ADVANCED ENERGY INDUSTRIES INC

FORM S-3/A

(Securities Registration Statement (simplified form))

Filed 1/23/2002

Address	1625 SHARP POINT DR
	FT COLLINS, Colorado 80525
Telephone	970-221-4670
CIK	0000927003
Industry	Electronic Instr. & Controls
Sector	Technology
Fiscal Year	12/31

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JANUARY 23, 2002

REGISTRATION NO. 333-72748

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

AMENDMENT NO. 2

TO

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ADVANCED ENERGY INDUSTRIES, INC.

(Exact Name of Registrant as Specified in Its Charter)

DELAWARE	84-0846841
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification Number)

1625 SHARP POINT DRIVE
FORT COLLINS, COLORADO 80525
(970) 221-4670
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

MICHAEL EL-HILLOW
SENIOR VICE PRESIDENT AND CHIEF FINANCIAL OFFICER
ADVANCED ENERGY INDUSTRIES, INC.
1625 SHARP POINT DRIVE
FORT COLLINS, COLORADO 80525
(970) 221-4670
(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPY TO:

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PALO ALTO, CALIFORNIA 94303-3308
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APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC: From time to time after the effective date of this registration statement.

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

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

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

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

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER UNIT(1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(1)	AMOUNT OF REGISTRATION FEE
5.00% Convertible Subordinated Notes due 2006.....	$125,000,000	100%	$125,000,000	$31,250
Common Stock, par value $0.001 per share.....	4,191,113(2)	(3)	(3)	(3)

(1) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(i) under the Securities Act. Exclusive of accrued interest and distributions, if any.

(2) Each note may be converted into common stock at the fixed conversion rate of 33.5289 shares of common stock per $1,000 principal amount of notes (equal to a conversion price of approximately $29.83 per share). Pursuant to Rule 416 under the Securities Act, such number of shares of common stock registered hereby shall also include an indeterminate number of shares of common stock that may be issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.

(3) No additional registration fee is required pursuant to Rule 457(i).

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 THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SECURITIES AND EXCHANGE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. THE SELLING SECURITY HOLDERS 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 JANUARY 23, 2002

PROSPECTUS

[ADVANCED ENERGY INDUSTRIES, INC LOGO]

ADVANCED ENERGY INDUSTRIES, INC.

$125,000,000

5.00% Convertible Subordinated Notes due September 1, 2006 and Shares of Common Stock Issuable Upon Conversion of the Notes

This prospectus covers resales by selling securityholders of our 5.00% Convertible Subordinated Notes due September 1, 2006 and shares of our common stock issuable upon conversion of the notes. See "Plan of Distribution."

MATURITY

The notes are due on September 1, 2006, unless earlier converted, redeemed by us at our option or repurchased by us at your option.

INTEREST

We will pay interest on the notes on March 1 and September 1 of each year at the rate of 5.00% per year, commencing on March 1, 2002.

REDEMPTION

We may redeem the notes, in whole or in part, at any time before September 4, 2004 at a redemption price equal to $1,000 per $1,000 principal amount of notes to be redeemed plus accrued and unpaid interest, if any, to the date of redemption if the closing price of our common stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice. If we redeem the notes under these circumstances, we will make an additional "make whole" payment of $150.56 per $1000 notes, minus any interest paid or accrued and unpaid to the redemption date. We may redeem some or all of the notes at any time after September 4, 2004.

SUBORDINATION

The notes are subordinated to all of our existing and future senior debt.

CONVERSION

You may convert your notes at any time prior to maturity or redemption into shares of our common stock at a conversion rate of 33.5289 shares of common stock per $1,000 principal amount of notes, equal to a conversion price of approximately $29.83 per share, subject to adjustment.

REPURCHASE RIGHT

You have the right to require us to purchase all or a portion of your notes upon a change in control.

THE NASDAQ NATIONAL MARKET

Our common stock is quoted on the Nasdaq National Market under the symbol "AEIS." On January 22, 2002, the last reported sale price of our common stock on the Nasdaq National Market was $24.70 per share.

We do not intend to apply for listing of the notes on any securities exchange or for inclusion of the notes in any automated quotation system.

INVESTING IN THE NOTES OR THE COMMON STOCK INTO WHICH THE NOTES ARE CONVERTIBLE INVOLVES RISKS. PLEASE CAREFULLY CONSIDER THE "RISK FACTORS" BEGINNING ON PAGE 6 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.

The date of this prospectus is , 2002.

TABLE OF CONTENTS

SUMMARY

The following summary is qualified in its entirety by the more detailed information and historical consolidated financial statements, including the notes to those financial statements, appearing elsewhere in this prospectus or incorporated by reference herein. Investors should carefully consider the information set forth under "Risk Factors". Unless the context otherwise requires, the term "Advanced Energy" refers to Advanced Energy Industries, Inc., and the terms "company", "we", "us" and "our" refer to Advanced Energy Industries, Inc., and its subsidiaries.

ADVANCED ENERGY INDUSTRIES, INC.

We design, manufacture and support critical technology solutions for plasma-based manufacturing processes. These solutions are important components in industrial manufacturing equipment that modifies surfaces or deposits or etches thin film layers on computer chips, CDs/DVDs, flat panel displays such as computer screens, windows, eyeglasses, solar panels and other products. Our solutions control various aspects of the plasma manufacturing process, such as power delivery, gas flow, temperature measurement and temperature management. These technologies enable manufacturing equipment to produce and deposit very thin films at an even thickness on a mass scale with more accuracy and lower overall cost of ownership.

The ongoing demand for improvements in the performance, capacity and speed of computer chips, CDs/DVDs, flat panel displays and advanced product applications drives manufacturers to develop more advanced technology to produce thinner, more consistent and more precise layers of film. Thin film production processes enable manufacturers to control and alter the electrical, magnetic, optical and mechanical characteristics of materials. Our systems are used primarily in plasma-based thin film production processes. Plasma is commonly created by applying enough electrical force to a gas at reduced pressure to separate electrons from their parent atoms. Plasma-based process technology was developed to address the limitations of wet chemistry and thermal process technologies and to enable new applications. Plasma-based processes are inherently more controllable and more accurate for many applications than other thin film production processes because of the electrical characteristics of plasma.

Our core product line includes power delivery systems that refine, modify and control the raw electrical power from a utility and convert it into power that is uniform and predictable. We continue to seek to expand our product offerings, customer base and total available market through internal development and acquisitions. Some of our recent acquisitions include a manufacturer of temperature measurement instrumentation, a manufacturer of temperature management equipment and two manufacturers of mass flow controllers to measure and control the flow of liquids and gases. These acquisitions add key vacuum process components to our product offering.

Our principal customers include Applied Materials, Axcelis Technologies, Lam Research, Novellus, Singulus, ULVAC, and Unaxis. The semiconductor capital equipment industry accounted for approximately 52% of our total sales in 1998, 65% in 1999, 70% in 2000 and 61% in the first nine months of 2001.

We incorporated in Colorado in 1981 and reincorporated in Delaware in 1995. Our main offices are located at 1625 Sharp Point Drive, Fort Collins, Colorado 80525, and our telephone number is (970) 221-4670.

THE NOTES

Maturity date.....	September 1, 2006.
Subordination.....	The notes are subordinated to our present and future senior debt, as that term is defined in "Description of the Notes -- Subordination." The notes are also effectively subordinated in right of payment to all indebtedness and other liabilities of our subsidiaries. As of September 30, 2001, we had no outstanding "senior debt", and the aggregate amount of indebtedness and other liabilities of our subsidiaries was approximately $13.3 million (excluding intercompany liabilities). As part of the acquisition of Aera Japan Ltd., as more fully described below under "Recent Developments," Advanced Energy assumed approximately $35 million of senior debt. The indenture under which the notes are issued does not restrict the incurrence of "senior debt" by us or the incurrence of other indebtedness or liabilities by us or any of our subsidiaries. See "Description of Notes -- Subordination."
Interest payment dates.....	March 1 and September 1 of each year, beginning March 1, 2002.
Interest rate.....	5.00% per annum.
Conversion rights.....	Any portion of the notes that is an integral multiple of $1,000 is convertible at the option of the holder into shares of our common stock at a conversion rate of 33.5289 shares of common stock per $1,000 principal amount of notes. This is equivalent to a conversion price of approximately $29.83 per share. The conversion rate is subject to adjustment in some events. The notes are convertible at any time before the close of business on the maturity date, unless we have previously redeemed or repurchased the notes. Holders of notes called for redemption or submitted for repurchase will be entitled to convert the notes up to the close of business on the business day immediately preceding the date fixed for redemption or repurchase, as the case may be. See "Description of Notes -- Conversion Rights."
Sinking fund.....	None
Provisional redemption.....	We may redeem the notes, in whole or in part, at any time before September 4, 2004, at a redemption price equal to $1,000 per $1,000 principal amount of notes to be redeemed plus accrued and unpaid interest, if any, to the date of redemption if the closing price of our common

	stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice. Upon any provisional redemption, we will make an additional payment in cash with respect to the notes called for redemption in an amount equal to $150.56 per $1,000 principal amount of notes, less the amount of any interest actually paid or accrued and unpaid on the note prior to the redemption date. We may make this additional payment in shares of our common stock, and any payment in common stock will be valued at 95% of the average of the closing sales prices of our common stock for the five consecutive days ending on the day prior to the redemption date. We will be obligated to make this additional payment on all notes called for provisional redemption, including any notes converted after the notice date and before the provisional redemption date. See "Description of Notes -- Optional Redemption by Advanced Energy -- Provisional Redemption."
Non-Provisional redemption by Advanced Energy.....	We may redeem the notes, at our option, in whole or in part, on or after September 4, 2004, at the redemption prices set forth in this prospectus plus accrued and unpaid interest to the redemption date. See "Description of Notes -- Optional Redemption by Advanced Energy -- Non-Provisional Redemption."
Repurchase at option of holders upon a change in control.....	Upon a "change in control," as that term is described in "Description of the Notes -- Repurchase at Option of Holders Upon a Change in Control," you will have the right, subject to specific conditions and restrictions, to require us to repurchase your notes, in whole or in part, at 100% of their principal amount, together with interest accrued but unpaid to, but excluding, the repurchase date. The repurchase price is payable in cash or, at our option, and subject to specific conditions, in shares of common stock. If we pay the repurchase price in common stock, the common stock will be valued at 95% of the average closing sales prices of the common stock for the five trading days preceding and including the third trading day prior to the repurchase date. See "Description of Notes -- Repurchase at Option of Holders Upon a Change in Control."

