in U.S. government and short-term investment grade securities.

PRICE RANGE OF OUR COMMON STOCK

Our common stock trades on The Nasdaq Global Market under the symbol MKTY. The following table sets forth the high and low sale prices of our common stock as reported by The Nasdaq Global Market for the periods indicated (for periods prior to May 16, 2008, such prices have been derived by multiplying the actual prices by eight to reflect the reverse split of our common stock that was approved by our stockholders at a meeting held on May 15, 2008, pursuant to which every eight shares of our common stock were combined into one share of our common stock).

	High	Low
2006		
First Quarter	$ 31.20	$ 21.60
Second Quarter	40.00	16.00
Third Quarter	19.92	10.16
Fourth Quarter	23.68	12.40
2007		
First Quarter	15.44	10.56
Second Quarter	14.40	9.60
Third Quarter	11.28	7.20
Fourth Quarter	10.80	5.76
2008		
First Quarter	7.44	3.76
Second Quarter	7.80	1.11
Third Quarter (through July 2, 2008)	1.63	1.26

We estimate that there were approximately 540 holders of our common stock as of July 2, 2008, which does not include an indeterminate number of stockholders whose shares may be held by brokers in street name.

DIVIDEND POLICY

We have never declared or paid any dividends on our capital stock. We currently intend to retain any future earnings to fund the development and expansion of our business, and therefore do not anticipate paying cash dividends in the foreseeable future. Any future determination to pay dividends will be at the discretion of our Board of Directors and will depend on our financial condition, results of operations, capital requirements, restrictions contained in financing instruments, and other factors our Board of Directors deems relevant.

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2008

on an actual basis, which reflects our actual capitalization as of March 31, 2008 on a historical basis, giving effect to our eight-to-one reverse stock split that was approved by our stockholders at a meeting held May 15, 2008; and

on an as adjusted basis to reflect the sale of the units (assuming the underwriter s over-allotment option is not exercised) and the application of the net proceeds therefrom as described in Use of Proceeds.

	March 31, 2008	
	Actual	As Adjusted
	(in thousands, except share data)	
Cash and cash equivalents	$4,560	$ 15,655
Securities available for sale (1)	3,537	3,537
Long-term debt:		
% Convertible Senior Notes due (5)		12,000
Total long-term debt		12,000
Stockholders equity (2)(5):		
Common stock, par value $0.01 per share, 75,000,000 shares authorized, actual and as adjusted; 5,777,578 shares issued, actual and as adjusted (3)	58	58
Additional paid-in capital	132,449	132,449
Accumulated deficit	(108,253)	(108,253)
Accumulated other comprehensive income:		
Unrealized gain on securities available for sale, net of tax	(455)	(455)
Common stock in treasury, at cost, 1,005,092 shares	(13,754)	(13,754)
Total stockholders equity	10,045	10,045
Total capitalization (4)	$10,045	$ 22,045

(1) Represents shares of Plug Power held for sale by us, classified as current assets, and such amount reflects the fair value of these shares. Through the sale of Plug Power shares, we generated proceeds of $6.2 million during 2006 and $5.1 million during 2007 that we have used to fund the development and commercialization of our portable power source business.

(2) The table includes adjustments in the number of shares of our issued common stock as a result of the reverse split of our common stock that was approved by our stockholders at a meeting held May 15, 2008, pursuant to which every eight shares of our common stock were combined into one share of our common stock.

(3) Excludes the following as of March 31, 2008:

136,886 shares of common stock reserved for future issuance under our equity incentive plans. As of March 31, 2008, there were 762,391 options outstanding and 625 shares of restricted stock issued under our equity incentive plans;

378,472 shares of common stock issuable upon exercise of outstanding warrants as of March 31, 2008, with an exercise price of $18.16 per share; and

shares of common stock that will be issued upon exercise of warrants at an exercise price of $ per share sold as part of the units in this offering and the warrants issued to the underwriter.

(4) Total capitalization is the sum of total long-term debt and total stockholders equity.

(5) Upon completion of the offering, the net proceeds of the units attributable to the fair value of the warrants to purchase common stock will be recorded as a permanent component of stockholders equity.

Please read the capitalization table together with the sections of this prospectus entitled Selected Consolidated Financial Data and Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes included elsewhere in this prospectus.

RATIO OF EARNINGS TO FIXED CHARGES

Our ratio of earnings to fixed charges for each of the periods indicated is as follows:

	Year Ended December 31,					Three Months Ended March 31,
	2003	2004	2005	2006	2007	2008
Ratio of earnings to fixed charges (1)						

(1) For the purposes of computing ratio of earnings to fixed charges, earnings consist of income (loss) before provision for income taxes plus fixed charges. Fixed charges consist of interest charges and that portion of rental payments under operating leases we believe to be representative of interest. Earnings for the years ended December 31, 2003, 2004, 2005, 2006 and 2007, were insufficient to cover fixed charges by $552, $4,191, $15,094, $13,667 and $9,575 (in thousands) respectively. Earnings for the three months ended March 31, 2008, were insufficient to cover fixed charges by $3,187 (in thousands). For this reason, no ratios are provided for these periods.

SELECTED CONSOLIDATED FINANCIAL DATA

The following table sets forth our summary consolidated financial data for the fiscal years ended December 31, 2005, 2006, and 2007, which was derived from our audited consolidated financial statements included elsewhere in this prospectus. The summary consolidated balance sheet data as of March 31, 2007 and 2008 and the summary consolidated statements of operations data for each of the three months ended March 31, 2007 and 2008 have been derived from the unaudited consolidated financial statements included elsewhere in this prospectus. We derived the consolidated financial data for the years ended December 31, 2003 and 2004 from our audited consolidated financial statement that is not included in this prospectus. You should read the following summary consolidated financial data together with the information under Management s Discussion and Analysis of Financial Condition and Results of Operations and our consolidated financial statements, including the related notes thereto.

	Years Ended December 31,					Three Months Ended March 31,	
	2003	2004	2005	2006	2007	2007	2008
Statement of Operations Data (in thousands except share and per share data):							
Product revenue	$5,547	$7,530	$6,012	$7,667	$9,028	$1,701	$1,980
Gross profit on product revenue	3,165	4,653	3,631	4,767	5,598	963	1,140
Funded research and development revenue	2,311	1,040	1,829	489	1,556	615	173
Research and product development expenses	8,348	12,960	9,671	12,921	11,765	3,622	2,373
Operating loss	(8,709)	(13,592)	(15,098)	(17,737)	(13,349)	(4,500)	(3,678)
Net loss	$(559)	$(4,191)	$(15,094)	$(13,667)	$(9,575)	$(3,156)	$(3,187)
Net loss per share (basic and diluted)	$(0.16)	$(1.15)	$(3.93)	$(3.46)	$(2.01)	$(0.66)	$(0.67)
Weighted average common shares outstanding (basic and diluted)	3,456,999	3,645,147	3,842,201	3,952,793	4,763,547	4,754,868	4,771,861
Balance Sheet Data (in thousands):							
Cash and cash equivalents	$12,380	$22,545	$11,230	$14,545	$7,650	9,885	4,560
Securities available for sale (1)	44,031	17,678	18,947	10,075	4,492	8,184	3,537
Working capital	49,053	33,663	33,045	23,076	11,347	15,927	7,634

Current ratio	4.2:1	4.0:1	4.9:1	3.9:1	3.9:1	3.9:1	2.8:1
Total assets	65,838	66,830	41,267	33,811	18,716	26,310	14,812
Total current liabilities	16,761	8,826	8,222	7,071	3,866	5,448	4,170
Long-term obligations	24	1,149		3,664	904	2,883	572
Total stockholders equity	$48,266	$55,584	$32,916	$22,871	$13,803	17,839	10,045

(1) Represents shares of Plug Power held for sale by us, classified as current assets, except for 2004 when approximately $16.5 million shares were classified as restricted shares, and such amount reflects the fair value of these shares. Through the sale of Plug Power shares, we generated proceeds of $6.2 million during 2006 and $5.1 million during 2007 that we have used to fund the development and commercialization of our portable power source business.

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

The following discussion of our financial condition and results of operations should be read in conjunction with our Consolidated Financial Statements and the related notes included elsewhere in this prospectus. This discussion contains forward-looking statements, which involve risk and uncertainties. Our actual results could differ materially from those anticipated in the forward-looking statements as a result of certain factors including those discussed in Risk Factors and elsewhere in this prospectus.

Overview

We are developing and commercializing off-the-grid rechargeable power sources for portable electronics. We have developed a patented, proprietary direct methanol fuel cell technology platform called Mobion, which generates electrical power using up to 100% methanol as fuel. Our proprietary fuel cell power solution consists of two primary components integrated in an easily manufactured device: the direct methanol fuel cell power engine, which we refer to as our Mobion Chip, and methanol replacement cartridges. Our current Mobion Chip weighs less than one ounce and is small enough to fit in the palm of one s hand. The methanol used by the technology is fully biodegradable. We believe we are the only micro fuel cell developer to have demonstrated power density of over 50 mW/cm^2 with high energy efficiencies of 1.4 Wh/cc of methanol for handheld consumer electronic applications. For these reasons, we believe our technology offers a compelling alternative to current lithium-ion and similar rechargeable battery systems currently used by original equipment manufacturers and branded partners, or OEMs, in many handheld electronic devices, such as mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, PDAs, and GPS devices. We believe our platform will facilitate the development of numerous product advantages, including small size, environmental friendliness, and simplicity of design, all critical for commercialization in the consumer market, and can be implemented as three different product options: a compact external charging device, a snap-on or attached power accessory, or an embedded fuel cell power solution. We have strategic arrangements with Samsung Electronics, an OEM of mobile phones and mobile phone accessories, with Duracell, part of the Procter & Gamble Company, and with a global Japanese consumer electronics company. Our goal is to become a leading provider of portable power for handheld electronic devices and we intend to commercialize Mobion products beginning in 2009.

Our Mobion technology eliminates the need for active water recirculation pumps or the inclusion of water as a fuel dilutant. The water required for the electrochemical process is transferred internally within the Mobion Chip from the site of water generation on the air-side of the cell. This internal flow of water takes place without the need for any pumps, complicated re-circulation loops or other micro-plumbing tools. Our Mobion technology is protected by a patent portfolio that includes over 90 U.S. patent applications covering five key technologies and manufacturing areas.

We also design, manufacture, and sell high-performance test and measurement instruments and systems serving three markets: general dimensional gauging, semiconductor, and aviation. These products consist of: electronic, computerized gauging instruments for position, displacement and vibration applications for the design, manufacturing and test markets; semiconductor products for wafer characterization; and engine balancing and vibration analysis systems for military and commercial aircraft.

Our cash requirements depend on numerous factors, including completion of our portable power source products development activities, our ability to commercialize our portable power source products, market acceptance of our portable power source products, and other factors. We expect to pursue the expansion of our operations through internal growth and strategic partnerships. Several key indicators of our liquidity are summarized in the following table:

	Years Ended December 31,			Three Months Ended March 31,	
	2005	2006	2007	2007	2008
	(dollars in thousands)				
Cash and cash equivalents	$11,230	$14,545	$7,650	9,885	4,560
Securities available for sale	18,947	10,075	4,492	8,184	3,537
Working capital	24,465	20,820	11,347	15,927	7,634
Net loss	(15,094)	(13,667)	(9,575)	(3,156)	(3,187)
Net cash used in operating activities	(12,572)	(12,706)	(11,683)	(4,610)	(2,988)
Purchase of property, plant and equipment	(1,004)	(1,574)	(414)	(50)	(102)

From inception through March 31, 2008, we have incurred an accumulated deficit of $108.3 million and we expect to incur losses for the foreseeable future as we continue micro fuel cell product development and commercialization programs. We expect that losses will fluctuate from year to year and that such fluctuations may be substantial as a result of, among other factors, sales of securities available for sale as well as the operating results of our business.

Results of Operations

Results of Operations for the Three Months Ended March 31, 2008 Compared to the Three Months Ended March 31, 2007.

Product Revenue. Product revenue in our test and measurement instrumentation business increased by $279,000, or 16.4%, to $2.0 million for the three months ended March 31, 2008 from $1.7 million for the three months ended March 31, 2007. The revenue increase was primarily a result of a $220,000 increase in commercial aviation sales, coupled with smaller increases in our semiconductor and general dimensional products.

As a result of general global economic conditions, our test and measurement instrumentation business is currently experiencing weaker than expected demand in Japan for photolithography equipment. This weakness in demand may negatively impact OEM capacitance sales over the remainder of 2008.

Information regarding government contracts included in product revenue is as follows:

		Revenue For the Three Months Ended March 31,		Revenue Contract to Date March 31,	Total Contract Orders Received to Date March 31,
Contract (1)	Expiration	2007	2008	2008	2008
		(Dollars in thousands)			

$2.3 million Air Force New PBS-4100 Systems	07/28/2010 (2)	$	$	$ 1,596	$ 1,596
$8.8 million Air Force Retrofit and Maintenance of PBS-4100 Systems	06/19/2008 (3)	$ 346	$ 338	$ 7,703	$ 7,703

(1) Contract values represent maximum potential values and may not be representative of actual results.