Events of default.....	The following are events of default under the indenture for the notes: - we fail to pay principal of or any premium on any note when due, whether or not the payment is prohibited by the subordinated provisions of the indenture; - we fail to pay any interest on any note when due and that default continues for 30 days, whether or not the payment is prohibited by the subordination provisions of the indenture; - we fail to provide the notice that we are required to give in the event of a "change in control," whether or not the notice is prohibited by the subordination provisions of the indenture; - we fail to perform any agreement or other covenant in the notes or the indenture and that failure continues for 60 days after written notice to us by the trustee or by the holders of at least 25% in aggregate principal amount of outstanding notes; - we or any of our significant subsidiaries fail to pay when due, either at its maturity or upon acceleration thereof, any indebtedness under any bonds, debentures, notes or other evidences of indebtedness for money borrowed (or any guarantee thereof) in excess of $15 million if the indebtedness is not discharged, or the acceleration is not annulled, within 30 days after written notice to us by the trustee or the holders of at least 25% in aggregate principal amount of the outstanding notes; and - events of bankruptcy, insolvency or reorganization with respect to us or any of our significant subsidiaries specified in the indenture. See "Description of Notes -- Events of Default."
Symbol for our common stock.....	Our common stock is quoted on the Nasdaq National Market under the symbol "AEIS".

RECENT DEVELOPMENTS

On October 22, 2001, we announced additional cost reduction actions in response to the sustained downturn in the semiconductor industry and global economy. As part of our strategy to increase the use of outsourcing to achieve these operating goals, we are taking steps to consolidate our manufacturing structure. As a first step, we are phasing out our Austin, Texas manufacturing facility in order to begin outsourcing the assembly of certain DC power products.

We also further reduced our workforce by 8 percent, or 107 employees, bringing the worldwide headcount to 1185 employees. This represents a 26 percent decrease from 1600 employees at December 31, 2000. We expect to further reduce the number of employees at our Voorhees, New Jersey facility over the course of the next six months.

In connection with these actions, we announced that we expect to report a restructuring charge of approximately $2.5 million for the fourth quarter of 2001.

On October 25, 2001, we announced that we named Michael El-Hillow Senior Vice President of Finance and Administration and Chief Financial Officer to replace Richard Beck, who is retiring. Mr. Beck will remain on our board of directors and will retain the title of Senior Vice President as a part-time consultant over the next several months.

On January 18, 2002, Advanced Energy acquired Aera Japan Ltd. Aera is headquartered in Hachioji, Japan and is a leading supplier of mass flow controllers to the semiconductor capital equipment industry. The acquisition is valued at approximately $78 million, including cash paid at closing and the assumption of bank debt.

RISK FACTORS

You should read the "Risk Factors" section, beginning on page 6 of this prospectus, to understand the risks associated with an investment in the notes and our common stock.

RISK FACTORS

In addition to the other information contained or incorporated by reference in this prospectus, you should carefully consider the following risk factors in evaluating an investment in the notes. This prospectus includes "forward-looking statements" within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. All statements contained or incorporated by reference in this prospectus other than statements of historical fact are "forward-looking statements" for purposes of these provisions, including any statements of the plans and objectives for future operations and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "estimates," "potential," or "continue," or the negative thereof or other comparable terminology. Our actual results could differ materially from those projected or assumed in these forward-looking statements because of risks and uncertainties, including risks and uncertainties described in the risk factors below and elsewhere in this prospectus. We assume no obligation to update any forward-looking statement or the reasons why actual results might differ.

RISKS FACTORS RELATING TO OUR BUSINESS

OUR QUARTERLY OPERATING RESULTS ARE SUBJECT TO SIGNIFICANT FLUCTUATIONS, WHICH COULD NEGATIVELY IMPACT OUR STOCK PRICE AND CONSEQUENTLY THE PRICE OF THE NOTES.

Our quarterly operating results have fluctuated significantly and we expect them to continue to experience significant fluctuations. Downward fluctuations in our quarterly results have historically resulted in decreases in the price of our common stock. Quarterly operating results are affected by a variety of factors, many of which are beyond our control. These factors include:

- changes or slowdowns in economic conditions in the semiconductor and semiconductor capital equipment industries and other industries in which our customers operate;

- the timing and nature of orders placed by major customers;

- changes in customers' inventory management practices;

- customer cancellations of previously placed orders and shipment delays;

- pricing competition from our competitors;

- component shortages resulting in manufacturing delays;

- the introduction of new products by us or our competitors;

- costs incurred by responding to specific feature requests by customers; and

- declines in macroeconomic conditions.

In addition, companies in the semiconductor capital equipment industry and other electronics companies experience pressure to reduce costs. Our customers exert pressure on us to reduce prices, shorten delivery times and extend payment terms. These pressures could lead to significant changes in our operating results from quarter to quarter. These changes often occur quickly and make it difficult for us to predict our revenues or operating results. For example, our current visibility on our future operating results is quite low given the current downturn in virtually all forms of technology spending.

In the past, we have incurred charges and costs related to events such as acquisitions, restructuring and storm damages. In addition, we have from time to time incurred charges and costs related to new technologies that are being developed by others. The occurrence of similar events in the future could adversely affect our operating results in the applicable quarter.

Our operating results in one or more future quarters may fall below the expectations of analysts and investors. In those circumstances, the trading price of our common stock would likely decrease and, as a result, any trading price of the convertible notes may decrease.

THE MARKET PRICE OF OUR COMMON STOCK IS HIGHLY VOLATILE, WHICH COULD LEAD TO FLUCTUATING PRICES OF THE NOTES, LOSSES FOR INDIVIDUAL INVESTORS AND COSTLY SECURITIES CLASS ACTION LITIGATION.

The market for technology stocks, including our common stock, has experienced significant price and volume fluctuations. These fluctuations often have been unrelated or disproportionate to the operating performance of the companies. From our IPO in November 1995 through January 22, 2002, the closing prices of our common stock on the Nasdaq National Market have ranged from $3.50 to $73.25. The market for our common stock likely will continue to be subject to fluctuations. Many factors could cause the trading price of our common stock to fluctuate substantially, including the following:

- future announcements concerning our business, our technology, our customers or competitors;

- variations in our operating results;

- introduction of new products or changes in product pricing policies by us, our competitors or our customers;

- changes in earnings estimates by securities analysts or announcements of operating results that are not aligned with the expectations of analysts and investors;

- reduced spending for consumer electronic items;

- the economic and competitive conditions in the industries in which our customers operate; and

- general stock market trends.

In the past, following periods of volatility in the market price of a particular company's securities, securities class action litigation has often been brought against that company. Many technology companies have been subject to this type of litigation. We may also become involved in this type of litigation. Litigation is often expensive and diverts management's attention and resources, which could significantly harm our business, financial condition and results of operations.

THE SEMICONDUCTOR AND SEMICONDUCTOR CAPITAL EQUIPMENT INDUSTRIES ARE HIGHLY VOLATILE AND OUR OPERATING RESULTS ARE AFFECTED TO A LARGE EXTENT BY EVENTS IN THOSE INDUSTRIES.

The semiconductor industry historically has been highly volatile and has experienced periods of oversupply resulting in significantly reduced demand for semiconductor capital equipment. These reductions, in turn, have significantly reduced demand for our systems. During downturns, some of our customers have drastically reduced their orders to us and have implemented substantial cost reduction programs. The semiconductor industry is currently involved in one of the most significant downturns in its history and there is no reason to believe that this situation will remedy itself in the near term. Sales to customers in the semiconductor capital equipment industry accounted for 52% of our total sales in 1998, 65% in 1999, 70% in 2000 and 61% in the first nine months of 2001. We expect that we will continue to depend significantly on the semiconductor and semiconductor capital equipment industries for the foreseeable future.

A rapid decrease in demand for our products can occur with limited advance notice because we supply subsystems to equipment manufacturers and make a portion of our shipments on a just-in-time basis. This decrease in demand can adversely impact our business and financial results disproportionately because of its unanticipated nature.

A SIGNIFICANT PORTION OF OUR SALES IS CONCENTRATED AMONG A FEW CUSTOMERS.

Our ten largest customers accounted for 60% of our total sales in 1998, 67% in 1999 and 72% in 2000. Our largest customer, Applied Materials, accounted for 24% of our total sales in 1998, 34% in 1999 and 39% in 2000. The loss of any of these customers or a material reduction in any of their purchase orders would significantly harm our business, financial condition and results of operations.

THE MARKETS IN WHICH WE OPERATE ARE HIGHLY COMPETITIVE.

We face substantial competition, primarily from established companies, some of which have greater financial, marketing and technical resources than we do. Our primary competitors are ENI, a subsidiary of Emerson Electric Co. expected to be acquired by MKS Instruments, Inc.; Applied Science and Technology (ASTeX), a subsidiary of MKS Instruments, Inc.; Huettinger; Shindingen; Kyosan; Comdel; STEC; Kinetics; Mykrolis Corporation; and Daihen. We expect that our competitors will continue to develop new products in direct competition with ours, improve the design and performance of their systems and introduce new systems with enhanced performance characteristics.

To remain competitive, we need to continue to improve and expand our systems and system offerings. In addition, we need to maintain a high level of investment in research and development and expand our sales and marketing efforts, particularly outside of the United States. We may not be able to make the technological advances and investments necessary to remain competitive.

New products developed by competitors or more efficient production of their products could increase pressure on the pricing of our systems. In addition, electronics companies, including companies in the semiconductor capital equipment industry, have been facing pressure to reduce costs. Either of these factors may require us to make significant price reductions to avoid losing orders. Further, our current and prospective customers consistently exert pressure on us to lower prices, shorten delivery times and improve the capability of our systems. Failure to respond adequately to these pressures could result in a loss of customers or orders.

WE PLAN TO CONTINUE SEEKING ACQUISITIONS AND MAY NOT BE ABLE TO INTEGRATE OUR ACQUISITIONS.

We have experienced significant growth through acquisitions and continue to actively seek acquisition opportunities. Prior to 1997, we did not make any significant acquisitions. In the three years from 1997 through 1999, we acquired five companies. From January 2000 through January 2002, we acquired four companies and entered into a strategic partnership arrangement with one other company. Some of our acquisitions have been in markets in which we have limited experience. We might not be able to compete successfully in these markets or operate the acquired businesses efficiently.

Our business and results of operations could be adversely affected if integrating our acquisitions results in substantial costs, delays or other operational or financial problems. Further, the increased pace of our acquisitions has required us to try to integrate multiple acquisitions simultaneously. This has exponentially increased the demands placed on our management team and has decreased the time and effort that management can give to integrating each acquisition, while continuing to manage our existing business.

Future acquisitions could place additional strain on our operations and management. Our ability to manage future acquisitions will depend on our success in:

- evaluating new markets and investments;

- monitoring operations of acquired companies;

- controlling costs and unanticipated expenses of acquired companies;

- integrating acquired operations and personnel;

- retaining existing customers and strategic partners of acquired companies;

- maintaining effective quality controls of acquired companies; and expanding our internal management, technical and accounting systems.

In connection with future acquisitions we may issue equity securities, incur or assume debt, recognize substantial one-time expenses or create goodwill or other intangible assets that could result in significant amortization expense or future charges for impairment. Parties to whom we issue equity securities in acquisitions may seek to liquidate their ownership following an acquisition, which may lead to increased pressure on our stock price. Our stock price may also decline upon announcement of an acquisition if investors do not view it favorably. Also, many acquisition opportunities are for foreign companies or for divisions of larger companies, for whom cash is generally a more attractive consideration than securities. The use of cash for these acquisitions may reduce our future financial flexibility.

SHORTAGES OF COMPONENTS NECESSARY FOR OUR PRODUCT ASSEMBLY CAN DELAY OUR SHIPMENTS.

Manufacturing our products and control systems for the semiconductor capital equipment industry requires numerous electronic components. Dramatic growth in the electronics industry has significantly increased demand for these components. This demand has resulted in periodic shortages and allocations of needed components, and we expect to experience additional shortages and allocations from time to time. Shortages and allocations could cause shipping delays for our systems, adversely affecting our results of operations. Shipping delays also could damage our relationships with current and prospective customers.

OUR DEPENDENCE ON SOLE AND LIMITED SUPPLIERS COULD AFFECT OUR ABILITY TO MANUFACTURE PRODUCTS AND SYSTEMS.

We rely on sole and limited source suppliers for some of our components and subassemblies that are critical to the manufacturing of our systems. This reliance involves several risks, including the following:

- the potential inability to obtain an adequate supply of required components;

- reduced control over pricing and timing of delivery of components; and

- the potential inability of our suppliers to develop technologically advanced products to support our growth and development of new systems.

We believe that in time we could obtain and qualify alternative sources for most sole and limited source parts or could manufacture the parts ourselves. Seeking alternative sources or commencing internal manufacture of the parts could require us to redesign our systems, resulting in increased costs and likely shipping delays. We may be unable to manufacture the parts internally or redesign our systems, which could result in further costs and shipping delays. These increased costs would decrease our profit margins if we could not pass the costs to our customers. Further, shipping delays could damage our relationships with current and potential customers and have a material adverse effect on our business and results of operations.

WE ARE HIGHLY DEPENDENT ON OUR INTELLECTUAL PROPERTY BUT MAY NOT BE ABLE TO PROTECT IT ADEQUATELY.

Our success depends in part on our proprietary technology. We attempt to protect our intellectual property rights through patents and non-disclosure agreements. However, we might not be able to protect our technology, and competitors might be able to develop similar technology independently. In addition, the laws of some foreign countries might not afford our intellectual property the same protection as do the laws of the United States. For example, our

intellectual property is not protected by patents in several countries in which we do business, and we have limited patent protection in some other countries. The costs of applying for patents in foreign countries and translating the applications into foreign languages require us to select carefully the inventions for which we apply for patent protection and the countries in which we seek protection. Generally, we have concentrated our efforts to obtain international patents in the United Kingdom, Germany, France, Italy and Japan because there are other manufacturers and developers of similar products and control systems in those countries, as well as customers for those systems. Our inability or failure to obtain adequate patent protection in a particular country could have a material adverse effect on our ability to compete effectively in that country.

Our patents also might not be sufficiently broad to protect our technology, and any existing or future patents might be challenged, invalidated or circumvented. Additionally, our rights under our patents may not provide meaningful competitive advantages.

INTELLECTUAL PROPERTY LITIGATION COULD BE COSTLY.

We do not believe that any of our products are infringing any patents or proprietary rights of others, although infringements may exist or might occur in the future and are currently alleged in a litigation in which we are a defendant. Litigation may be necessary to enforce patents issued to us, to protect our trade secrets or know-how, to defend ourselves against claimed infringement of the rights of others or to determine the scope and validity of the proprietary rights of others. Our current litigation with a subsidiary of MKS Instruments, Inc. is resulting, and this and other litigations in the future may result, in substantial costs and diversion of our efforts. The current litigation with MKS Instruments involves our inductively-coupled plasma source product line, which represented less than 5% of our total revenues since January 1, 2000. Moreover, an adverse determination in any current or future litigation could cause us to lose proprietary rights, subject us to significant liabilities to third parties, require us to seek licenses or alternative technologies from others or prevent us from manufacturing or selling our products. Any of these events could have a material adverse effect on our business, financial condition and results of operations.

WE MUST CONSTANTLY DEVELOP AND SELL NEW SYSTEMS IN ORDER TO KEEP UP WITH RAPID TECHNOLOGICAL CHANGE.

The markets for our systems and the markets in which our customers compete are characterized by ongoing technological developments and changing customer requirements. We must continue to improve existing systems and to develop new systems that keep pace with technological advances and meet the needs of our customers in order to succeed. We might not be able to continue to improve our systems or develop new systems. The systems we do develop might not be cost-effective or introduced in a timely manner. Developing and introducing new systems may involve significant and uncertain costs. Our business, financial condition and results of operations, as well as our customer relationships, could be adversely affected if we fail to develop or introduce improved systems and new systems in a timely manner.

WE MUST ACHIEVE DESIGN WINS TO RETAIN OUR EXISTING CUSTOMERS AND TO OBTAIN NEW CUSTOMERS.

The constantly changing nature of semiconductor fabrication technology causes equipment manufacturers to continually design new systems. We often must work with these manufacturers early in their design cycles to modify our equipment to meet the requirements of the new systems. Manufacturers typically choose one or two vendors to provide the power conversion equipment for use with the early system shipments. Selection as one of these vendors is called a design win. It is critical that we achieve these design wins in order to retain existing customers and to obtain new customers.

We typically must customize our systems for particular customers to use in their equipment to achieve design wins. This customization increases our research and development expenses and can strain our engineering and management resources. These investments do not always result in design wins.

Once a manufacturer chooses a power conversion and control system for use in a particular product, it is likely to retain that system for the life of that product. Our sales and growth could experience material and prolonged adverse effects if we fail to achieve design wins. In addition, design wins do not always result in substantial sales or profits.

We believe that equipment manufacturers often select their suppliers based on factors such as long-term relationships. Accordingly, we may have difficulty achieving design wins from equipment manufacturers who are not currently customers. In addition, we must compete for design wins for new systems and products of our existing customers, including those with whom we have had long-term relationships.

OUR EFFORTS TO BE RESPONSIVE TO CUSTOMERS MAY LEAD TO INCURRING COSTS THAT ARE NOT READILY RECOVERABLE.

We may incur manufacturing overhead and other costs, many of which are fixed, to meet anticipated customer demand. Accordingly, operating results could be adversely affected if orders or revenues in a particular period or for a particular system do not meet expectations.

We often require long lead times for development of our systems during which times we must expend substantial funds and management effort. We may incur significant development and other expenses as we develop our systems without realizing corresponding revenue in the same period, or at all.