(2) Date represents expiration of contract, including all three potential option extensions.

(3) Expiration date was extended during May 2008 from May 19, 2008 to June 19, 2008.

Funded Research and Development Revenue. Funded research and development revenue in our new energy business during 2008 decreased by $442,000, or 71.9%, to $173,000 during the three

months ended March 31, 2008 from $615,000 during the three months ended March 31, 2007. The decrease in revenue was primarily a result of the completion of the SAFT America, Inc., or SAFT, contract during the first quarter of 2007, which accounted for $418,000 of revenue in 2007. Revenue during 2008 for the U.S. Department of Energy, or the DOE, contract, which had its funding reinstated during May 2007, increased by $170,000, while revenue recognized under the alliance agreement with Samsung Electronics Co., Ltd., or Samsung, decreased by $194,000 during 2008 over 2007 as a result of the contract s completion in 2007.

Information regarding our contracts included in funded research and development revenue is as follows:

Contract (1)	Expiration	Revenue Three Months Ended March 31, 2007	% of 2007 Total	Revenue Three Months Ended March 31, 2008	% of 2008 Total	Revenue Contract to Date March 31, 2008
		(dollars in thousands)				
$3.0 million DOE (2)	03/31/09	$ 3	0.5%	$ 173	100.0%	$ 2,019
$1.0 million Samsung (3)	07/31/07	194	31.5			875
$418,000 SAFT (4)	12/31/06	418	68.0			418
Total funded research and development revenue		$ 615	100.0%	$ 173	100.0%	$ 3,312

(1) Dates represent expiration of contract, not date of final billing.

(2) The DOE contract is a cost-share contract. DOE funding for this contract was suspended during January 2006 and reinstated during May 2007. During 2007, we received notifications from the DOE of funding releases totaling $1.0 million and also received an extension of the termination date for the contract from July 31, 2007 to September 30, 2008. During 2008, we received notifications of funding releases totaling $825,000 and also received an extension of the termination date for the contract from September 30, 2008 to March 31, 2009.

(3) The Samsung contract is a research and prototype contract. This contract included one up-front payment of $750,000 and two milestone payments of $125,000 each for the delivery of prototypes. The contract was amended on October 22, 2007 as we agreed to issue a credit in the amount of the last invoice in recognition of our continuing collaboration with Samsung. Therefore, revenue under this contract totaled $875,000.

(4) The SAFT contract is a fixed-price contract. This is a subcontract with SAFT under the U.S. Army CECOM contract. The purchase order received in connection with this subcontract was revised on November 14, 2006, eliminating one milestone. As a result, the contract value was reduced from $470,000 to $418,000 and the expiration date was extended from September 30, 2006 to December 31, 2006.

Cost of Product Revenue. Cost of product revenue in our test and measurement instrumentation business increased by $102,000, or 7.0%, to $840,000 during the three months ended March 31, 2008 from $738,000 during the three months ended March 31, 2007. As a percentage of product revenue, the quarterly cost of product revenue declined by

one percentage point as a result of a more favorable product sales mix.

Gross profit as a percentage of product revenue increased by 0.9% to 57.5% during the three months ended March 31, 2008 from 56.6% during the three months ended March 31, 2007.

Funded Research and Product Development Expenses. Funded research and product development expenses in our new energy business increased by $132,000, or 13.8%, to $356,000 during the three months ended March 31, 2008 from $224,000 during the three months ended March 31, 2007. This change was primarily a result of costs for the DOE contract increasing by $351,000, reflecting its reinstatement during 2007, while cost for the Samsung contract decreased by $194,000, as that contract was completed during July 2007.

Unfunded Research and Product Development Expense. Unfunded research and product development expenses decreased by $1.4 million, or 40.6%, to $2.0 million during the three months ended March 31, 2008 from $3.4 million during the three months ended March 31, 2007. This decrease reflects a $1.5 million decrease in development costs in our new energy business related to (a) cost savings from the decision to suspend work on our high power program during March 2007, and (b) the DOE contract that resumed during May 2007, which increased funded research and product development expense, which were partially offset by the effects of the completion of work under the Samsung alliance agreement, which increased unfunded research and product development. This decrease was also partially offset by a $129,000 increase in product development expenses for our test and measurement instrumentation business, reflecting increased staffing and external product development costs focused on the development of our photovoltaic thickness module and certain redesigns of our general gauging and aviation solutions.

Selling, General and Administrative Expenses. Selling, general and administrative expenses increased by $162,000, or 6.6%, to $2.6 million during the three months ended March 31, 2008 from $2.5 million during the three months ended March 31, 2007. This increase was primarily a result of (a) a $715,000 increase related to decreases in liquidations to unfunded research and development costs, which was primarily due to the elimination of our high power program, partially offset by increased liquidations in connection with the DOE program, (b) a $400,000 decrease in administrative salaries and benefits as a result of our March 2007 restructuring, (c) a $266,000 decrease in severance costs, which was also attributable to the 2007 restructuring, (d) a $139,000 increase in salaries, benefits, and commissions, reflecting increased sales and marketing efforts in our test and measurement instrumentation business, (e) a $42,000 increase in non-cash equity compensation primarily related to performance grants, (f) a $78,000 decrease in depreciation costs, and (g) a $10,000 increase in other expenses, net.

Operating Loss. Operating loss decreased by $822,000, or 18.3%, to $3.7 million during the three months ended March 31, 2008 compared to the three months ended March 31, 2007 as a result of the factors noted above.

Gain on Derivatives. Our gain on derivative treatment of the freestanding warrants issued in conjunction with our December 2006 capital raise decreased by $636,000, or 65.6%, to $333,000 during the three months ended March 31, 2008 compared to $969,000 during the three months ended March 31, 2007. The decrease in derivative income was attributable to valuation changes of the underlying warrants using the Black-Scholes option-pricing model.

Income Tax (Expense) Benefit. Our income tax rate for both the three months ended March 31, 2007 and 2008 was 0.3%. These tax rates were primarily a result of losses generated by operations, changes in the valuation allowance, state true-ups, and permanent deductible differences for derivative valuations.

The valuation allowance against our deferred tax assets were $24.2 million at March 31, 2008 and $22.3 million at December 31, 2007. We determined that it was more likely than not that ultimate recognition of certain deferred tax assets would not be realized.

Results of Operations for the Year Ended December 31, 2007 Compared to December 31, 2006.

Product Revenue. Product revenue in our test and measurement instrumentation business increased by $1.4 million, or 17.8%, to $9.0 million for the fiscal year ended December 31, 2007 from $7.7 million for the fiscal year ended December 31, 2006. This performance was primarily the result of a $602,000 increase in activity by the U.S. Air Force, driven by the New PBS-4100 systems contract. Also contributing were increased purchases by our Japanese distributor (particularly OEM capacitance), as well as increased volume in semiconductor product shipments. Total product revenue for general dimensional gauging products increased $298,000, or 7.2%, to $4.5 million, while total product revenue for the segment s semiconductor products increased by $364,000, or 71.2%, to $875,000.

In our test and measurement instrumentation business, during 2007 the U.S. Air Force accounted for $2.4 million, or 26.3%, of product revenue while during 2006, the U.S. Air Force accounted for $1.8 million, or 23.1%, of product revenue. Additionally, during 2007, Koyo Precision, our Japanese distributor, represented $2.5 million, or 27.7%, of product revenue while during 2006, Koyo Precision represented $1.8 million, or 22.9%, of product revenue.

Information regarding government contracts included in product revenue is as follows:

Contract (1)	Expiration	Revenue For The Year Ended December 31, 2006	Revenue For The Year Ended December 31, 2007	Revenue Contract to Date December 31, 2007	Total Contract Orders Received to Date December 31, 2007
		(dollars in thousands)			
$2.3 million Air Force New PBS-4100 Systems	07/28/2010 (2)	$	$1,596	$1,596	$1,596
$8.8 million Air Force Retrofit and Maintenance of PBS-4100 Systems	06/19/2008 (3)	$1,417	$738	$7,365	$7,365

(1) Contract values represent maximum potential values and may not be representative of actual results.

(2) Date represents expiration of contract, including all three potential option extensions.

(3) Expiration date was extended during December 2007 from December 20, 2007 to May 19, 2008, and in May 2008 it was extended from May 19, 2008 to June 19, 2008.

Funded Research and Development Revenue. Funded research and development revenue in our new energy business during 2007 increased $1.1 million, or 218.2%, to $1.6 million for the year ended December 31, 2007 from $489,000 for the year ended December 31, 2006. The increase in revenue was primarily the result of billings under the DOE contract, which had its funding reinstated during May 2007 after it had been suspended during 2006. This DOE funding resumption contributed an additional $613,000 to revenue during 2007. Revenue during 2007 also included $418,000 from the SAFT contract, for which revenue recognition had been deferred until the delivery under the contract was accepted during the first quarter of 2007. Revenue recognized under the Samsung alliance agreement increased $21,000 during 2007 over 2006.

Contract	Expiration (1)	For The Year Ended December 31, 2006		For The Year Ended December 31, 2007		Revenue Contract to Date December 31, 2007
		Revenue	Percent	Revenue	Percent	
		(dollars in thousands)				
$3.0 million DOE (2)	03/31/09	$ 62	12.7%	$ 675	43.4%	$ 1,846
$1.0 million Samsung (3)	07/31/07	427	87.3	448	28.8	875
$418,000 SAFT (4)	12/31/06			418	26.9	418

$15,000 NCMS (5)	06/30/07				15	0.9		15
Total		$	489	100.0%	$ 1,556	100.0%	$	3,154

(1) Dates represent expiration of contract, not date of final billing.

(2) The DOE contract is a cost share contract. DOE funding for this contract was suspended during January 2006 and reinstated during May 2007. During 2007, we received notifications from the DOE of funding releases totaling $1.0 million and also received an extension of the termination date for the contract from July 31, 2007 to September 30, 2008. During February 2008, we received notification from the DOE of a funding release of $500,000, and during May 2008 we received notification of a funding release of $325,000.

(3) The Samsung contract is a research and prototype contract. This contract included one up-front payment of $750,000 and two milestone payments of $125,000 each for the delivery of

prototypes. The contract was amended on October 22, 2007 as we agreed to issue a credit in the amount of the last invoice in recognition of our continuing collaboration with Samsung. Therefore, revenue under this contract totaled $875,000.

(4) The SAFT contract is a fixed price contract. This is a subcontract with SAFT under the U.S. Army CECOM contract. The purchase order received in connection with this subcontract was revised on November 14, 2006 eliminating one milestone. As a result, the contract value was reduced from $470,000 to $418,000 and the expiration date was extended from September 30, 2006 to December 31, 2006.

(5) This contract was a cost plus catalyst research contract with the National Center for Manufacturing Sciences, or NCMS.

Cost of Product Revenue. Cost of product revenue in our test and measurement instrumentation business increased by $530,000, or 18.3%, to $3.4 million during the year ended December 31, 2007 from $2.9 million during the year ended December 31, 2006. As a percentage of product revenue, the annual cost of product revenue remained relatively consistent with 2006, and this increase was consistent with the higher revenue during 2007.

Gross profit as a percentage of product revenue decreased by 0.2% to 62.0% during the year ended December 31, 2007, remaining relatively consistent with 2006.

Funded Research and Product Development Expenses. Funded research and development expenses in our new energy business increased $739,000, or 64.1%, to $1.9 million for the year ended December 31, 2007 from $1.2 million for the year ended December 31, 2006. While the active contracts were relatively consistent between periods, costs for the DOE contract increased $1.3 million, reflecting its reinstatement during May 2007, while costs for the Samsung contract increased by $22,000. These increases were partially offset by a decrease in costs for the SAFT contract of $576,000, as that contract was completed during the first quarter of 2007.

Unfunded Research and Product Development Expenses. Unfunded research and product development expenses decreased $1.9 million, or 16.1%, to $9.9 million for the year ended December 31, 2007 from $11.8 million for the year ended December 31, 2006. This decrease reflects a $2.2 million decrease in development costs related to (a) the DOE contract that resumed during May 2007, which related increase is reflected in funded research and product development expenses, and (b) cost savings from the decision to suspend work on our high power program during March 2007. This decrease was partially offset by a $317,000 increase in product development expenses in our test and measurement instrumentation business, reflecting increased staffing and external product development costs focused on the development of the division s new stand-alone measurement and data acquisition solution, stand-alone laser head, as well as other precision measurement solutions.

Selling, General and Administrative Expenses. Selling, general and administrative expenses decreased by $1.3 million, or 13.2%, to $8.7 million for the year ended December 31, 2007 from $10.1 million for the year ended December 31, 2006. This decrease was primarily the result of (a) a $387,000 decrease in non-cash stock-based compensation charges reflecting the difference between sign on and promotion grants during 2006 compared with primarily annual compensation grants during 2007 and the reversal of expense during 2007 related to certain cancelled executive stock-based performance grants where performance goals were not met, (b) a $528,000 decrease in outside services, including audit, legal, and consulting fees, (c) a $345,000 decrease in recruiting and relocation costs, (d) a $178,000 increase in severance costs attributable to employees terminated as a result of our March 2007 restructuring, (e) a $632,000 decrease in wages and benefits, which was also attributable to our March 2007 restructuring, (f) a $227,000 decrease in other operating expenses, primarily insurance and laboratory operating fees, (g) a $647,000 increase related to a decrease in allocations of expense from SG&A to funded and unfunded research and development costs for overhead and other costs allocable to research and development programs, and (h) a $40,000 savings in other

expenses, net.

Operating Loss. Operating loss for the year ended December 31, 2007 compared with the operating loss for the year ended December 31, 2006 decreased by $4.4 million to $13.3 million, a 24.7% decrease, as a result of the factors noted above.

Gain on Sale of Securities Available for Sale. The gain on sale of securities available for sale for the year ended December 31, 2007 was $2.5 million compared with a gain of $4.3 million for the year ended December 31, 2006. During 2007, we sold 1,452,770 shares of Plug Power common stock at a weighted average price of $3.53 per share, with gross proceeds to us of $5.1 million.

Gain (loss) on Derivatives. We recorded a gain on derivative accounting of $3.0 million for the year ended December 31, 2007 and a gain of $182,000 on derivative accounting for the year ended December 31, 2006. Both the 2007 and 2006 gains are the result of derivative treatment of the freestanding warrants issued to investors in conjunction with our December 2006 capital raise.

Income Tax (Expense) Benefit. Our income tax rate for the year ended December 31, 2007 was 33%, while the income tax rate for the year ended December 31, 2006 was 15%. These tax rates were primarily the result of losses generated by operations, changes in the valuation allowance, state true-ups upon tax return filings, permanent deductible differences for the derivative valuation, and disproportionate effects of reclassification of gains on Plug Power security sales included in operating loss.

The valuation allowance against our deferred tax assets at December 31, 2007 was $22.3 million and at December 31, 2006 was $18.9 million. We determined that it was more likely than not that the ultimate recognition of certain deferred tax assets would not be realized.

Results of Operations for the Year Ended December 31, 2006 Compared to December 31, 2005.

Product Revenue. Product revenue in our test and measurement instrumentation business increased by $1.7 million, or 27.5%, to $7.7 million for the year ended December 31, 2006 from $6.0 million for the year ended December 31, 2005. This performance was primarily the result of (a) an increase of $1.5 million, or 55.0%, in dimensional gauging sales, particularly direct capacitance sales through our Japanese distributor, (b) increases in semiconductor sales of $200,000, as 18 manual, one automatic, and one semi-automated metrology tool systems were sold during the year, compared to seven manual, one semi-automated, and four OEM systems during 2005, (c) commercial aviation equipment sales increases of $539,000, and (d) lower revenue from the U.S. Air Force of $611,000 as a result of fewer purchases of new equipment and reduced activity under the existing repair contract.

In our test and measurement instrumentation business, the U.S. Air Force accounted for $1.8 million, or 23.1%, of product revenue during the year ended December 31, 2006 compared with $2.4 million, or 39.7% of product revenue during the year ended December 31, 2005. During 2006, Koyo Precision, our Japanese distributor, represented $1.8 million, or 22.9%, of product revenue.

Information regarding government contracts included in product revenue is as follows:

Contract (1)	Expiration	Revenue Year Ended December 31, 2005	Revenue Year Ended December 31, 2006	Revenue Contract to Date December 31, 2006 (dollars in thousands)	Total Contract Orders Received to Date December 31, 2006
	06/19/2008 (1)	$ 1,552	$ 1,417	$6,627	$ 6,637

$8.8 million Air Force
Retrofit and Maintenance of
PBS-4100 Systems

(1) Expiration date was extended from December 20, 2007 to May 19, 2008, and in May 2008 it was extended from May 19, 2008 to June 19, 2008.

Funded Research and Development Revenue. Funded research and development revenue in our new energy business decreased $1.3 million, or 73.3%, to $489,000 for the year ended December 31, 2006 from $1.8 million for the year ended December 31, 2005. The decrease in revenue was primarily

the result of the suspension of previously approved DOE funding for 2006 and the completion of other programs that were active in 2005, including programs with the New York State Energy Research and Development Authority, the Army Research Labs, the Marine Corps, the Cabot Superior Micro Powders subcontract with the National Institute of Standards and Technology, and Harris. This decrease was partially offset by $427,000 of revenue recognized from the Samsung alliance agreement during 2006.

Information regarding government and private company development contracts included in funded research and development revenue is as follows:

Contract	Expiration (1)	For The Year Ended December 31, 2005		For The Year Ended December 31, 2006		Revenue Contract to Date December 31, 2006
		Revenue	Percent	Revenue	Percent	
		(dollars in thousands)				
$3.0 million DOE (2)	03/31/09	$ 930	50.8%	$ 62	12.7%	$ 1,171
$1.3 million NYSERDA (3)	06/30/06	329	18.0			1,135
$1.0 million Samsung (4)	07/31/07			427	87.3	427
$418,000 SAFT (5)	12/31/06					
$250,000 ARL	09/30/05	250	13.7			250
$210,000 NIST (6)	06/30/05	100	5.5			210
$150,000 Harris (7)	06/25/04	150	8.2			150
$70,000 Marine Corps	03/31/05	70	3.8			70
Total		$ 1,829	100.0%	$ 489	100.0%	$ 3,413

(1) Dates represent expiration of contract, not date of final billing.

(2) The DOE contract is a cost-share contract. DOE funding for this contract was suspended during January 2006 and reinstated during May 2007. During 2007, we received notifications from the DOE of funding releases totaling $1.0 million and also received an extension of the termination date for the contract from July 31, 2007 to September 30, 2008. During February 2008, we received notification from the DOE of a funding release of $500,000, and during May 2008 we received notification of a funding release of $325,000.

(3) The total contract value for this cost shared contract is $1.3 million consisting of four Phases: Phase I for $500,000 was from March 12, 2002 through September 30, 2003; Phase II for $200,000 was from October 28, 2003 through October 31, 2004; Phase III for $348,000 was from August 23, 2004 through August 31, 2005; and Phase IV for $202,000 which commenced on December 14, 2004 and expired on June 30, 2006. Phases I, II, and III have been completed, while Phase IV expired before it was completed.

(4) The Samsung contract is a research and prototype contract. This contract included one up-front payment of $750,000 and two milestone payments of $125,000, each for the delivery of prototypes. The contract was amended on October 22, 2007 as we agreed to issue a credit in the amount of the last invoice in recognition of our continuing collaboration with Samsung. Therefore, revenue under this contract totaled $875,000.

(5) Represents a fixed price subcontract with SAFT under the U.S. Army CECOM contract. The purchase order received in connection with this subcontract was revised on November 14, 2006 eliminating one milestone. As a result, the contract value was reduced from $470,000 to $418,000 and the expiration date was extended from September 30 to December 31, 2006.

(6) Represents a fixed price subcontract with CSMP under NIST and includes the original contract for $200,000 and a contract amendment for $10,000.

(7) Represents a fixed price contract that includes the original contract for $200,000, an amendment for $50,000, and a 2005 amendment reducing the contract by $100,000.

Cost of Product Revenue. Cost of product revenue in our test and measurement instrumentation business increased by $519,000, or 21.8%, to $2.9 million for the year ended December 31, 2006 from $2.4 million for the year ended December 31, 2005. This increase is consistent with higher product revenue during 2006 compared with 2005.

Gross profit as a percentage of product revenue increased by 1.8% to 62.2% for the year ended December 31, 2006. The improvement in gross margin during 2006 was primarily the result of a five point rise in average margins on capacitance product sales resulting from higher sales volume and improved pricing strategies.

Funded Research and Product Development Expenses. New energy funded research and development expenses decreased by $2.4 million, or 67.6%, to $1.2 million for the year ended December 31, 2006 from $3.6 million for the year ended December 31, 2005. The decreased costs were attributable to active contracts during 2005, which were no longer active during 2006. During 2006, we had active contracts with Samsung, DOE, and SAFT, while during 2005 we had active contracts with DOE, NYSERDA, SAFT, NIST, ARL, and the Marine Corps.

Unfunded Research and Product Development Expenses. Unfunded research and product development expenses increased by $5.7 million, or 92.4%, to $11.8 million for the year ended December 31, 2006 from $6.1 million for the year ended December 31, 2005. This increase reflected a $5.4 million increase in our new energy business related to increased internal costs for the development of micro fuel cell systems and costs in connection with developing prototypes and product intent prototypes, including a $512,000 non-cash charge for share-based compensation resulting from the adoption of SFAS No. 123R, which requires that the fair value of share-based compensation be expensed. This increase also included a $208,000 increase in product development expenses in our test and measurement instrumentation business for projects related to the development of a glass thickness gauge, improvements to the portable engine vibration and balancing system, and updated industrial balancing software.

Selling, General and Administrative Expense. Selling, general and administrative expenses decreased by $815,000, or 7.5%, to $10.1 million for the year ended December 31, 2006 from $10.9 million for the year ended December 31, 2005. This decrease was primarily the result of (a) an $892,000 increase in non-cash equity compensation charges resulting from the adoption of SFAS No. 123R, which required that the fair value of share-based compensation be expensed, (b) a $1.1 million decrease in salaries and engineering management costs, partially a result of an increase in costs directly charged to research and product development and the elimination of the government systems group during the second quarter of 2005, (c) a $640,000 decrease related to increases in liquidations to unfunded research and development costs, which was a result of having charged more time to internal development projects for low power and high power technology platform developments, the development of prototypes for Samsung, and the development of the Mobion 30M product, (d) a $259,000 decrease in the Los Alamos National Laboratory license fees as a result of an amendment of the license agreement, which resulted in reduced minimum annual license payments, (e) a $152,000 decrease in depreciation costs primarily related to the renewal of the lease on our main office, (f) a $104,000 increase in commission costs at MTI Instruments, (g) a $131,000 increase in incentive compensation primarily related to new executive employment agreements, (h) a $261,000 increase in marketing costs as MTI Micro raised its emphasis on marketing and business development and MTI Instruments underwent a major rebranding campaign during 2006, and (i) a $39,000 decrease in other expenses, net.

Operating Loss. Operating loss increased by $2.6 million, or 17.5%, to $17.7 million for the year ended December 31, 2006 compared with the year ended December 31, 2005 as a result of the factors noted above.

Gain on Sale of Securities Available for Sale. The gain on sale of securities available for sale for the year ended December 31, 2006 was $4.3 million compared with $10.1 million for the year ended December 31, 2005. During the year ended December 31, 2006, we sold 1,103,500 shares of Plug Power common stock at a weighted average price of $5.66 per share, with gross proceeds to us of $6.2 million.

On June 24, 2005, Fletcher International Ltd., or Fletcher, notified us of its election to exercise in full its right to purchase from us an amount of common stock of Plug Power. As a result of this election, Fletcher purchased 1,799,791 shares of Plug Power common stock from us at a price of $0.7226 per share, with proceeds to us of $1.3 million. In connection with this exercise, we recognized a loss on this embedded derivative immediately prior to exercise of $7.2 million and a gain on the sale of Plug Power common shares of $9.6 million.

*Gain (loss) on Derivative*s. We recorded a gain on derivative accounting of $182,000 for the year ended December 31, 2006 and a loss of $10.4 million on derivative accounting for the year ended December 31, 2005. The 2006 gain was the result of derivative treatment of the freestanding warrants issued in conjunction with our December 2006 capital raise, while the 2005 result related to an embedded derivative for the purchase of Plug Power common stock, which was issued as part of the 2004 private placement transaction. The warrant derivative was valued using the Black-Scholes Pricing model, as was the embedded derivative prior to its exercise on June 24, 2005. Upon exercise, the embedded derivative was valued at its intrinsic value.

Income Tax (Expense) Benefit. Our income tax expense rate for the year ended December 31, 2006 was 15%, while the income tax expense rate for the year ended December 31, 2005 was 11%. These tax rates were primarily the result of losses generated by operations, changes in the valuation allowance, and disproportionate effects of reclassification of gains on Plug Power security sales included in operating loss.

The valuation allowance against our deferred tax assets at December 31, 2006 was $18.8 million and at December 31, 2005 was $10.9 million. We determined that it was more likely than not that the ultimate recognition of certain deferred tax assets would not be realized.

Quarterly Results of Operations

The following table presents unaudited quarterly financial information for each of the 12 quarters ended March 31, 2008. We believe this information contains all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation. The quarterly operating results are not necessarily indicative of results for any future periods. Quarter-to-quarter comparisons should not be relied upon as indicators of future performance. Our operating results are subject to quarterly fluctuations as a result of a number of factors.