OUR SUCCESS DEPENDS UPON OUR ABILITY TO ATTRACT AND RETAIN KEY PERSONNEL.

Our success depends upon the continued efforts of our senior management team and our technical, marketing and sales personnel. These employees may voluntarily terminate their employment with us at any time. Our success also depends on our ability to attract and retain additional highly qualified management, technical, marketing and sales personnel. The process of hiring employees with the combination of skills and attributes required to carry out our strategy can be extremely competitive and time-consuming. We may not be able to successfully retain existing personnel or identify, hire and integrate new personnel. If we lose the services of key personnel for any reason, including retirement, or are unable to attract additional qualified personnel, our business, financial condition and results of operations could be materially and adversely affected.

WE CONDUCT MANUFACTURING AT ONLY A FEW SITES AND OUR SITES ARE NOT GENERALLY INTERCHANGEABLE.

We conduct the majority of our manufacturing at our facilities in Fort Collins, Colorado, Voorhees, New Jersey and, with the acquisition of Aera Japan Ltd., Hachioji, Japan. We also conduct manufacturing in Austin, Texas; San Jose, California; Vancouver, Washington; and Longmont, Colorado. Each facility generally manufactures different systems and, therefore, are not readily interchangeable. In July 1997, a severe rainstorm in Fort Collins caused substantial damage to our Fort Collins facilities and to some equipment and inventory. The damage caused us to stop manufacturing at that facility temporarily and prevented us from resuming full production there until mid-September 1997. Our insurance policies did not cover all of the costs that we incurred in connection with the rainstorm. Future natural or other uncontrollable occurrences at any of our primary manufacturing facilities that negatively impact our manufacturing processes may not be fully covered by insurance and could cause significant harm to our operations and results of operations.

WE MIGHT NOT BE ABLE TO COMPETE SUCCESSFULLY IN INTERNATIONAL MARKETS OR MEET THE SERVICE AND SUPPORT NEEDS OF OUR INTERNATIONAL CUSTOMERS.

Our customers increasingly require service and support on a worldwide basis as the markets in which we compete become increasingly globalized. We maintain sales and service offices in Germany, Japan, South Korea, the United Kingdom, Taiwan and China.

Sales to customers outside the United States accounted for 27% of our total sales in 1998, 27% in 1999 and 28% in 2000, and we expect international sales to continue to represent a significant portion of our future sales. International sales are subject to various risks, including:

- currency fluctuations;

- governmental controls;

- political and economic instability;

- barriers to entry;

- trade restrictions;

- changes in tariffs and taxes; and

- longer payment cycles.

In particular, the Japanese market has historically been difficult for non-Japanese companies, including us prior to our acquisition of Aera Japan Ltd., to penetrate.

Providing support services for our systems on a worldwide basis also is subject to various risks, including:

- our ability to hire qualified support personnel;

- maintenance of our standard level of support; and

- differences in local customs and practices.

Our international activities are also subject to the difficulties of managing overseas distributors and representatives and managing foreign subsidiary operations.

We cannot assure you that we will be successful in addressing any of these risks.

FLUCTUATIONS IN THE CURRENCY EXCHANGE RATE BETWEEN THE U.S. DOLLAR AND FOREIGN CURRENCIES COULD ADVERSELY AFFECT OUR OPERATING RESULTS.

A portion of our sales is subject to currency exchange risks as a result of our international operations. Approximately 24% of our revenues for the nine month period ended September 30, 2001 were subject to this risk. We have experienced fluctuations in foreign currency exchange rates, particularly against the Japanese yen, which have negatively affected our operating results from time to time. We have in the past entered into various forward foreign exchange contracts as a hedge against currency fluctuations in the yen and intend to continue to do so. We have not employed hedging techniques with respect to any other currencies. Our current or any future hedging techniques might not protect us adequately against substantial currency fluctuations.

WE MUST MAINTAIN MINIMUM LEVELS OF CUSTOMIZED INVENTORY TO SUPPORT SOME CUSTOMER DELIVERY REQUIREMENTS.

We must keep a relatively large number and variety of customized systems in our inventory to meet client delivery requirements because a portion of our business involves the just-in-time shipment of systems. Our inventory may become obsolete as we develop new systems and as our customers develop new systems. Inventory obsolescence could have a material adverse effect on our financial condition and results of operations.

WE ARE SUBJECT TO NUMEROUS GOVERNMENTAL REGULATIONS.

We are subject to federal, state, local and foreign regulations, including environmental regulations and regulations relating to the design and operation of our products and control systems. We must ensure that our systems meet safety and emissions standards, many of which vary across the states and countries in which our systems are used. For example, the European Union has published directives specifically relating to power supplies. We must comply with these directives in order to ship our systems into countries that are members of the European Union. In the past, we have invested significant resources to redesign our systems to comply with these directives. We believe we are in compliance with current applicable regulations, directives and standards and have obtained all necessary permits, approvals and authorizations to conduct our business. However, compliance with future regulations, directives and standards could require us to modify or redesign some systems, make capital expenditures or incur substantial costs. If we do not comply with current or future regulations, directives and standards:

- we could be subject to fines;

- our production could be suspended; or

- we could be prohibited from offering particular systems in specified markets.

WE MAY INVEST IN START-UP COMPANIES AND LOSE OUR ENTIRE INVESTMENT.

We have a majority interest in a start-up company and have invested in other start-up companies that develop products and technologies that we believe may provide us with future benefits. These investments may not provide us with any benefit, and we may not achieve any economic return on any of these investments. Our investments in these start-up companies are subject to all of the risks inherent in investing in companies that are not established. We could lose all or any part of our investments in these companies. Over the last twelve months the implied value of a number of start-up companies has decreased dramatically and a number of technology companies have been forced to write off all or a portion of their investments in these companies. We may be forced to take similar actions. As we make additional investments, we may be required to reflect all or a portion of such investments as a charge against earnings, or record our share of the start-up company's income or losses. As of September 30, 2001, the aggregate book value of our investments in start-up companies was $5.9 million.

WE LEASE OUR FORT COLLINS, COLORADO FACILITIES AND A CONDOMINIUM FROM ENTITIES IN WHICH TWO INDIVIDUALS WHO ARE INSIDERS AND MAJOR STOCKHOLDERS HAVE FINANCIAL INTERESTS.

We lease our executive offices and manufacturing facilities in Fort Collins, Colorado from Prospect Park East Partnership and from Sharp Point Properties, LLC. Douglas S. Schatz, our Chairman, President and Chief Executive Officer, holds a 26.7% interest in each of the leasing entities. G. Brent Backman, a member of our board of directors, holds a 6.6% interest in each of the leasing entities. Aggregate rental payments under these leases for 2000 totaled approximately $1.6 million. We also lease a condominium in Breckenridge, Colorado to provide rewards and incentives to our customers, suppliers and employees. We lease the condominium from AEI Properties, a partnership in which Mr. Schatz holds a 60% interest and Mr. Backman holds a 40% interest. Aggregate rental payments under the condominium lease for 2000 totaled approximately $36,000. As of December 31, 2001, Mr. Schatz owned approximately 34.7% of our common stock, and Mr. Backman owned approximately 3.8% of our common stock. It is possible that the interests of these individuals may not align with our interests with respect to these properties.

OUR EXECUTIVE OFFICERS AND DIRECTORS OWN A SIGNIFICANT PERCENTAGE OF OUR OUTSTANDING COMMON STOCK, WHICH COULD ENABLE THEM TO CONTROL OUR BUSINESS AND AFFAIRS.

Our executive officers and directors owned approximately 39.8% of our common stock outstanding as of December 31, 2001. Douglas S. Schatz, our Chairman, President and Chief Executive Officer, owned approximately 34.7% of our common stock outstanding as of December 31, 2001. These stockholdings give our executive officers and directors collectively, and Mr. Schatz individually, significant voting power. Depending on the number of shares that abstain or otherwise are not voted on a particular matter, our executive officers collectively may be able to elect all of the members of our board of directors and to control our business affairs for the foreseeable future.

RISK FACTORS RELATING TO THE NOTES

WE HAVE INCREASED OUR LEVERAGE AS A RESULT OF THE SALE OF THE NOTES.

In connection with the sale of the notes, we incurred $125 million of indebtedness. As a result of this indebtedness, our principal and interest payment obligations increased and our total debt increased from $81.9 million to $206.9 million. The degree to which we will be leveraged could adversely affect our ability to obtain financing for working capital, acquisitions or other purposes and could make us more vulnerable to industry downturns and competitive pressures. Our ability to meet our debt service obligations will be dependent upon our future performance, which will be subject to the financial, business and other factors affecting our operations, many of which are beyond our control.

THE NOTES RANK BELOW OUR SENIOR DEBT AND LIABILITIES OF OUR SUBSIDIARIES, AND WE MAY BE UNABLE TO REPAY OUR OBLIGATIONS UNDER THE NOTES.

The notes are unsecured and subordinated in right of payment to all of our senior debt, as described in this prospectus, including senior debt we may incur in the future. Because the notes are subordinate to senior debt, in the event of (1) our bankruptcy, liquidation or reorganization, (2) acceleration of the notes due to an event of default under the indenture or (3) some other events, we will make payments on the notes only after we have satisfied all of our senior debt obligations. We may not have sufficient assets remaining to pay amounts on any or all of the notes.