2005				2006				2007		
June 30	Sep. 30	Dec. 31	Mar. 31	June 30	Sep. 30	Dec. 31	Mar. 31	June 30	Sep. 30	De
(dollars in thousands, except per share data)										
$1,285	$1,428	$1,896	$1,513	$1,700	$1,693	$2,761	$1,701	$2,275	$2,196	
768	865	1,197	974	974	1,043	1,776	963	1,348	1,348	
380	792	333	45	93	173	178	615	353	357	
2,913	2,093	2,005	2,560	3,252	3,557	3,552	3,622	2,872	2,677	
(4,273)	(2,623)	(3,633)	(4,601)	(4,961)	(4,200)	(3,975)	(4,500)	(3,500)	(2,688)	
$(2,793)	$(1,909)	$(4,338)	$(3,431)	$(3,222)	$(3,678)	$(3,336)	$(3,156)	$(2,487)	$(2,481)	$
$(0.73)	$(0.50)	$(1.12)	$(0.89)	$(0.82)	$(0.93)	$(0.82)	$(0.66)	$(0.52)	$(0.52)	

Liquidity and Capital Resources

We have incurred significant losses as we continue to fund the development and commercialization of our portable power source business. We expect that losses will fluctuate from year-to-year and that such fluctuations may be substantial as a result of, among other factors, sales of securities available for sale, our operating results, the availability of equity financing, including warrants issued in connection with the December 2006 capital raise, and the ability to attract government funding resources to offset research and development costs. As of March 31, 2008, we had an accumulated deficit of $108.3 million. During the three months ended March 31, 2008, our results of operations resulted in a net loss of $3.2 million and cash used in operating activities totaling $3.0 million. This cash use in 2008 was funded primarily by cash and cash equivalents on hand as of December 31, 2007 of $7.7 million. We expect to continue to incur losses as we seek to develop and commercialize our portable power source products. We expect to continue funding our operations from current cash and cash equivalents, the sales of securities available for sale, proceeds, if any, from equity financings, including warrants issued in connection with the December 2006 capital raise, and government funding. We expect to spend approximately $11.7 million on research and development of Mobion technology and $1.8 million in research and development on our test and measurement instrumentation products during 2008.

Additional financing may not be available to us on acceptable terms, if at all. Cash used to support operations is expected to total approximately $11.8 million, and cash used for capital expenditures is expected to total approximately $1.1 million. Capital expenditures will consist of purchases of manufacturing and laboratory equipment, software, computer equipment, and furniture. Proceeds from our sale of securities available for sale are subject to fluctuations in the market value of Plug Power Inc., or Plug Power. We may also seek to supplement our resources through additional equity offerings, sales of assets (including MTI Instruments). Additional government revenue could also provide more resources.

As of March 31, 2008, we owned 1,137,166 shares of Plug Power common stock. Potential future sales of Plug Power securities will generate taxable income or loss, which is different from book income or loss, as a result of the tax bases in these assets being significantly different from their book bases. Book and tax bases as of March 31, 2008 were as follows:

Security	Shares Held	Average Book Cost Basis	Average Tax Cost Basis
Plug Power	1,137,166	$ 1.78	$ 0.96

Plug Power stock is currently traded on The Nasdaq Global Market and is therefore subject to stock market conditions. When acquired, these securities were unregistered. Our Plug Power securities are considered restricted securities as defined under the securities laws and may not be sold in the future without registration under the Securities Act of 1933, as amended, unless in compliance with an available exemption from registration. While our Plug Power shares remain restricted securities, these shares are now freely transferable in accordance with Rule 144(d) under the Securities Act of 1933, subject to the limitations associated with such rule.

Working capital was $7.6 million at March 31, 2008, a $3.7 million decrease from $11.3 million at December 31, 2007. This decrease was primarily a result of the use of cash in operations and a decline in the value of our Plug Power common stock.

At March 31, 2008, our order backlog was $1.9 million compared to $445,000 at December 31, 2007.

Our inventory turnover ratios and accounts receivable days sales outstanding for the trailing 12-month periods and their changes at March 31, 2007 and 2008 were as follows:

	2007	2008	Change
Inventory turnover	2.5	2.3	(0.2)
Average accounts receivable days sales outstanding	47	57	10

The decline in inventory turnover stemmed from a 15% higher inventory balance needed at March 31, 2008, compared to March 31, 2007, to support new product initiatives as these products gain acceptance in their targeted markets, as well as to build higher stock levels to facilitate delivery upon our increased order backlog.

The increase in average accounts receivable days sales outstanding in 2008 compared to 2007 was primarily attributable to our decision to grant our largest commercial customer 90-day payment terms during 2007.

Cash used by operating activities was $3.0 million for the three months ended March 31, 2008 compared to $4.6 million in 2007. This cash use decrease of $1.6 million reflects a net decrease in cash expenditures to fund operations of $743,000, coupled with net balance sheet changes, which decreased cash expenditures by $879,000, reflecting the timing of cash payments and receipts, particularly recognition of deferred revenue and the accrual of certain accrued liabilities.

Capital expenditures were $102,000 during the three months ended March 31, 2008, an increase of $52,000 from the comparable period in prior year. Capital expenditures in 2008 included manufacturing, laboratory and demonstration equipment. Outstanding commitments for capital expenditures as of March 31, 2008 totaled $5,000 and included

commitments for laboratory equipment. We expect to finance these expenditures with current cash and cash equivalents, the sale of securities available for sale, equity financing and other sources, as appropriate and to the extent available.

Cash flow used by operating activities was $11.7 million during 2007 compared with $12.7 million during 2006. This cash use decrease of $1.0 million reflected a net decrease of

$3.5 million in cash expenditures to fund operations coupled with net balance sheet changes, which increased cash expenditures by $2.5 million, reflecting the timing of cash receipts and payments, particularly recognition of deferred revenue and payment of certain accrued liabilities.

Capital expenditures were $414,000 during 2007, a decrease of $1.2 million from the prior year. Capital expenditures during 2007 included computer equipment, software, and manufacturing and laboratory equipment. Outstanding commitments for capital expenditures as of December 31, 2007 totaled $35,000 and included expenditures for laboratory and computer equipment. We expect to finance these expenditures and other capital expenditures during 2008 with current cash and cash equivalents, the sale of securities available for sale, equity financing, and other sources, as appropriate and to the extent available.

During 2007, we sold 1,452,770 shares of Plug Power common stock with proceeds totaling $5.1 million and gains totaling $2.5 million. These proceeds reflect our previously announced strategy to raise additional capital through the sale of Plug Power stock to fund our micro fuel cell operations. We expect the net gains to be offset by our operating losses for purposes of computing taxable income. We estimate that as of December 31, 2007, our remaining net operating loss carry forwards were approximately $54 million.

Off-Balance Sheet Arrangements

Pursuant to a financing transaction between us and certain investors on December 15, 2006, we issued warrants to purchase up to an aggregate 378,472 shares of our common stock exercisable at any time until December 19, 2011 at an exercise price per share of $18.16. The shares issuable upon exercise of these warrants would be issued under a shelf registration statement covering the resale of such shares. The terms of the warrant agreement permit a cash settlement with the holders of the warrants if we are acquired by, or merge with, a private company. Because of the possibility of such a settlement, we have classified this agreement as an asset/liability derivative in accordance with SFAS No. 133 and EITF 00-19.

Critical Accounting Policies and Significant Judgments and Estimates

The following discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. Note 2 to the consolidated audited financial statements includes a summary of our most significant accounting policies. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenue, and expenses, and related disclosure of assets and liabilities. On an ongoing basis, we evaluate our estimates and judgments, including those related to revenue recognition, inventories, securities available for sale, income taxes, share-based compensation and derivatives. We base our estimates on historical experience and on various other factors that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. Periodically, we review our critical accounting estimates with the Audit Committee of our Board of Directors.

The significant accounting policies that we believe are most critical to aid in fully understanding and evaluating our financial statements include the following:

Revenue Recognition. We recognize revenue from development contracts based upon the relationship of actual costs to estimated costs to complete the contract. These types of contracts typically provide development services to achieve a specific scientific result relating to direct methanol fuel cell technology. Some of these contracts require us to contribute to the development effort. The customers for these contracts are commercial customers and various state

and federal government agencies. While government agencies are providing revenue, we do not expect the

government to be a significant end user of the resulting products. Therefore, we do not reduce funded research and product development expense by the funding received. When it appears probable that estimated costs will exceed available funding on fixed price contracts and we are not successful in securing additional funding, we record the estimated additional expense before it is incurred.

We apply the guidance in SAB No. 104, *Revenue Recognition*, in the evaluation of commercially funded fuel cell research and prototype agreements to determine when to properly recognize income. Payments received in connection with commercial research and prototype agreements are deferred and recognized on a straight-line basis over the term of the agreement for service-related payments. For milestone and prototype delivery payments, if and when achieved, revenue is deferred and recognized on a straight-line basis over the remaining term of the agreement. When revenue qualifies for recognition it will be recorded as funded research and development revenue. The costs associated with research and prototype-producing activities are expensed as incurred. Expenses in an amount equal to revenue recognized are reclassified from unfunded research and product development to funded research and product development.

We also recognize revenue from product sales in accordance with SAB No. 104. We recognize product revenue when there is persuasive evidence of an arrangement, delivery of the product to the customer or distributor has occurred, at which time title generally is passed to the customer or distributor, and we have determined that collection of a fixed fee is probable, all of which occur upon shipment of the product. If the product requires installation to be performed by us, all revenue related to the product is deferred and recognized upon the completion of the installation.

Inventory. Inventory is valued at the lower of cost or the current estimated market value of the inventory. We periodically review inventory quantities on hand and record a provision for excess or obsolete inventory based primarily on our estimated forecast of product demand, as well as based on historical usage. Demand and usage for products and materials can fluctuate significantly. A significant decrease in demand for our products could result in a short-term increase in the cost of inventory purchases and an increase of excess inventory quantities on hand. Therefore, although we make every effort to assure the accuracy of our forecasts of future product demand, any significant unanticipated changes in demand could have a significant impact on the value of our inventory and our reported operating results.

Share-Based Payments. We grant options to purchase our common stock and award restricted stock to our employees and directors under our equity incentive plans. The benefits provided under these plans are share-based payments subject to the provisions of SFAS No. 123R, *Share-Based Payment*, and SEC Staff Accounting Bulletin 107, *Share-Based Payments*. Effective January 1, 2006, we use the fair value method to apply the provisions of FAS 123R with the modified prospective application, which provides for certain changes to the method for valuing share-based compensation. The valuation provisions of FAS 123R apply to new awards and to awards that are outstanding on the effective date and subsequently modified. Under the modified prospective application, prior periods are not revised for comparative purposes. Share-based compensation expense recognized under FAS 123R for the three months ended March 31, 2008 was $389,000 and for the year ended December 31, 2007 was $1.6 million. At March 31, 2008, total unrecognized estimated compensation expense related to non-vested awards granted prior to that date was $1.3 million, which is expected to be recognized over a weighted average period of 1.27 years.

Upon adoption of FAS 123R, we began estimating the value of share-based awards on the date of grant using a Black-Scholes option-pricing model. Prior to the adoption of FAS 123R, the value of each share-based award was estimated on the date of grant using the Black-Scholes model for the pro forma information required to be disclosed under FAS 123. The determination of the fair value of share-based payment awards on the date of grant using an option-pricing model is affected

by our stock price as well as assumptions regarding a number of complex and subjective variables. These variables include our expected stock price volatility over the term of the awards, actual and projected employee stock option exercise behaviors, risk-free interest rate, and expected dividends.

If factors change and we employ different assumptions in the application of FAS 123R during future periods, the compensation expense that we record under FAS 123R may differ significantly from what we have recorded in the current period. Therefore, we believe it is important for investors to be aware of the high degree of subjectivity involved when using option-pricing models to estimate share-based compensation under FAS 123R. Option-pricing models were developed for use in estimating the value of traded options that have no vesting or hedging restrictions, are fully transferable and do not cause dilution. Because our share-based payments have characteristics significantly different from those of freely traded options, and because changes in the subjective input assumptions can materially affect our estimates of fair values, in our opinion, existing valuation models, including the Black-Scholes Option Pricing model, may not provide reliable measures of the fair values of our share-based compensation. Consequently, there is a risk that our estimates of the fair values of our share-based compensation awards on the grant dates may bear little resemblance to the intrinsic values realized upon the exercise, expiration, cancellation**,** or forfeiture of those share-based payments in the future. Certain share-based payments, such as employee stock options, may expire worthless or otherwise result in zero intrinsic value as compared to the fair values originally estimated on the grant date and expensed in our financial statements. Alternatively, value may be realized from these instruments that are significantly in excess of the fair values originally estimated on the grant date and expensed in our financial statements. There currently is neither a market-based mechanism nor other practical application to verify the reliability and accuracy of the estimates stemming from these valuation models, nor a way to compare and adjust the estimates to actual values. Although the fair value of employee share-based awards is determined in accordance with FAS 123R and SAB 107 using a qualified option-pricing model, that value may not be indicative of the fair value observed in a willing buyer/willing seller market transaction. Estimates of share-based compensation expenses are significant to our financial statements, but these expenses are based on the aforementioned option valuation model and will never result in the payment of cash by us.

The guidance in FAS 123R and SAB 107 is still relatively new, and best practices are not well established. The application of these principles may be subject to further interpretation and refinement over time. There are significant differences among valuation models, and there is a possibility that we will adopt different valuation models in the future. This may result in a lack of consistency in future periods and materially affect the fair value estimate of share-based payments. It may also result in a lack of comparability with other companies that use different models, methods**,** and assumptions.

Theoretical valuation models and market-based methods are evolving and may result in lower or higher fair value estimates for share-based compensation. The timing, readiness, adoption, general acceptance, reliability, and testing of these methods is uncertain. Sophisticated mathematical models may require voluminous historical information, modeling expertise, financial analyses, correlation analyses, integrated software and databases, consulting fees, customization**,** and testing for adequacy of internal controls.

For purposes of estimating the fair value of stock options granted during the three months ended March 31, 2008 and the year ended December 31, 2007 using the Black-Scholes model, we used the historical volatility of our stock for the expected volatility assumption input to the Black-Scholes model, consistent with the guidance in FAS 123R and SAB 107. The risk-free interest rate is based on the risk-free zero-coupon rate for a period consistent with the expected option term at the time of grant. We do not currently pay nor do we anticipate paying dividends, but we are required to assume a dividend yield as an input to the Black-Scholes model. As such, we use a zero dividend rate. The expected option term is estimated using both historical term measures and projected termination estimates.

Income Taxes. As part of the process of preparing our consolidated financial statements, we are required to estimate our income taxes in each of the jurisdictions in which we operate. This process involves the estimation of our actual current tax exposure together with assessing temporary differences resulting from differing treatment of items for tax and accounting purposes. Included in this assessment is the determination of net operating loss carry forwards. These differences result in a net deferred tax asset. We must assess the likelihood that our deferred tax assets will be recovered from future taxable income and, to the extent that we believe that recovery is not likely, we must establish a valuation allowance.

Significant management judgment is required in determining our provision for income taxes, our deferred tax assets and liabilities, and any valuation allowance recorded against our net deferred tax assets. We have recorded a valuation allowance as a result of uncertainties in our ability to realize certain net deferred tax assets, primarily consisting of net operating losses being carried forward. In the event that actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust the recorded valuation allowance, which could materially impact our financial position and results of operations. We have recorded a full valuation allowance against our net deferred tax assets of $22.3 million as of December 31, 2007. In the event actual results differ from these estimates or we adjust these estimates in future periods, we may need to adjust our valuation allowance which could materially impact our financial position and results of operations.

During June 2006, the Financial Accounting Standards Board, or FASB, issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes, an Interpretation of FASB Statement No. 109* or FIN 48, which became effective for us beginning in fiscal 2007. FIN 48 addresses the determination of how tax benefits claimed or expected to be claimed on a tax return should be recorded in the financial statements. Under FIN 48, we must recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution. The impact of our reassessment of our tax positions in accordance with FIN 48 did not have a material impact on our results of operations, financial condition**,** or liquidity.

Derivative Instruments. We account for derivative instruments and embedded derivative instruments in accordance with SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities*, as amended. The amended standard requires an entity to recognize all derivatives as either assets or liabilities in the statement of financial position and measure these instruments at fair value. Fair value is estimated using the Black-Scholes Pricing model. We also follow EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in, a Company s Own Stock*, which requires freestanding contracts that are settled in a company s own stock, including common stock warrants, to be designated as an equity instrument, asset or a liability. Under the provisions of EITF Issue No. 00-19, a contract designated as an asset or a liability must be carried at fair value, with any changes in fair value recorded in the results of operations. A contract designated as an equity instrument can be included in equity, with no fair value adjustments are required.

The asset/liability derivatives are valued on a quarterly basis using the Black-Scholes Pricing model. Significant assumptions used in the valuation included exercise dates, closing prices for our common stock, volatility of our common stock, and a proxy risk-free interest rate. Gains (losses) on derivatives are included in Gain (loss) on derivatives in our consolidated statement of operations.

BUSINESS

We are developing and commercializing off-the-grid rechargeable power sources for portable electronics. We have developed a patented, proprietary direct methanol fuel cell technology platform called Mobion, which generates electrical power using up to 100% methanol as fuel. Our proprietary fuel cell power solution consists of two primary components integrated in an easily manufactured device: the direct methanol fuel cell power engine, which we refer to as our Mobion Chip, and methanol replacement cartridges. Our current Mobion Chip weighs less than one ounce and is small enough to fit in the palm of one s hand. The methanol used by the technology is fully biodegradable. We believe we are the only micro fuel cell developer to have demonstrated power density of over 50 mW/cm^2 with high energy efficiencies of 1.4 Wh/cc of methanol for handheld consumer electronic applications. For these reasons, we believe our technology offers a compelling alternative to current lithium-ion and similar rechargeable battery systems currently used by original equipment manufacturers and branded partners, or OEMs, in many handheld electronic devices, such as mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, PDAs, and GPS devices. We believe our platform will facilitate the development of numerous product advantages, including small size, environmental friendliness, and simplicity of design, all critical for commercialization in the consumer market, and can be implemented as three different product options: a compact external charging device, a snap-on or attached power accessory, or an embedded fuel cell power solution. We have strategic arrangements with Samsung Electronics, an OEM of mobile phones and mobile phone accessories, with Duracell, part of the Procter & Gamble Company, and with a global Japanese consumer electronics company. Our goal is to become a leading provider of portable power for handheld electronic devices and we intend to commercialize Mobion products beginning in 2009.

Our Mobion technology eliminates the need for active water recirculation pumps or the inclusion of water as a fuel dilutant. The water required for the electrochemical process is transferred internally within the Mobion Chip from the site of water generation on the air-side of the cell. This internal flow of water takes place without the need for any pumps, complicated re-circulation loops or other micro-plumbing tools. Our Mobion technology is protected by a patent portfolio that includes over 90 U.S. patent applications covering five key technologies and manufacturing areas.

We also design, manufacture, and sell high-performance test and measurement instruments and systems serving three markets: general dimensional gauging, semiconductor, and aviation. These products consist of: electronic, computerized gauging instruments for position, displacement and vibration applications for the design, manufacturing and test markets; semiconductor products for wafer characterization; and engine balancing and vibration analysis systems for military and commercial aircraft.

The Portable Power Source Industry

Industry Background

Consumers demand portable electronics that offer an enhanced experience through expanded memory, improved display technologies, constant connectivity, robust software, and a reduced form factor. In addition, technological advances in semiconductor manufacturing, LED displays, memory costs and availability, wireless technologies, and software applications have resulted in a dramatic increase in the number of portable electronic devices, their usage, and power requirements. As a result of these consumer demands and technological advances, there are a number of handheld electronic devices, such as mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, PDAs, and GPS devices, that have been introduced into the market. Many of these devices provide consumers and mobile professionals with the ability to communicate any time, anywhere and have effectively enabled the creation of an always-on environment independent of the end user s location. This trend

towards increased

functionality in portable electronic devices has led to a power gap in which the disparity between a device s power supply, typically a rechargeable lithium-ion battery, and its power need are not being met. This power gap leads to a need for the end user to plug-in their devices to the electrical grid on a regular basis, which limits their ability to use these electronic devices where and when the need arises.

The Power Source Bottleneck

Improvements in rechargeable battery technology have not kept pace with the evolution of consumer electronic device performance. Over the last ten years, device performance as measured by silicon processor speed has increased by a factor of 128 times, while the energy density of lithium-ion technology has only doubled. We believe that further gains in lithium-ion technology for portable electronics will be incremental at best, as any achievable benefits may be outweighed by the decreasing stability, availability, integrity, and relative safety of these higher energy output batteries. In addition to their performance shortfalls, lithium-ion battery technology poses an environmental risk as the various heavy metals incorporated in these batteries require special disposal to prevent contamination of waste disposal sites.

According to Frost and Sullivan, an independent research firm, the global battery market was approximately $14.3 billion in 2006 and is projected to increase to roughly $21.4 billion by 2012. The market for batteries can be divided into three segments: consumer, industrial, and military. Consumer battery sales represented approximately 81% of this market and are projected to represent an overwhelming majority of sales through at least 2012. The same study estimates that rechargeable batteries accounted for approximately $5.4 billion of this market in 2006.

OEMs are actively seeking improved power sources to replace existing rechargeable lithium-ion batteries and to power additional improvements to their mobile electronic devices. The development of new products using technologies that already exist, such as radio frequency technologies and 4G wireless capabilities, but cannot be effectively commercialized on mobile devices, will result from the availability of portable, compact, economical, rechargeable/replaceable higher energy density power sources, including micro fuel cells.

Our Solution

At the core of our solution is our proprietary Mobion Chip engine, a design architecture that embodies a reduction in the size, complexity, and cost of fuel cell construction, which results in a reliable, manufacturable, and affordable power solution that we believe provides improved energy density and portability over competing rechargeable battery technologies. Our proprietary fuel cell power solution consists of two primary components integrated in an easily manufactured device: the direct methanol fuel cell power engine, which we refer to as our Mobion Chip, and methanol replacement cartridges. Our Mobion Chip weighs less than one ounce and is small enough to fit in the palm of one s hand. For these reasons, we believe that our Mobion platform is ideally suited to provide a replacement for rechargeable lithium-ion batteries. Based upon our ability to provide a compact, efficient, clean, safe, and long-lasting power source for lower power applications, we intend to initially target power solutions for applications, such as mobile phones (including smart phones) and mobile phone accessories, digital cameras, portable media players, PDAs, and GPS devices.

For handheld consumer electronic applications, we believe we are the only micro fuel cell developer to have demonstrated power density of over 50 mW/cm^2 with energy efficiencies of 1.4 Wh/cc of fuel, which is a direct result of our Mobion platform s ability to use 100% methanol a widely available, environmentally friendly, inexpensive, and biodegradable fuel. These advantages result in higher energy density and reduced size, cost, and complexity of our power solution offering consumers portable on-demand power, independence from power outlets, and freedom from the need to constantly recharge their devices.

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Our Strategy

Our goal is to become a leading provider of portable power for handheld electronic devices. Key elements of our strategy designed to achieve this objective include the following:

Business Focus. We are focusing our efforts on the development and commercialization of our portable power source products. We believe this business provides a higher potential, higher growth opportunity than our test and measurement instrumentation business. We will continue to evaluate our test and measurement instrumentation business, which contributes positive operating results and cash flows, but may consider its eventual sale or other disposition.

Design for Mass Manufacturing. Our portable power source products will be manufactured using standard processes, such as injection molding and automated test and assembly, which are broadly employed throughout the electronics manufacturing industry. In preparing Mobion for commercialization, our current Mobion Chip is injection molded and is being designed for mass manufacturing. In addition, we have continued integrating more functionality into our Mobion Chip while reducing its part count to one molded piece. Our current Mobion Chip is 9cc in size, which is small enough to fit in the palm of a hand.

Outsource Manufacturing. We plan to outsource manufacturing to expand rapidly and diversify our production capacity. This strategy will allow us to maintain a variable cost model in which we do not incur most of our manufacturing costs until our proprietary fuel cell power solution has been shipped and billed to our customers. We intend to concentrate on our core competencies of research and development and product design. This approach should reduce our fixed capital expenditures and allow us to efficiently scale production.

Utilize our Technology to Provide Compelling Products. We plan to utilize our intellectual property portfolio and technological expertise to develop and offer portable power source products across multiple electronic device markets. We intend to employ our technological expertise to reduce the overall size and weight of our portable power source products while increasing their ease of manufacturing, power capacity, and power duration and decreasing their cost. We believe that these efforts will enable us to meet customer expectations and to achieve our goal of supplying on a timely and cost-effective basis the most environmentally friendly portable power source products to our target markets. We believe our products will offer advantages in terms of performance, functionality, size, weight, and ease of use. We plan to continue enhancing our customers industrial design alternatives and device functionality through innovative product development based on our existing capabilities and technological advances.

Capitalize on Growth Markets. We intend to capitalize on the growth of the electronic device markets, including new products that may be brought about by the convergence of computing, communications, and entertainment devices. We believe our portable power source products will address the growing need for portability, connectivity, and functionality in the evolving electronic device markets. We plan to offer these power solutions to OEM customers to enable them to offer products that have advantages in terms of size, weight, power duration, and environmental friendliness. We plan to utilize our existing technologies, as well as aggressively pursue new technologies and evolving markets that demand enhanced power solutions.

Develop Strong Customer Relationships. We plan to develop strong and long-lasting customer relationships with leading electronic device OEMs and to provide them with power solutions for their products. We believe that our portable power source products will enable our OEM customers to deliver a more positive user experience and to differentiate their products from those of their competitors. We will attempt to enhance the competitive position of our customers by providing them with innovative, distinctive, and high-quality portable power supply products on a timely and cost-effective basis. We will work continually to improve our portable power source products, to reduce costs, and to speed the delivery of our products. We will endeavor to streamline our designs

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and delivery processes through ongoing design, engineering, and production improvement efforts. We will also devote considerable effort to support our customers after the purchase of our portable power source products.

Pursue Strategic Relationships. We intend to develop and expand strategic relationships to enhance our ability to offer value-added customer solutions, penetrate new markets, and strengthen the technological leadership of our portable power source products.