In addition, our right to receive assets of any subsidiaries upon their liquidation or reorganization, and the rights of the holders of the notes to share in those assets, would be subject to the satisfaction of claims of the subsidiaries' creditors. Consequently, the notes are subordinate to all liabilities, including trade payables, of any of our subsidiaries and any subsidiaries that we may in the future acquire or establish.

The notes will be our obligations exclusively. The indenture for the notes does not limit our ability to incur senior debt, or our ability or that of any of our presently existing or future subsidiaries, to incur other indebtedness and other liabilities. We may have difficulty paying our obligations under the notes if we, or any of our subsidiaries, incur additional indebtedness or liabilities. As of September 30, 2001, we had no senior debt outstanding and the aggregate amount of indebtedness and other liabilities of our subsidiaries was approximately $13.3 million (excluding intercompany liabilities). As part of the acquisition of Aera Japan Ltd., Advanced Energy assumed approximately $35 million of senior debt. We and our subsidiaries may incur additional indebtedness, including senior debt, which could adversely affect our ability to pay our obligations under the notes.

WE MAY BE UNABLE TO REPAY OR REPURCHASE THE NOTES.

At maturity, the entire outstanding principal amount of the notes will become due and payable by us. In addition, if a "change in control," as defined in the indenture, occurs, each holder of the notes may require that we repurchase all or a portion of that holder's notes. We cannot assure you that we will have sufficient funds or will be able to arrange for additional financing to pay the principal amount or repurchase price due. Under the terms of the indenture for the notes, we may elect, if we meet particular conditions, to pay the repurchase price with shares of common stock. Any future borrowing arrangements or agreements relating to senior debt to which we become a party may contain restrictions on, or prohibitions against, our repayment or repurchase of the notes. In the event that the maturity date or "change in control" occurs at a time when we are prohibited from repaying or repurchasing the notes, we could attempt to obtain the consent of the lenders under those arrangements to purchase the notes or we could attempt to refinance the borrowings that contain the restrictions. If we do not obtain the necessary consents or refinance these borrowings, we will be unable to repay or repurchase the notes. In that case, our failure to repay the notes at maturity or to repurchase any tendered notes would constitute an event of default under the indenture. Any default, in turn, may cause a default under the terms of our senior debt. As a result, in these circumstances, the subordination provisions of the indenture would, absent a waiver, prohibit the repayment or repurchase of the notes until we pay the senior debt in full.

THERE MAY BE NO PUBLIC MARKET FOR THE NOTES.

Although the initial purchaser of the notes advised us at the time of the issuance of the notes that it then intended to make a market in the notes, it is not obligated to do so and may discontinue market making activities at any time without notice. The notes will not trade publicly until they are sold pursuant to this registration statement or another exemption from registration is available, and the liquidity of any public market will depend on the volume and timing of such sales. Consequently, we cannot ensure that any public market for the notes will develop or, if one does develop, that it will be liquid or maintained. If an active public market for the notes fails to develop or be sustained, the trading price of the notes, as well as your ability to sell your notes, could be materially and adversely affected. We do not intend to apply for listing of the notes on any securities exchange or any automated quotation system.

IF LESS THAN ALL THE NOTES ARE TO BE REDEEMED BY ADVANCED ENERGY PURSUANT TO THE PROVISIONAL REDEMPTION OR NON-PROVISIONAL REDEMPTION PROVISIONS OF THE INDENTURE, YOUR NOTES MAY OR MAY NOT BE SELECTED TO BE REDEEMED.

The indenture relating to the notes provides that if less than all the notes are to be redeemed pursuant to the provisional redemption or non-provisional redemption provisions of the indenture, the particular notes to be redeemed will be selected by the trustee by lot or by any other method the trustee may deem fair and appropriate. As a consequence, in some cases it is possible that some or all of your notes may not be redeemed while notes belonging to other holders are redeemed. For any notes that are not redeemed, you would not be eligible to receive the "make whole" payment required in the case of provisional redemptions or the premium over the principal amount received in connection with non-provisional redemptions. In addition, you would continue to hold notes for which, as discussed in the risk factor above, there may be no public market.

ANTI-TAKEOVER PROVISIONS LIMIT THE ABILITY OF A PERSON OR ENTITY TO ACQUIRE CONTROL OF US AND MAY ADVERSELY AFFECT THE VALUE OF OUR COMMON STOCK AND CONSEQUENTLY THE NOTES.

Our certificate of incorporation and bylaws include provisions which:

- allow the board of directors to issue preferred stock with rights senior to those of the common stock without any vote or other action by the holders of the common stock;

- limit the right of our stockholders to call a special meeting of stockholders; and

- impose procedural and other requirements that could make it difficult for stockholders to effect particular corporate actions.

In addition, we are subject to the anti-takeover provisions of the Delaware General Corporation Law. Any of these provisions could delay or prevent a person or entity from acquiring control of us. The effect of these provisions may be to limit the price that investors are willing to pay in the future for our securities. These provisions might also discourage potential acquisition proposals or could diminish the opportunities for our stockholders to participate in a tender offer, even if the acquisition proposal or tender offer is at a price above the then current market price for our common stock.

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

In addition to the other information contained or incorporated by reference in this prospectus, investors should carefully consider the risk factors disclosed in this prospectus, including those beginning on page 6, in evaluating an investment in the notes or the common stock issuable upon conversion of the notes. This prospectus includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. All statements other than statements of historical fact are "forward-looking statements" for purposes of these provisions, including any projections of earnings, revenues or other financial items, any statements of the plans and objectives of management for future operations, any statements concerning proposed new products or services, any statements regarding future economic conditions or performance, and any statement of assumptions underlying any of the foregoing. In some cases, forward-looking statements can be identified by the use of terminology such as "may," "will," "expects," "plans," "anticipates," "estimates," "potential," or "continue" or the negative thereof or other comparable terminology. These forward-looking statements include statements as to, among other things:

- customer inventory levels, needs and order levels;

- revenues;

- gross profit;

- research and development expenses;

- marketing, general and administrative expenditures;

- capital resources sufficiency;

- acquisitions;

- capital expenditures; and

- restructuring activities and expenses.

There can be no assurance that these expectations or any of the forward-looking statements will prove to be correct, and actual results could differ materially from these projected or assumed in the forward-looking statements. Our future financial condition and results of

operations, as well as any forward-looking statements, are subject to inherent risks and uncertainties, including but not limited to the risk factors set forth below and those described elsewhere in this prospectus. All forward-looking statements and reasons why results may differ included in this prospectus are made as of the date hereof, and we assume no obligation to update any forward-looking statement or reason why actual results might differ.

USE OF PROCEEDS

We will not receive any proceeds from the sale of the notes or the shares of common stock offered by this prospectus. See "Selling Security Holders".

RATIO OF EARNINGS TO FIXED CHARGES

The following table sets forth our ratio of earnings to fixed charges for the periods indicated.

	FOR THE NINE MONTHS ENDED SEPTEMBER 30,		FOR THE YEARS ENDED DECEMBER 31,				
	2001	2000	2000	1999	1998	1997	1996
Ratio of earnings to fixed charges(1).....	N/A	10.62x	11.86x	18.77x	N/A	28.82x	19.82x

(1) The ratio of earnings to fixed charges is calculated by dividing our "earnings," as described below, by our "fixed charges," as described below. For the purposes of this ratio, we calculate "earnings" as our pretax income from continuing operations before fixed charges; less minority interests in income of subsidiaries (unless the subsidiary has fixed charges), minority interests in losses of subsidiaries and income or loss from equity investees. We calculate "fixed charges" by adding (1) our interest expense,
(2) the amount of amortization of deferred debt issuance cost and (3) the portion of rental expense under our operating leases that we have deemed to be representative of the interest factor for these leases. Our earnings, as defined, were insufficient to cover our fixed charges by $14,547,000 and $25,505,000 for the year ended December 31, 1998 and the nine months ended September 30, 2001, respectively.

DESCRIPTION OF NOTES

The notes were issued under an indenture between us and State Street Bank and Trust Company of California, N.A., as trustee. Because this section is a summary, it does not describe every aspect of the notes and the indenture. The following summaries of provisions of the indenture do not purport to be complete and are subject to, and are qualified in their entirety by reference to, the detailed provision of the notes and the indenture, including the definitions therein of terms.

GENERAL

The notes are general, unsecured obligations of Advanced Energy Industries, Inc. The notes are subordinated, which means that they rank behind some of our indebtedness as described below. The notes are limited to $125,000,000 aggregate principal amount. We are required to repay the principal amount of the notes in full on September 1, 2006.

The notes bear interest at 5.00% per annum from the date of original issuance, August 27, 2001. We will pay interest on the notes on March 1 and September 1 of each year, commencing on March 1, 2002. Interest payable per $1,000 principal amount of notes for the period from August 27, 2001 to March 1, 2002 will be $25.5556.

You may convert the notes into shares of our common stock initially at the conversion rate of 33.5289 shares per each $1,000 principal amount of notes at any time before the close of business on the maturity date, unless the notes have been previously redeemed or repurchased. Holders of notes called for redemption or submitted for repurchase will be entitled to convert the notes up to and including the business day immediately preceding the date fixed for redemption or repurchase, as the case may be. The conversion rate may be adjusted as described below.

We may redeem the notes at our option at any time on or after September 4, 2004, in whole or in part, at the redemption prices set forth below under "-- Optional Redemption by Advanced Energy," plus accrued and unpaid interest to the redemption date. If there is a change in control of us, you will have the right to require us to repurchase your notes as described below under "-- Repurchase at Option of Holders Upon a Change in Control." We may redeem some or all of the notes at any time before September 4, 2004 at a redemption price of $1,000 per $1,000 principal amount of notes, plus accrued and unpaid interest, if any, to the redemption date, if the closing price of our common stock has exceeded 150% of the conversion price then in effect for at least 20 trading days within a period of 30 consecutive trading days ending on the trading day before the date of mailing of the provisional redemption notice. We will make an additional payment in cash or common stock with respect to the notes called for provisional redemption in an amount equal to $150.56 per $1,000 principal amount of notes, less the amount of any interest paid on the notes.

FORM, DENOMINATION, TRANSFER, EXCHANGE AND BOOK-ENTRY PROCEDURES

The notes have been issued:

- only in fully registered form;

- without interest coupons; and

- in denominations of $1,000 and greater multiples.

The notes are evidenced by one or more global notes, which are deposited with the trustee as custodian for The Depository Trust Company, or DTC, and registered in the name of Cede & Co., as nominee of DTC. The global note and any notes issued in exchange for the global note are subject to restrictions on transfer and bear the legend regarding those restrictions set forth under "Notice to Investors." Except as set forth below, record ownership of the global note may

be transferred, in whole or in part, only to another nominee of DTC or to a successor of DTC or its nominee.

The global note may not be registered in the name of any person, nor may it be exchanged for notes that are registered in the name of any person, other than DTC or its nominee unless either of the following occurs:

- DTC notifies us that it is unwilling, unable or no longer qualified to continue acting as the depositary for the global note; or

- an event of default with respect to the notes represented by the global note has occurred and is continuing.

In those circumstances, DTC will determine in whose names any securities issued in exchange for the global note will be registered.

DTC or its nominee is considered the sole owner and holder of the global note for all purposes, and as a result:

- you cannot have notes registered in your name if they are represented by the global note;

- you cannot receive physical certificated notes in exchange for your beneficial interest in the global note;

- you will not be considered to be the owner or holder of the global note or any note it represents for any purpose; and

- all payments on the global note will be made to DTC or its nominee.

The laws of some jurisdictions require that particular kinds of purchasers, such as insurance companies, can only own securities in definitive certificated form. These laws may limit your ability to transfer your beneficial interests in the global note to these types of purchasers.

Only institutions, such as a securities broker or dealer, that have accounts with DTC or its nominee (called participants) and persons that may hold beneficial interests through participants can own a beneficial interest in the global note. The only place where the ownership of beneficial interests in the global note will appear and the only way the transfer of those interests can be made will be on the records kept by DTC (for their participants' interests) and the records kept by those participants (for interests of persons held by participants on their behalf).

Secondary trading in bonds and notes of corporate issuers is generally settled in clearinghouse (that is, next-day) funds. In contrast, beneficial interests in a global note usually trade in DTC's same-day funds settlement system, and settle in immediately available funds. We make no representations as to the effect that settlement in immediately available funds will have on trading activity in those beneficial interests.

We will make cash payments of interest on and principal of and the redemption or repurchase price of the global note to Cede, the nominee for DTC, as the registered owner of the global note. We will make these payments by wire transfer of immediately available funds on each payment date.

We have been informed that DTC's practice is to credit participants' accounts on the payment date with payments in amounts proportionate to their respective beneficial interests in the notes represented by the global note as shown on DTC's records, unless DTC has reason to believe that it will not receive payment on that payment date. Payments by participants to owners of beneficial interests in notes represented by the global note held through participants will be the responsibility of those participants, as is now the case with securities held for the accounts of customers registered in street name.

We will send any redemption notices to Cede. We understand that if less than all of the notes are being redeemed, DTC's practice is to determine by lot the amount of the holdings of each participant to be redeemed.

We also understand that neither DTC nor Cede will consent or vote with respect to the notes. We have been advised that under its usual procedures, DTC will mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns Cede's consenting or voting rights to those participants to whose accounts the notes are credited on the record date identified in a listing attached to the omnibus proxy.

Because DTC can only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having a beneficial interest in the principal amount represented by the global note to pledge the interest to persons or entities that do not participate in the DTC book-entry system, or otherwise take actions in respect of that interest, may be affected by the lack of a physical certificate evidencing its interest.

DTC has advised us that it will take any action permitted to be taken by a holder of notes (including the presentation of notes for exchange) only at the direction of one or more participants to whose account with DTC interests in the global note are credited and only in respect of the portion of the principal amount of the notes represented by the global note as to which the participant or participants has or have given direction.

DTC has also advised us as follows:

- DTC is a limited purpose trust company organized under the laws of the State of New York, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code, as amended, and a clearing agency registered pursuant to the provisions of Section 17A of the Exchange Act;

- DTC was created to hold securities for its participants and facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants;

- Participants include securities brokers and dealers, banks, trust companies and clearing corporations and may include some other organizations;

- Some participants, or their representatives, together with other entities, own DTC; and

- Indirect access to the DTC System is available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly.

The policies and procedures of DTC, which may change periodically, will apply to payments, transfers, exchanges and other matters relating to beneficial interests in the global note. We and the trustee have no responsibility or liability for any aspect of DTC's or any participants' records relating to beneficial interests in the global note, including for payments made on the global note. Further, we and the trustee are not responsible for maintaining, supervising or reviewing any of those records.

CONVERSION RIGHTS

You have the option to convert any portion of the principal amount of any note that is an integral multiple of $1,000 into shares of our common stock at any time on or prior to the close of business on the maturity date, unless the notes have been previously redeemed or repurchased. The conversion rate will be equal to 33.5289 shares per $1,000 principal amount of notes. The conversion rate is equivalent to a conversion price of approximately $29.83 per share. Your right to convert a note called for redemption or delivered for repurchase will terminate at the close of business on the business day immediately preceding the redemption date or

repurchase date for that note, unless we default in making the payment due upon redemption or repurchase.

You may convert all or part of any note by delivering the note at the Corporate Trust Office of the trustee in the Borough of Manhattan, The City of New York, accompanied by a duly signed and completed conversion notice, a copy of which may be obtained by the trustee. The conversion date will be the date on which the note and the duly signed and completed conversion notice are so delivered.

As promptly as practicable on or after the conversion date, we will issue and deliver to the trustee a certificate or certificates for the number of full shares of our common stock issuable upon conversion, together with payment in lieu of any fraction of a share. The certificate will then be sent by the trustee to the conversion agent for delivery to the holder. The shares of our common stock issuable upon conversion of the notes will be fully paid and nonassessable and will rank equally with the other shares of our common stock.

If you surrender a note eligible for conversion on a date that is not an interest payment date, you will not be entitled to receive any interest for the period from the interest payment date preceding the conversion date to the conversion date, except as described below in this paragraph. In the case of any eligible note that has been converted after any regular record date but before the following interest payment date, interest payable on the interest payment date shall be payable on the interest payment date notwithstanding such conversion, and interest shall be paid to the holder of the note on the regular record date. However, any eligible note surrendered for conversion during that period between the regular record date and the following interest payment date must be accompanied by payment of an amount equal to the interest on the interest payment date on the principal amount of the notes being surrendered for conversion. This payment is not required in the case of notes that are called for non-provisional redemption or that are to be repurchased and for which your right to convert will terminate during that period between the regular record date and the following interest payment date.

No other payment or adjustment for interest, or for any dividends in respect of our common stock, will be made upon conversion. Holders of our common stock issued upon conversion will not be entitled to receive any dividends payable to holders of our common stock as of any record time or date before the close of business on the conversion date. We will not issue fractional shares upon conversion. Instead, we will pay cash based on the market price of our common stock at the close of business on the conversion date.

You will not be required to pay any taxes or duties relating to the issue or delivery of our common stock on conversion but you will be required to pay any tax or duty relating to any transfer involved in the issue or delivery of our common stock in a name other than yours. Certificates representing shares of our common stock will not be issued or delivered unless all taxes and duties, if any, payable by you have been paid.

The conversion rate will be subject to adjustment for, among other things:

- dividends and other distributions payable in our common stock on shares of our capital stock;

- the issuance to all holders of our common stock of rights, options or warrants entitling them to subscribe for or purchase our common stock at less than the then current market price of the common stock as of the record date for stockholders entitled to receive rights, options or warrants;

- subdivisions, combinations and reclassifications of our common stock;

- distributions to all holders of our common stock of evidences of our indebtedness, shares of capital stock, cash or assets, including securities, but excluding:

- those dividends, rights, options, warrants and distributions referred to above;

- dividends and distributions paid exclusively in cash; and

- distributions upon mergers or consolidations discussed below;

- distributions consisting exclusively of cash, excluding any cash portion of distributions referred to immediately above, or cash distributed upon a merger or consolidation to which the next succeeding bullet point applies, to all holders of our common stock in an aggregate amount that, combined together with:

- other all-cash distributions made within the preceding 365-day period in respect of which no adjustment has been made; and

- any cash and the fair market value of other consideration payable in connection with any tender offer by us or any of our subsidiaries for our common stock concluded within the preceding 365-day period in respect of which no adjustment has been made,

exceeds 10% of our market capitalization, being the product of the current market price per share of the common stock on the record date for the distribution and the number of shares of common stock then outstanding; and

- the successful completion of a tender offer made by us or any of our subsidiaries for our common stock which involves an aggregate consideration that, together with:

- any cash and other consideration payable in a tender offer by us or any of our subsidiaries for our common stock expiring within the 365-day period preceding the expiration of that tender offer in respect of which no adjustment has been made; and

- the aggregate amount of all cash distributions referred to above to all holders of our common stock within the 365-day period preceding the expiration of that tender offer in respect of which no adjustments have been made,

exceeds 10% of our market capitalization on the expiration of the tender offer.