Products

Portable Power Source Products

We are developing three product categories of our Mobion technology: (i) external power charger products, (ii) snap-on or attached power source products, and (iii) embedded power source products. In addition, we are working with our strategic partners and suppliers to develop disposable methanol cartridges that will be used to fuel our portable power source products. Through our alliance with Duracell, we are developing fuel cartridges that will be designed and branded for mass market commercialization. Duracell has experience in the sale and distribution of portable power through its battery products, as well as in the development, distribution, and sale of liquid products with similar safety and packaging requirements as the 100% methanol cartridges.

External Power Charger: Our design for an external power charger is a standalone device that uses a standard and widely used universal serial bus, or USB, interface as a power output connector that can be used to recharge handheld mobile devices. Our current design for the device is roughly the size of two decks of playing cards (see photo below) and employs a 100% methanol fuel cartridge, which occupies the same volume as a pack of chewing gum. Our current prototype external power charger provides up to one month of power for the typical mobile phone. It can also be designed to enable a professional photographer to take over 5,000 pictures using a high end digital camera from a single fuel tank. Our device is designed to provide 2.5 watts of power from its USB interface and also offer fast charge, ultra-long run time and self-charging modes.

Mobion external power charger prototypes

Snap-on or Attached Power Source Products: Similar to aftermarket battery attachments, our snap-on direct methanol fuel cell power solution is an attached power supply that is compatible with existing portable electronic devices and offers users extended run-time power. In this category, we envision a number of product applications, including attachments for digital cameras, portable media players, GPS devices, and other consumer and electronic products. Our initial design is a direct methanol fuel cell camera-grip (see photo below) that replaces comparable rechargeable lithium-ion battery-pack grips and is designed to provide twice as much energy as similar

rechargeable lithium-ion battery-based products. Our Mobion direct methanol fuel cell camera grip allows photographers the benefits of extended usage plus the freedom to refill using a methanol cartridge rather than by plugging into a wall outlet.

Sample Mobion attached power source camera-grip prototype

Embedded power source products: Our goal is to produce direct methanol fuel cells that can be embedded into portable electronic devices in order to increase their run time and to provide fast charge capability by hot-swapping 100% methanol cartridges. We have developed an embedded fuel cell prototype for a GPS unit that we believe will generate three times as much usage time as GPS devices powered by conventional disposable AA batteries (see photos below.)

We have also developed an embedded fuel cell concept model designed for a smart phone (see photos below) and believe that this concept model highlights the anticipated future product direction for our portable power source products in the consumer market.

Prototype of a GPS unit with an embedded Mobion power source

Concept model of a smart phone with an embedded Mobion power source

Advantages of our Portable Power Source Products

We believe that our portable power source products will offer the following advantages:

Off-the-grid power source. Our products provide users of consumer electronic devices with extended mobility by providing power without having to attach to a wall outlet to recharge their devices.

Small size and low weight. The dimensions of our products will enable our OEM customers to reduce the overall size and weight of their products.

Power density. Our products will have power density of over 50 mW/cm^2 and high energy efficiencies of 1.4 Wh/cc of methanol.

Power duration. Our products will offer longer run time than currently available portable charging systems.

Ease of manufacturing. Our products will be manufactured using traditional injection molding techniques that will easily transfer to mass-manufacturing production lines.

Safety. Our products will utilize methanol fuel, which does not require storage under pressure or at low temperatures.

Environmentally friendly. Our products will utilize fully biodegradable methanol fuel.

Codes and Standards

In 2004, we became the world s first company to obtain micro fuel cell safety compliance certifications for a fuel cell product from Underwriter s Laboratory and CSA International. In addition, we received United Nations packaging certification and our methanol cartridges were deemed compliant by the U.S. Department of Transportation for worldwide cargo shipment. Certification is required for every commercial product prior to its shipment. Based upon our previous experiences with these regulatory agencies, we do not anticipate delays associated with seeking Underwriter s Laboratory and CSA International product certifications for our commercial products, which are anticipated to begin shipping in 2009.

Also, we helped to develop a proposal adopted by the United Nations to provide methanol fuel cartridges a separate classification and we worked with other micro fuel cell companies, and the appropriate regulatory bodies, to generate the first draft of the international standards for methanol safety and use related to transport on commercial airplanes.

As a result of our industry coalition efforts, the International Civil Aviation Organization technical instructions and the International Air Transport Association Dangerous Goods Regulations now permit airline passengers and crew to carry on and use certain fuel cell power systems and fuel cell cartridges containing methanol. On April 30, 2008, the U.S. Department of Transportation issued a final ruling adopting the International Civil Aviation Organization, or ICAO, regulations permitting commercial aircraft passengers and crew to bring in their carry-on baggage methanol fuel cell cartridges and fuel cell systems designed for portable electronic devices. The effective date of this ruling is October 1, 2008, although voluntary compliance with this ruling may begin as soon as May 30, 2008.

Test and Measurement Instrumentation Products

We are a global supplier of computerized gauging instruments, metrology systems for semiconductor wafers, and jet engine balancing systems.

General Dimensional Gauging: Our gauging instruments employ fiber optic, laser, and capacitance technologies to make precision measurements in product design, production, and quality related processes. Our gauging instruments include capacitance gauging systems offering ultra-high precision measurement, a fiber-optic based vibration sensor system with extremely high frequency response, a high-speed laser sensor system utilizing the latest complementary metal-oxide semiconductor/charge-coupled device technology, and a stand-alone data acquisition system that incorporates multiple sensor technologies. These products are targeted towards the data storage, semiconductor, and automotive industries.

Semiconductor: Our family of wafer metrology systems range from manually operated units to fully automated systems, which test key wafer characteristics critical to producing high-quality chips used in the semiconductor industry. These units are used as quality control tools delivering highly precise measurements for thickness variations, bow, warp, resistivity, and flatness. These systems can be used on substrates varying widely in size and materials. Our wafer metrology systems include an automated wafer characterization system, a semi-automated, full wafer surface scanning system, and a device that provides for manual, non-contact measurements.

Jet Engine Balancing Systems: Our portable and test cell balance systems automatically collect and record aircraft engine vibration data, identify vibration or balance issues in an engine, and calculate a solution to the problem. These units are used by major aircraft engine manufacturers, the U.S. Air Force, other military and commercial airlines and gas turbine manufacturers.

Technology

A fuel cell is an electrochemical energy conversion device, which is similar to a battery, that produces electricity from a liquid or gaseous fuel, such as methanol, and an oxidant, such as oxygen. Fuel cells are different from batteries in that they consume a reactant, which must be replenished, while batteries store electrical energy chemically in a closed system. Generally, the reactants flow in and reaction products flow out of the fuel cell. While the electrodes within a battery react and change as a battery is charged or discharged, a fuel cell s electrodes are catalytic and relatively stable.

The direct methanol fuel cell relies upon the reaction of water with methanol at the catalytic anode layer to release protons and electrons, and form carbon dioxide. The electrons pass through a circuit and generate electricity that can be used to power external devices. The protons generated through this reaction pass through the proton exchange membrane to the cathode, where they combine to form water. The anode and cathode layers of a direct methanol fuel cell are usually made of platinum particles and platinum ruthenium particles embedded on either side of a proton exchange membrane.

Methanol fuel cells need water at the anode and therefore pure methanol cannot be used without the provision of water via either active transport, such as the pumping of water generated at the cathode back to the anode layer (see Chart A), or a passive recirculation mechanism that incorporates pressurized internal ducts or piping. Without either an active or a passive recirculation mechanism, a direct methanol fuel cell would require the inclusion of water as a dilutant in the methanol fuel, which limits the energy content of the diluted fuel (see Chart B).

Direct Methanol Fuel Cell with Active Water Transport (Chart A)

Methanol Fuel Cell With Water As A Fuel Dilutant (Chart B)

Our Mobion technology eliminates the need for active water recirculation pumps or the inclusion of water as a fuel dilutant. The water required for reaction at the anode is transferred internally within the Mobion Chip from the site of water generation on the air-side of the cell through a proprietary, passive design that eliminates the need for water movement by external pumps, complicated re-circulation loops or other micro-plumbing tools (see Chart C).

Our Mobion Technology with 100% Methanol and Passive Water Recirculation (Chart C)

Our Mobion solution contains a passive water recirculation sub-system that allows for the consumption of 100% methanol, results in a reduced parts count design and offers the advantage of higher energy density than competing fuel cell technologies for portable electronic devices.

Strategic Agreements

On April 28, 2008, we entered into a development agreement with a global Japanese consumer electronics company to evaluate the feasibility, development, and production of our Mobion products. This agreement will enable us and this developer to collaborate in evaluating and adopting our Mobion technology for use in various precision imaging applications, including digital cameras. On May 12, 2008, we announced that we delivered a Mobion prototype to this company for their evaluation.

On May 16, 2006, we entered into an alliance with Samsung Electronics Co., Ltd., or Samsung, to develop next-generation fuel cell prototypes for Samsung s mobile phone business. We developed, and together with Samsung we jointly tested and evaluated, our Mobion technology for several Samsung mobile phone applications. We are continuing to work with Samsung on a non-exclusive collaboration under which we continue to refine our Mobion baseline product design. We will share development updates with Samsung and loan them prototypes for evaluation. Samsung may also request changes to product specifications until December 2008 and may purchase commercial samples as soon as they become available.

On September 19, 2003, we entered into a strategic alliance agreement with Duracell, now part of the Procter & Gamble Company, under which we agreed to work with Duracell to develop and commercialize complementary methanol fuel cell products to power mass market, high-volume portable consumer devices. The agreement provides for a multi-year partnership for the design, development, and commercialization of a low power direct methanol fuel cell power system and a compatible fuel refill system. The arrangement provides for us to receive a percentage of net revenues related to Duracell s sale of fuel refills for methanol fuel cells. The agreement gives Duracell the ability to make equity investments in MTI Micro. Duracell has made an initial $1.0 million investment in MTI Micro common stock and may make additional investments of up to $4.0 million, subject to agreed upon milestones related to technical and marketing progress. Any further investment by Duracell in MTI Micro will effectively dilute our ownership interest in MTI Micro, although we do not believe that such dilution will be substantial.

On August 1, 2004, we entered into a $6.1 million cost-shared development contract with the U.S. Department of Energy, or the DOE, for the development of manufacturing techniques and the optimization of our Mobion product solutions. Through May 2008, the DOE has authorized $6.1 million of spending on a cost-shared basis.

On December 13, 2007, we entered into an agreement with Trident Systems, Inc. to pursue opportunities to leverage our consumer market platform into low-power military markets. Teaming opportunities include demonstrations of unattended ground sensor prototypes powered by Mobion and evaluations and potential submissions of proposals for military programs.

Manufacturing

We plan to outsource manufacturing of our portable power source products through third-party relationship contract manufacturers. We believe this strategy will provide us with a business model that allows us to concentrate on our core competencies of research and development and technological know-how and reduce our capital expenditures. In addition, this strategy will significantly reduce our working capital requirements for inventory because we will not incur most of our manufacturing costs until we have actually shipped our portable power source products to our customers and billed those customers for those products. To date, we have established an internal developmental pilot production line to test our design and engineering capabilities and a representative office in Shanghai to facilitate our efforts to develop relationships with manufacturers and low cost component suppliers in China. Although we have developed an internal developmental pilot production line, we intend to rely upon third parties to forecast production requirements and have established the basic design, function, and performance of our in-house engineering capabilities to foster the successful commercialization of our products.

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The commercialization of our Mobion power solution will depend upon our ability to reduce the costs of our portable power source products, as they are currently more expensive than existing rechargeable battery technologies. In addition, we continue to work on enhancing our Mobion power source, including our injection molded Mobion Chip, design to ensure its manufacturability (including engineering, verification and product testing), design for assembly, design for testability, and design for serviceability, all of which are critical to successful high-volume production.

We assemble and test our test and instrumentation measurement products at our facilities located in Albany, New York. We believe that our existing assembly and test capacity is sufficient to meet our current needs and short-term future requirements. We believe that most of the raw materials used in our test and measurement products are readily available from a variety of vendors.

Sales and Marketing

We plan to sell our portable power source products for incorporation into the products of our OEM customers or to be sold as accessories through them. We plan to generate sales to OEM customers through direct sales employees as well as outside sales representatives and distributors. We have recently established sales representatives in South Korea and Japan.

We build awareness in our target markets through a series of targeted campaigns, which include our website, e-mails, conferences, tradeshows, and other standard marketing efforts. In addition, we monitor developments in the portable power industry through subscriptions with well known firms such as Frost and Sullivan, a wide array of publications, active public relations, updates with industry analysts and the investment community, and speaking engagements.

We market our test and measurement instrumentation products through a combination of direct sales personnel and domestic and international distributors.

Customers

We expect that our customers for our portable power source products will include a number of the world s largest electronic device OEMs.

Revenue from our test and measurement instrumentation products to Koyo, our Japanese distributor, and the U.S. Air Force accounted for 20.1% and 18.3%, respectively, of product revenue for the three months ended March 31, 2008. In 2007, sales to Koyo and the U.S. Air Force accounted for 26.4% and 27.8%, respectively, of product revenue. In 2006, sales to Koyo and the U.S. Air Force accounted for 22.9% and 23.1%, respectively, of product revenue. No other single customer accounted for greater than 10% of product revenue in 2006, 2007 or 2008.

Competition

We expect that the primary competitive factor in our portable power source business will be market acceptance of our portable power source products as an alternative power source to conventional lithium-ion and other rechargeable batteries. Market acceptance of our portable power source products will depend on a wide variety of factors, including the compatibility of direct methanol fuel cell power sources with portable electronic devices and the market s assessment of the advantages offered by our products in terms of size, weight, power density and duration, safety, reliability, and environmental friendliness when measured against price disadvantages. We anticipate direct competition from large Asian-based companies and some of our potential OEM customers.

Competition in the sale of our measurement and instrumentation products is based on product quality, performance, price, and timely delivery. Our competitors for test and measurement instrumentation products include National

Instruments, KLA-Tencor, Capacitec, Sigma Tech, Corning Tropel, Chadwick-Helmuth, ACES Systems, Micro-Epsilon, and Keyence.

Product Development

Over the past two years, we have developed and built a number of engineering prototypes used to validate our technology and to generate discussions with potential customers about the inclusion of our technology in new products. During the same period, we have created three generations of external power charger prototypes, each of which has shown a dramatic size reduction over the previous generation. Our latest external power charger prototype achieved a 60% reduction in volume over our first generation prototype.

We have improved the capabilities of our Mobion Chip technology during the last two years, which we expect will continue to evolve as we integrate greater functionality into our designs. This continuous iterative integration process is intended to reduce the size, simplify the design and construction, and reduce assembly complexity of our technology. We continue to improve the product design of the Mobion Chip and believe that future product generations will deliver performance improvements in terms of energy density, size, weight, and power duration and should be able to power wireless electronic devices for longer periods of time than rechargeable lithium-ion batteries.

Intellectual Property and Proprietary Rights

We rely on a combination of patent (both national and international), trade secret, trademark, and copyright protection to protect our intellectual property. Our strategy is to apply for patent protection for all significant design requirements. Additionally, we systematically analyze the existing intellectual property landscape for direct methanol fuel cells to determine where the greatest opportunities for developing intellectual property exist. We also enter into standard confidentiality agreements with our employees, consultants, vendors, partners and potential customers and seek to control access to and distribution of our proprietary information.

As of December 31, 2007, we had filed over 90 U.S. patent applications, 43 of which have been awarded. Of the awarded patents, 34 are assigned to us and 9 are assigned to Duracell as part of our strategic alliance agreement with them. We have filed 22 Patent Cooperation Treaty Applications and have filed for National Phase Patent Protection for 12 pieces of intellectual property in multiple countries, including Japan, the European Union, and South Korea. We have developed a portfolio of patent applications in areas including fuel cell systems, components, controls, manufacturing processes, and system packaging.

Research and Development

Our research and development team is responsible for advanced research, product planning, design and development, and quality assurance. Through our supply chain, we are also working with subcontractors in developing specific components of our technologies.

The primary objective of our research and development program is to advance the development of our direct methanol fuel cell technology to enhance the commercial value of our products and technology, as well as to develop next generation fuel cell products.

We have incurred research and development costs of approximately $9.7 million, $12.9 million and $11.8 million for the years ended December 31, 2005, 2006, and 2007, respectively. We incurred research and development costs of approximately $2.4 million for the three months ended March 31, 2008. We expect to continue to invest in research and development in the future.

Employees

As of March 31, 2008, we had 106 employees. Of these employees, 45 were involved in our portable power source business (including 24 scientists and engineers, of whom 18 had advanced degrees) and 46 were involved in our test and measurement instrumentation business. Fifteen of our employees are involved in corporate functions.

Properties

We presently lease two premises, one located at 325 Washington Avenue Extension, Albany, New York and the other at 431 New Karner Road, Albany, New York. Both leases expire at the end of 2009. The 325 Washington Avenue Extension premise consists of approximately 20,700 useable square feet of space, and the 431 New Karner Road consists of approximately 23,500 useable square feet of space. Together, the premises are adequate for our current and foreseeable needs.

Legal Proceedings

We are not currently involved in any legal proceeding that we believe would have a material adverse effect on our business or financial condition.

MANAGEMENT

The following table sets forth information regarding our executive officers and directors.

Name	Age	Position or Capacity
Peng K. Lim	45	Chairman and Chief Executive Officer
Cynthia A. Scheuer	47	Vice President, Chief Financial Officer and Secretary
Robert J. Kot	57	Vice President and General Manager, MTI Instruments
James K. Prueitt	51	Vice President of Engineering and Operations, MTI Micro
Thomas J. Marusak	57	Director
E. Dennis O Connor	68	Director
William P. Phelan	52	Director
Dr. Walter L. Robb	80	Director

Peng K. Lim was elected as our Chairman on May 15, 2008 and has served as our Chief Executive Officer since December 2006. Between May 2006 and December 2006, Mr. Lim served as the President and Chief Executive Officer of MTI Micro. From July 2005 to April 2006, Mr. Lim served on numerous boards of private and public companies. From 2001 to 2005, Mr. Lim served as the President and Chief Executive Officer of Tapwave, Inc., a handheld and entertainment platform company. Mr. Lim served as Vice President, Worldwide Product Development of Palm, Inc., a handheld and wireless computer company, from April 1999 until May 2001. Mr. Lim served as Vice President of Engineering of Fujitsu Personal Systems, a pen-based and wireless computer company and a wholly-owned subsidiary of Fujitsu Limited, from June 1997 until March 1999. From July 1996 to June 1997, Mr. Lim was an Engineering Platform Director for Texas Instruments, a semiconductor company. Mr. Lim holds a B.S. and an M.S. in Electrical Engineering from University of Windsor (Ontario, Canada) and a Master of Engineering Management from Northwestern University. Mr. Lim is an alumnus of the Stanford Executive Program for Growing Companies at Stanford University.

Cynthia A. Scheuer has served as our Vice President and Chief Financial Officer since November 1997 and as our Secretary since March 2005. From June 1983 to October 1997, Ms. Scheuer served as a Senior Business Assurance Manager at PricewaterhouseCoopers LLP where she was responsible for the planning and delivery of audit and financial consulting services to a diverse group of clients in manufacturing, high technology, retail, and government. Ms. Scheuer holds a B.A. in Accounting and Economics from Ohio Wesleyan University and is a Certified Public Accountant.

Robert J. Kot has served as a Vice President of MTI Instruments since March 2007 and has served as General Manager in that division since December 2005. Mr. Kot previously served as MTI Instruments Vice President of Marketing and Sales from August 2005 to December 2005. From June 2001 to July 2005, Mr. Kot served as Vice President of Sales for Sierra Monitor Corporation, a company with independent business units serving the industrial, building automation, and telecommunications industries. During 1998, Mr. Kot founded OnCuity, a software company that marketed advanced alarm management systems for the process controls, building, and security markets. Mr. Kot served as Chief Executive Officer of OnCuity from 1998 to 2001. Prior to that time, Mr. Kot served in various capacities with Honeywell, EMC Controls, Azonix, and several venture capital backed technology companies focused upon rapid growth within the process, measurement, and building automation markets.

James K. Prueitt has served as Vice President of Engineering and Operations of MTI Micro since November 2007 and served as MTI Micro s Senior Director of Engineering between April 2006 and November 2007. Mr. Prueitt manages research and development, purchasing, quality, operations and program management. Prior to joining our company, Mr. Prueitt spent 20 years at Polaroid Corporation where he served most recently as Divisional Vice President of Hardware and Software research and development. Mr. Prueitt also holds an M.B.A. from the University of West Florida and an M.S. in Mechanical Engineering from the University of Kentucky.

Thomas J. Marusak has served as a director since December 2004. Since 1986, Mr. Marusak has served as President of Comfortex Corporation, an internationally recognized manufacturer of window blinds and specialty shades. Mr. Marusak served with New York s Capital Region Center for Economic Growth as Chairman of the Technology Council from June 2001 to July 2004 and Chairman of the Board of Directors from July 2004 until December 2005. Mr. Marusak has served as a director for the New York State Energy and Development Authority since September 1999. Mr. Marusak also represented the interests of small- and medium- sized manufacturing businesses of New York as a delegate at the White House in 1995. He was previously a member of the Advisory Board of Directors for Key Bank of New York from 1996 through 2004, and served on the Advisory Boards of Dynabil Industries Inc. and Clough Harbour Associates Technology Services Company of Albany from 2000 through 2005. Mr. Marusak received a B.S. in Engineering from Pennsylvania State University, and an M.S. in Engineering from Stanford University.

E. Dennis O Connor has served as a director since 1993, and is a retired attorney specializing in intellectual property. From 1984 until his retirement in June 2000, Mr. O Connor served as the Director of New Products and Technology for Masco Corporation, a diversified manufacturer of building, home improvement, and other specialty products for the home and family. Mr. O Connor holds a J.D. degree from George Washington University and a B.S. in Mechanical Engineering from Notre Dame University.

William P. Phelan has served as a director since December 2004. Mr. Phelan is the co-founder and Chief Executive Officer of Bright Hub, Inc., a software company founded in 2006, which focuses on the development of online commerce for software. Since May 2004, Mr. Phelan has acted as Chairman and CEO of Chatham Capital Management, Inc. In May 1999, Mr. Phelan founded OneMade, Inc., an electronic commerce marketplace technology systems and tools provider. Mr. Phelan served as Chief Executive Officer of OneMade, Inc. from May 1999 to May 2004. OneMade, Inc. was sold to America Online in May 2003. Mr. Phelan also serves on the Board of Trustees, and Chairman of the Audit Committee, of the Paradigm mutual fund family. In addition, Mr. Phelan served as a member of the Board of Directors of Florists Transworld Delivery, the largest floral services organization in the world, from January 1995 through December 1999. He has also held numerous executive positions at Fleet Equity Partners, Cowen & Company, and UHY Advisors Inc., formerly Urbach Kahn & Werlin, PC. Mr. Phelan has a B.A. in Accounting and Finance from Siena College, an M.S. in Taxation from City College of New York, and is a Certified Public Accountant.

Dr. Walter L. Robb has served as a director since 1997. Dr. Robb has served as President of Vantage Management, Inc., a management consulting company, since 1993. Prior to that time, Dr. Robb served in various executive positions with General Electric Company. Dr. Robb served as Senior Vice President for Corporate Research and Development with General Electric from 1986 until his retirement in December 1992, directing the General Electric Research and Development Center, one of the world s largest and most diversified industrial laboratories, while also serving on its Corporate Executive Council. Dr. Robb served on the Board of Directors of Plug Power Inc., from 1997 through October 2002, and currently serves on the board of directors of Celgene Corporation, a publicly held integrated biopharmaceutical company, and a number of privately held companies.

Classification of our Board of Directors

Our certificate of incorporation provides for a Board of Directors consisting of three classes serving three-year staggered terms. Messrs. Lim, and Robb serve as our Class I directors, with the term of office of the Class I directors expiring at the annual meeting of stockholders in fiscal 2010. The Class II directors consist of Messrs. Marusak and O Connor, with the term of office of the Class II directors expiring at the annual meeting of stockholders in fiscal 2011. The Class III director is Mr. Phelan, with the term of office of the Class III director expiring at the annual meeting of stockholders in 2009. Officers serve at the pleasure of the Board of Directors.

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Information Relating to Corporate Governance and the Board of Directors

Our Board of Directors has determined, after considering all the relevant facts and circumstances, that Messrs. Marusak, O Connor and Phelan, and Dr. Robb are independent directors, as independence is defined by the listing standards of Nasdaq Stock Market and the SEC, because they have no relationship with us that would interfere with their exercise of independent judgment in carrying out their responsibilities as a director.

Our bylaws authorize our Board of Directors to appoint among its members one or more committees, each consisting of one or more directors. Our Board of Directors has established two standing committees: an Audit Committee and a Governance, Nominating and Compensation Committee, each consisting entirely of independent directors.

The Audit Committee

The primary purpose of the Audit Committee is to select the independent registered public accounting firm to conduct the independent audit of the financial statements of our company; review the annual financial statements, any significant accounting issues, and the scope of the audit with the independent registered public accounting firm; and discuss with such firm any other audit-related matters that may arise during the year. The Audit Committee currently consists of Messrs. Phelan and O Connor and Dr. Robb, each of whom is an independent director of our company under The Nasdaq Stock Market Inc. as well as under rules adopted by the SEC.

The Governance, Nominating, and Compensation Committee

The Governance, Nominating, and Compensation Committee reviews and acts on matters relating to compensation levels and benefit plans for our key executives; assists our Board of Directors in fulfilling its responsibility to nominate and approve qualified new members to our Board of Directors in accordance with our certificate of incorporation and bylaws; develops and recommends to our Board of Directors a set of corporate governance principles; and oversees the selection and compensation of committees of our Board of Directors. The Compensation Committee currently consists of Messrs Marusak and O Connor and Dr. Robb, with Mr. O Connor serving as Chairman.