We reserve the right to effect the increases in the conversion rate in addition to those required by the foregoing provisions as we consider to be advisable in order that any event treated for United States federal income tax purposes as a dividend of stock or stock rights will not be taxable to the recipients. We will not be required to make any adjustment to the conversion rate until the cumulative adjustments amount to 1.0% or more of the conversion rate. We will compute all adjustments to the conversion rate and will give notice by mail to holders of the registered notes of any adjustments.

In the event that we consolidate or merge with or into another entity or another entity is merged into us, or in case of any sale or transfer of all or substantially all of our assets, each note then outstanding will become convertible only into the kind and amount of securities, cash and other property receivable upon the consolidation, merger, sale or transfer by a holder of the number of shares of common stock into which the notes were convertible immediately prior to the consolidation or merger or sale or transfer. The preceding sentence will not apply to a merger or sale of all or substantially all of our assets that does not result in any reclassification, conversion, exchange or cancellation of the common stock.

We may increase the conversion rate, meaning that we increase the number of shares of common stock into which the notes are convertible, for any period of at least 20 days if our board of directors determines that the increase would be in our best interest. The board of directors' determination in this regard will be conclusive and may be done at any time without limit as to frequency, including in connection with a call for redemption, subject to applicable

securities laws. We will give holders of notes at least 15 days' notice of an increase in the conversion rate. Any increase, however, will not be taken into account for purposes of determining whether the closing price of our common stock exceeds the conversion price by 105% in connection with an event that otherwise would be a change in control as defined below.

If at any time we make a distribution of property to our stockholders that would be taxable to the stockholders as a dividend for United States federal income tax purposes, such as distributions of evidences of indebtedness or assets by us, but generally not stock dividends on common stock or rights to subscribe for common stock, and, pursuant to the anti-dilution provisions of the indenture, the number of shares into which notes are convertible is increased, that increase may be deemed for United States federal income tax purposes to be the payment of a taxable dividend to holders of notes. See "United States Federal Income Tax Consequences -- U.S. Holders."

SUBORDINATION

The notes are subordinated and, as a result, the payment of the principal, any premium and interest on the notes, including amounts payable on any redemption or repurchase, are subordinate to the prior payment in full, in cash or other payment satisfactory to holders of senior debt, of all of our senior debt to the extent provided in the indenture. The notes are also effectively subordinated to any debt or other liabilities of our subsidiaries, which means that our right to receive assets of any of these subsidiaries in a liquidation is only to the extent that the claims of these subsidiaries' creditors have been satisfied. This subsidiary debt may also contain covenants that limit the ability of the applicable subsidiary to pay dividends to us. As of September 30, 2001, we had no senior debt, $81.6 million of other subordinated debt and the aggregate amount of indebtedness and other liabilities of our subsidiaries was approximately $13.3 million (excluding intercompany liabilities). As part of the acquisition of Aera Japan Ltd., Advanced Energy assumed approximately $35 million of senior debt. The subordination provisions in the notes are similar to but operate independently of the subordination and default provisions in our other subordinated debt. The holders of these notes share equal priority in right of payment with the holders of our other subordinated debt, meaning that neither of the debt is subordinated to the other debt in the case of a default. The maturity of these notes is before the maturity of our other subordinated debt.

"Senior debt" is defined in the indenture to mean: the principal of, and premium, if any, and interest, including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any proceeding, on, and all fees and other amounts payable or rent or other obligations, whether absolute or contingent, secured or unsecured, due or to become due, outstanding on the date of the indenture or thereafter created, incurred or assumed in connection with any of the following:

- any credit or loan agreement, note, bond, debenture or other written obligation;

- our incurring obligations for money borrowed;

- any note or similar instrument issued by us in connection with the acquisition of any businesses, properties or assets of any kind;

- our leasing real or personal property:

- under leases if all or a portion of the lessee's rental obligations are required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles; or

- under leases, participation agreements, guarantees or similar documents entered into by us in connection with the leasing of real or personal property by us or any of our subsidiaries which provides that we are contractually obligated to purchase or cause a third party to purchase the leased property for a fixed price or otherwise guarantee a

residual value of leased property to the lessor or a third party, whether or not the lease is properly classified as an operating or capital lease in accordance with generally accepted accounting principles;

- any interest rate and currency swaps, caps, floors, collars, hedge agreements, forward contracts or similar agreements or arrangements;

- any letters of credit, bankers' acceptances and similar facilities, including reimbursement obligations with respect to the foregoing;

- any deferred purchase price of property or services;

- all obligations of the type referred to in the above clauses of another person and any dividends of another person, the payment of which, in either case, we have assumed or guaranteed, or for which we are responsible or liable, directly or indirectly, jointly or severally, as obligor, guarantor or otherwise, or which are secured by a lien on our property; and

- renewals, extensions, modifications, replacements, restatements and refundings of, or any indebtedness or obligation issued in exchange for, any indebtedness or obligation described in the above clauses of this definition.

Senior debt does not include:

- the notes;

- any other indebtedness or obligation if its terms or the terms of the instrument under which or pursuant to which it is issued expressly provide that it is not superior in right of payment to the notes; or

- any trade accounts payable or accrued liabilities arising in the ordinary course of business.

"Designated senior debt" means our obligations under any particular senior debt in which the instrument creating or evidencing the same or the assumption or guarantee thereof, or related agreements or documents to which we are a party, expressly provides that the indebtedness will be designated senior debt for purposes of the indenture. The instrument, agreement or other document evidencing any designated senior debt may place limitations and conditions on the right of the senior debt to exercise the rights of designated senior debt.

We may not make any payment on account of principal, premium or interest, if any, on the notes, or redemption or repurchase of the notes, if:

- we default in our obligations to pay principal, premium, interest or other amounts on our senior debt, including a default under any redemption or repurchase obligation, and the default continues beyond any applicable grace period that we may have to make these payments; or

- any other default occurs and is continuing on any designated senior debt; and

- the default permits the holders of the designated senior debt to accelerate its maturity; and

- the trustee has received a payment blockage notice from us, the holder of debt or another person permitted to give notice under the indenture.

If payments of the notes have been blocked by a payment default on senior debt, payments on the notes may resume when the payment default has been cured or waived or ceases to exist.

If payments on the notes have been blocked by a nonpayment default on designated senior debt, payments on the notes may resume on the earlier of:

- the date the nonpayment default is cured or waived or ceases to exist; or

- 179 days after the payment blockage notice is received.

No nonpayment default that existed on the day a payment blockage notice was delivered to the trustee can be used as the basis for any subsequent payment blockage notice. In addition, once a holder of designated senior debt has blocked payment on the notes by giving a payment blockage notice, no new period of payment blockage can be commenced pursuant to a subsequent payment blockage notice unless and until both of the following are satisfied:

- 365 days have elapsed since the initial effectiveness of the immediately prior payment blockage notice; and

- all scheduled payments of principal, any premium and interest with respect to the notes that have come due have been paid in full in cash.

In addition, all principal, premium, if any, interest and other amounts due on all senior debt must be paid in full in cash before you are entitled to receive any payment otherwise due upon:

- any acceleration of the principal on the notes as a result of an event of default of the notes; or

- any payment or distribution of our assets to creditors upon any dissolution, winding up, liquidation or reorganization, whether voluntary or involuntary, marshaling of assets, assignment for the benefit of creditors, or in bankruptcy, insolvency, receivership or other similar proceedings.

In the event of insolvency, creditors who are holders of senior debt are likely to recover more, ratably, than you because of this subordination. The subordination may result in a reduction or elimination of payments on the notes to you.

In addition, the notes are "structurally subordinated" to all indebtedness and other liabilities of our subsidiaries, including trade payables and lease obligations. This occurs because our right to receive any assets of our subsidiaries upon their liquidation or reorganization, and your right to participate in those assets, are effectively subordinated to the claims of that subsidiary's creditors, including trade creditors, except to the extent that we are recognized as a creditor of the subsidiary. If we are recognized as a creditor of that subsidiary, our claims are subordinate to any security interest in the assets of the subsidiary and any indebtedness of the subsidiary senior to us.

The indenture does not limit our ability to incur senior debt or our ability or the ability of our subsidiaries to incur any other indebtedness.

OPTIONAL REDEMPTION BY ADVANCED ENERGY

PROVISIONAL REDEMPTION

We may redeem any portion of the notes at any time prior to September 4, 2004 upon at least 30 and not more than 60 days' notice by mail to the holders of the notes, at a redemption price equal to 100% of the principal amount of the notes to be redeemed per note plus accrued and unpaid interest to the redemption date if the closing price of our common stock has exceeded 150% of the conversion price for at least 20 trading days in any consecutive 30-day trading period ending on the trading day prior to the mailing of the notice of redemption.

If we redeem the notes under these circumstances, we will make an additional "make whole" payment on the redeemed notes equal to $150.56 per $1,000 notes, minus the amount of any interest actually paid or accrued and unpaid on the note prior to the redemption date. We

must make these "make whole" payments on all notes called for redemption, including notes converted after the date we mailed the notice. The "make whole" payment on notes that have been converted shall not be reduced by accrued and unpaid interest. We may make these "make whole" payments, at our option, either in cash or in our common stock or a combination of cash and stock. We will specify the type of consideration for the "make whole" payment in the redemption notice.