Executive Compensation

Compensation Philosophy

The primary objectives of our compensation policies are to attract, retain, motivate, develop, and reward our management team for executing our strategic business plan thereby enhancing stockholder value, while recognizing and rewarding individual and company performance. These compensation policies include (i) an overall management compensation program that is competitive with national and regional companies of similar size or within our industry; and (ii) long-term incentive compensation in the form of stock-based compensation that will encourage management to continue to focus on stockholder return. Our executive compensation program ties a substantial portion of each executive s overall compensation to key strategic, financial, and operational goals, including establishing and maintaining customer relationships, signing OEM agreements; meeting revenue targets and profit and expense targets; introducing new products; progressing products towards manufacturing; and improving operational efficiency.

We believe that potential equity ownership in our company is important to provide executive officers with incentives to build value for our stockholders. We believe that equity awards provide executives with a strong link to our short- and long-term performance, while creating an ownership culture to maintain the alignment of interests between our executives and our stockholders. When implemented responsibly, we also believe these equity incentives can function as a powerful executive retention tool.

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Our Governance, Compensation, and Nominating Committee consists entirely of independent directors, administers our compensation plans and policies, including the establishment of policies that govern base salary as well as short- and long-term incentives for our executive management team.

Summary of Cash and Other Compensation

The following table sets forth the total compensation received for services rendered in all capacities to our company during the fiscal years ended December 31, 2006 and 2007 by our three named executive officers, namely our Chief Executive Officer and our other two most highly compensated executive officers during fiscal 2007.

SUMMARY COMPENSATION TABLE

Name and Principal Position	Year	Salary	Bonus (3)	Stock Awards (4)	Option Awards (5)	Non-Equity Incentive Plan Compensation	All Other Compensation (7)	Total
Peng K. Lim	2007	$ 300,000	$ 21,041	$ 67,000	$ 509,750	$ 120,000	$ 10,769	$ 1,028,560
Chief Executive Officer (1)	2006	196,154	38,959		610,448	60,000	143,243	1,048,804
Cynthia A. Scheuer	2007	210,000		(7,001)	92,485	10,500	8,400	314,384
Vice President, Chief Financial Officer and Secretary	2006	207,500	20,000	10,447	116,310		8,300	362,557
James K. Prueitt	2007	184,975			54,645		46,909	286,529
Vice President of Engineering and Operations, MTI Micro (2)								

(1) Mr. Lim commenced employment as the Chief Executive Officer of MTI Micro on May 8, 2006, becoming our Chief Executive Officer on December 1, 2006.

(2) Mr. Prueitt did not become a named executive officer until 2007.

(3) Mr. Lim received a $60,000 guaranteed bonus in 2007 at the conclusion of his first year of employment. The bonus amount for 2006 reflects the proportionate amount of his bonus accrued through December 31, 2006 and the amount for 2007 reflects the remainder of the bonus accrued and then paid in 2007.

(4) Valuations based upon the dollar amount of stock awards recognized for financial statement reporting purposes pursuant to FAS 123R. During 2007, Ms. Scheuer forfeited a 625 restricted stock grant that did not vest, which resulted in compensation expense recovery of $10,493, and was awarded a 625 restricted stock grant that will vest upon successful completion of a financing objective by June 30, 2008, which resulted in compensation expense of $3,492.

(5) Valuations based upon the dollar amount of option grants recognized for financial statement reporting purposes pursuant to FAS 123R with respect to 2006 and 2007. The assumptions we use in calculating these amounts are discussed in Note 13 to our consolidated financial statements for the year ended December 31, 2007.

(6) Mr. Lim received a $60,000 bonus in 2007 based upon successful completion of performance objectives, and we have accrued, as of December 31, 2007, a $120,000 bonus related to his successful completion of performance objectives established for 2007-2008. We have accrued for Ms. Scheuer, as of December 31, 2007, a $10,500 bonus related to successful completion of certain of her 2007-2008 performance objectives.

(7) The following is a recap of the major categories included in All Other Compensation :

	2007 All Other Compensation			
	401(k) Matching	Relocation	Other	Total All Other Compensation
Peng K. Lim	$10,385	$	$384	$10,769
Cynthia A. Scheuer	8,400			8,400
James K. Prueitt	6,240	40,669		46,909

Base Salary and Cash Incentives of the Chief Executive Officer

Mr. Lim joined our company during May 2006 as President and Chief Executive Officer of MTI Micro at an annual salary of $300,000 and was promoted to our Chief Executive Officer during December 2006, receiving no base salary change. During our annual Chief Executive Officer compensation review during 2007, we engaged Radford to review the compensation package of our Chief Executive Officer based upon competitive market data. After consideration of the analysis and information provided by and the recommendations from Radford, we determined that no base salary adjustment was required for Mr. Lim during 2007.

Mr. Lim participates in an annual cash incentive compensation plan with a bonus targeted at 40% of base salary as prescribed in his current employment agreement.

During May 2007, Mr. Lim was awarded his first year bonus payouts: a cash bonus of $60,000 in connection with his first year guaranteed bonus and a cash bonus of $60,000 in connection with the completion of performance objectives for his first year of employment as established during 2006 by our Board of Directors.

In concert with our milestones, we included the following objectives in Mr. Lim s 2007-08 performance plan:

completion of low-power prototypes to Samsung;

introduction of the next generation of MTI Instruments precision instrumentation products;

addition of at least one OEM agreement for our low power platform;

at least a 15% increase in MTI Instruments annual revenue during fiscal year 2007 compared with fiscal year 2006; and

maintenance of key affiliate relationships, among other individual goals.

The Governance, Compensation, and Nominating Committee has determined that Mr. Lim met these performance objectives for fiscal 2007 and has approved a $120,000 bonus to be paid during 2008. Any future bonus compensation to Mr. Lim will be contingent solely upon the determination of the Governance, Compensation, and Nominating Committee that set objectives for Mr. Lim have been satisfied.

Base Salary and Cash Incentives of Other Named Executive Officers

We evaluated other named executive officer base salaries during 2007. We maintained current base salary levels for most of our named executive officers, but adjustments to the following executives base salaries were made to recognize either high performance or an increase in responsibility.

On October 8, 2007, James Prueitt was promoted to Vice President of Engineering and Operations at MTI Micro. Mr. Prueitt had received a base salary increase from $175,000 to $188,300 during April 2007 when he was appointed the acting leader of engineering and operations. We believed that Mr. Prueitt s total compensation package required a greater emphasis on equity

participation in congruence with compensation packages offered by other early stage technology companies. Thus, Mr. Prueitt s base salary was not changed at his promotion date and he received additional equity incentive awards.

The base salary of Cynthia Scheuer, Vice President, Chief Financial Officer and Secretary, has not increased since April 2006 and remains at $210,000.

In addition to base salary compensation, we consider short-term cash incentives to be an important tool in motivating and rewarding near-term performance against established short-term goals. We do not utilize a specific formula, but executive management is eligible for cash awards contingent upon achievement of individual, financial, or company-wide performance criteria. The criteria are established to ensure that a reasonable portion of an executive s total annual compensation is performance based.

We believe that the higher an executive s level of responsibility, the greater the portion of that executive s total earnings potential should be tied to the achievement of critical technological, operational and financial goals. Our Chief Executive Officer generally is eligible for annual cash incentive awards of up to 40% of his base salary, with other named executive officer eligibility between 5% and 10% of base salary. We believe this strategy places the desired proportionate level of risk and reward on performance by the Chief Executive Officer and other named executive officers.

During June 2007, our Board of Directors initiated individual executive cash incentive programs for Ms. Scheuer. Ms. Scheuer became eligible for a bonus of up to 10% of her annual base salary based upon achievement of certain operating expense and administrative goals to be achieved by May 2008. The Governance, Compensation, and Nominating Committee has determined that Ms. Scheuer met these goals by May 2008, and has approved a $21,000 bonus to be paid during 2008. In connection with his promotion to Vice President, Mr. Prueitt became eligible for a bonus of 5% of his annual salary based upon certain commercial prototype technical advances to be achieved by May 2008.

While performance targets are established at levels that are intended to be achievable, we believe that we have structured these incentives so that maximum bonus payouts would require a substantial level of both individual and company performance.

Long-Term Equity Incentive Compensation

Equity awards typically take the form of stock option and restricted stock grants. Authority to make equity awards to executive officers rests with our Governance, Compensation and Nominating Committee. In determining the size of awards for new or current executives, we consider the competitive market, strategic plan performance, contribution to future initiatives, benchmarking of comparative equity ownership for executives in comparable positions at similar companies, individual option history, recommendations of our Chairman and Chief Executive Officer.

We generally base our criteria for performance-based equity awards on one or more of the following long-term measurements:

- procurement and maintenance of OEM alliance/strategic agreements;
- manufacturing readiness;
- financing targets;
- gross revenue and profit goals;

operating expense improvements; and

product launches, new product introductions or improvements to existing products or product-intent prototypes.

These performance measurements support various initiatives identified by our Board of Directors as critical to our future success, and are either expressed as absolute in terms of success or failure, or will be measured in more qualitative terms.

The timing of all equity awards for our Chief Executive Officer and our Chief Financial Officer in the past have generally coincided with either employment anniversary dates or the annual meeting dates. Other executive officer equity awards have occurred in conjunction with completion or assignment of objectives, promotions, commencement of employment, or coincide with our annual meeting date. We do not time option grants to our executives in coordination with the release of material non-public information, nor do we impose any equity ownership guidelines on our executives.

The following table sets forth certain information regarding the options held and value of each such officer s unexercised options as of December 31, 2007.

OUTSTANDING EQUITY AWARDS AT FISCAL YEAR END 2007

	Option Awards					Stock Awards	
	Number of Securities Underlying Unexercised Options (#)		Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned	Option	Option	Equity Incentive Plan Awards: Number of Shares or Units of Stock That Have Not	Equity Incentive Plan Awards: Market Value of Shares or Units of Stock That Have Not
Name	Exercisable	Unexercisable	Options (#)	Exercise Price ($)	Expiration Date	Vested (#)	Vested ($)
P. Lim	20,313			35.44	5/7/2013		
	15,235	25,390(1)		35.44	5/7/2013		
			20,313	35.44	5/7/2013		
	8,750			10.72	6/17/2014		
		28,438(5)		10.72	6/17/2014		
	6,563			10.72	6/17/2014		
			12,500	10.72	6/17/2014		
C. Scheuer	3,594			14.08	12/17/2008		
	2,500			23.04	12/14/2010		
	3,125			15.28	3/31/2013		
	625			49.36	6/19/2010		
	1,875			49.36	3/29/2010		
	7,500			49.36	6/22/2014		

	5,000			19.92	8/17/2015		
	625			22.40	7/16/2012		
	1,042			22.40	3/31/2013		
	2,552	1,823(2)		32.40	5/17/2013		
	3,281			10.72	6/17/2014		
		6,094(5)		10.72	6/17/2014		
						625	3,750
J. Prueitt	2,188	2,187(3)		10.72	3/16/2014		
			6,250	9.84	10/7/2014		
		18,750(6)		9.84	10/7/2014		
			1,875	35.04	4/18/2016		
	782	2,343(4)		35.04	4/18/2016		

(1) The options vest at a rate of 6.25% per quarter, becoming fully exercisable on May 8, 2010.

(2) The options vest at a rate of 8.33% per quarter, becoming fully exercisable on February 18, 2009.

(3) The options vested 50% immediately on the grant date, with the remaining options vesting at a rate of 25% annually, becoming fully exercisable on March 17, 2009.

(4) The options vest at a rate of 25% annually, becoming fully exercisable on April 19, 2010.

(5) The options vest at a rate of 6.25% per quarter, starting January 1, 2008, becoming fully exercisable on October 1, 2011.

(6) The options vest at a rate of 25% at the first anniversary of the grants date and 6.25% on each quarterly anniversary thereafter, becoming fully exercisable on October 8, 2011 unless performance targets for accelerated vesting of this grant are achieved.

Equity Awards to Officers

Chief Executive Officer. On May 21, 2008, we awarded Mr. Lim the following:

options to purchase 57,500 shares of common stock that will vest upon attainment of a commercial shipment volume goal by December 31, 2009, and if such goal is not met, the options will be cancelled; and

options to purchase 57,500 shares of common stock (which was subsequently reduced to 37,500 due to limitations on share reserves under our active equity compensation plans) that will vest annually over a two-year period, with the first vesting event on May 21, 2009.

During June 2007, we awarded Mr. Lim the following:

6,250 shares of restricted stock that vested immediately;

options to purchase 8,750 shares of common stock that vested immediately;

options to purchase 6,563 shares of common stock that will vest upon achievement of all of our 2007 publicly disclosed milestones, as well as maintenance of existing relationships with our strategic alliance partners;

options to purchase 12,500 shares of common stock that will vest upon attainment of our financing goal during 2008, and if such goals are not achieved by June 30, 2008, the options will be cancelled; and

options to purchase 28,438 shares of common stock that will vest quarterly over a four-year period, with the first vesting event on January 1, 2008.

All stock options awarded to Mr. Lim during 2007 have a seven-year term.

Other Named Executive Officers. On May 21, 2008, we awarded Mr. Prueitt the following:

options to purchase 27,500 shares of common stock that will vest upon attainment of a commercial shipment