Payments made in our common stock will be valued at 95% of the average of the closing sales prices of our common stock for the five consecutive trading days ending on the day prior to the redemption date. If less than all the notes are to be redeemed, the particular notes to be redeemed will be selected by the trustee by lot or by any other method the trustee may deem fair and appropriate.

NON-PROVISIONAL REDEMPTION

On or after September 4, 2004, we may redeem the notes in whole or in part, at the prices set forth below. If we elect to redeem all or part of the notes, we will give at least 30, but no more than 60, days' notice to you.

The redemption price, expressed as a percentage of principal amount, is as follows for the following periods:

PERIOD	REDEMPTION PRICE
Beginning on September 4, 2004 and ending on August 31, 2005	102%
Beginning on September 1, 2005 and ending on August 31, 2006	101%

and thereafter is equal to 100% of the principal amount. In each case, we will pay interest to, but excluding the redemption date. If less than all the notes are to be redeemed, the particular notes to be redeemed will be selected by the trustee by lot or by any other method the trustee may deem fair and appropriate.

No sinking fund is provided for the notes, which means that the indenture does not require us to redeem or retire the notes periodically.

PAYMENT AND CONVERSION

We will make all payments of principal and interest on the notes by dollar check drawn on an account maintained at a bank in The City of New York. If you are the registered holder of notes with a face value greater than $2,000,000, at your request we will make payments of principal or interest to you by wire transfer to an account maintained by you at a bank in The City of New York and identified by you to the trustee at least 15 days prior to the relevant payment date. Payment of any interest on the notes will be made to the person in whose name the note, or any predecessor note, is registered at the close of business on February 15 or August 15, whether or not a business day, immediately preceding the relevant interest payment date (a "regular record date").

Payments on any global note registered in the name of DTC or its nominee will be payable by the trustee to DTC or its nominee in its capacity as the registered holder under the indenture. Under the terms of the indenture, we and the trustee will treat the persons in whose names the notes, including any global note, are registered as the owners for the purpose of receiving maintaining, supervising or reviewing any of DTC's records or any participant's or indirect participant's records relating to the beneficial ownership interests in the global note; or

- any other matter relating to the actions and practices of DTC or any of its participants or indirect participants.

We will not be required to make any payment on the notes due on any day which is not a business day until the next succeeding business day. The payment made on the next succeeding business day will be treated as though it were paid on the original due date and no interest will accrue on the payment for the additional period of time.

Notes may be surrendered for conversion at the Corporate Trust Office of the trustee in the Borough of Manhattan, New York. Notes surrendered for conversion must be accompanied by appropriate notices and any payments in respect of interest or taxes, as applicable, as described above under "-- Conversion Rights."

We have initially appointed the trustee as paying agent and conversion agent. We may terminate the appointment of any paying agent or conversion agent and appoint additional or other paying agents and conversion agents. However, until the notes have been delivered to the trustee for cancellation, or moneys sufficient to pay the principal of, premium, if any, and interest on the notes have been made available for payment and either paid or returned to us as provided in the indenture, the trustee will maintain an office or agency in the Borough of Manhattan, New York for surrender of notes for conversion. Notice of any termination or appointment and of any change in the office through which any paying agent or conversion agent will act will be given in accordance with "-- Notices" below.

All moneys deposited with the trustee or any paying agent, or then held by us, in trust for the payment of principal of, premium, if any, or interest on any notes which remain unclaimed at the end of two years after the payment has become due and payable will be repaid to us, and you will then look only to us for payment.

REPURCHASE AT OPTION OF HOLDERS UPON A CHANGE IN CONTROL

If a "change in control" as defined below occurs, you will have the right, at your option, to require us to repurchase all of your notes not previously called for redemption, or any portion of the principal amount thereof, that is equal to $1,000 or an integral multiple of $1,000. The price we are required to pay is 100% of the principal amount of the notes to be repurchased, together with interest accrued but unpaid to, but excluding, the repurchase date.

At our option, instead of paying the repurchase price in cash, we may pay the repurchase price in our common stock valued at 95% of the average of the closing prices of our common stock for the five trading days immediately preceding and including the third trading day prior to the repurchase date. We may only pay the repurchase price in our common stock if we satisfy conditions provided in the indenture.

Within 30 days after the occurrence of a change in control, we are obligated to give to you notice of the change in control and of the repurchase right arising as a result of the change of control. We must also deliver a copy of this notice to the trustee. To exercise the repurchase right, you must deliver on or before the 30th day after the date of our notice irrevocable written notice to the trustee of your exercise of your repurchase right, together with the notes with respect to which the right is being exercised. We are required to repurchase the notes on the date that is 45 days after the date of our notice.

A change in control will be deemed to have occurred at the time after the notes are originally issued that any of the following occurs:

- any person acquires beneficial ownership, directly or indirectly, through a purchase, merger or other acquisition transaction or series of transactions, of shares of our capital stock entitling the person to exercise 50% or more of the total voting power of all shares of our capital stock that is entitled to vote generally in elections of directors, other than an acquisition by us, any of our subsidiaries or any of our employee benefit plans; or

- we merge or consolidate with or into any other person, any merger of another person into us or we convey, sell, transfer or lease all or substantially all of our assets to another person, other than any transaction:

- that does not result in any reclassification, conversion, exchange or cancellation of outstanding shares of our capital stock; and

- pursuant to which the holders of 50% or more of the total voting power of all shares of our capital stock entitled to vote generally in elections of directors immediately prior to the transaction have the entitlement to exercise, directly or indirectly, 50% or more of the total voting power of all shares of capital stock entitled to vote generally in the election of directors of the continuing or surviving corporation immediately after the transaction; or

- any transaction which is effected solely to change our jurisdiction of incorporation and results in a reclassification, conversion or exchange of outstanding shares of our common stock into solely shares of common stock.

However, a change in control will not be deemed to have occurred if:

- the closing price per share of our common stock for any five trading days within the period of 10 consecutive trading days ending immediately after the later of the change in control or the public announcement of the change in control, in the case of a change in control relating to an acquisition of capital stock, or the period of 10 consecutive trading days ending immediately before the change in control, in the case of change in control relating to a merger, consolidation or asset sale, equals or exceeds 105% of the conversion price of the notes in effect on each of those trading days; or

- all of the consideration, excluding cash payments for fractional shares and cash payments made pursuant to dissenters' appraisal rights, in a merger or consolidation otherwise constituting a change of control under the first and second bullet points in the preceding paragraph above consists of shares of common stock, depository receipts or other certificates representing common equity interests traded on a national securities exchange or quoted on the Nasdaq National Market, or will be so traded or quoted immediately following the merger or consolidation, and as a result of the merger or consolidation the notes become convertible solely into common stock, depository receipts or other certificates representing common equity interests.

For purposes of these provisions:

- the conversion price is equal to $1,000 divided by the conversion rate;

- whether a person is a "beneficial owner" will be determined in accordance with Rule 13d-3 under the Exchange Act; and

- "person" includes any syndicate or group that would be deemed to be a person under Section 13 (d) (3) of the Exchange Act.

The rules and regulations promulgated under the Exchange Act require the dissemination of prescribed information to security holders in the event of an issuer tender offer and may apply in the event that the repurchase option becomes available to you. We will comply with this rule to the extent it applies at that time.

We may, to the extent permitted by applicable law, at any time purchase notes in the open market, by tender at any price or by private agreement. Any note that we purchase may, to the extent permitted by applicable law and subject to restrictions contained in the purchase agreement with the initial purchaser, be re-issued or resold or may, at our option, be surrendered to the trustee for cancellation. Any notes surrendered for cancellation may not be re-issued or resold and will be canceled promptly.

The definition of change in control includes a phrase relating to the conveyance, transfer, sale, lease or disposition of all or substantially all of our assets. There is no precise, established definition of the phrase "substantially all" under applicable law. Accordingly, your ability to require us to repurchase your notes as a result of conveyance, transfer, sale, lease or other disposition of less than all of our assets may be uncertain.

The foregoing provisions would not necessarily provide you with protection if we are involved in a highly leveraged or other transaction that may adversely affect you.

Our ability to repurchase notes upon the occurrence of a change in control is subject to important limitations. Some of the events constituting a change in control could result in an event of default under our senior debt. Moreover, a change in control could cause an event of default under, or be prohibited or limited by, the terms of our senior debt. As a result, unless we were to obtain a waiver, a repurchase of the notes in cash could be prohibited under the subordination provisions of the indenture until the senior debt is paid in full. Although we have the right to repurchase the notes with our common stock, subject to particular conditions, we cannot assure you that we would have the financial resources, or would be able to arrange financing, to pay the repurchase price in cash for all the notes that might be delivered by holders of notes seeking to exercise the repurchase right. If we were to fail to repurchase the notes when required following a change in control, an event of default under the indenture would occur, whether or not the repurchase is permitted by the subordination provisions of the indenture. Any default may, in turn, cause a default under our senior debt. See "-- Subordination."

MERGERS AND SALES OF ASSETS BY ADVANCED ENERGY

We may not consolidate with or merge into any other entity or convey, transfer, sell or lease our properties and assets substantially as an entirety to any entity other than to one or more of our subsidiaries, and we may not permit any entity to consolidate with or merge into us or convey, transfer, sell or lease the entity's properties and assets substantially as an entirety to us unless:

- the entity formed by the consolidation or into or with which we are merged or the entity to which our properties and assets are so conveyed, transferred, sold or leased, shall be a corporation, limited liability company, partnership or trust organized and existing under the laws of the United States, any State within the United States or the District of Columbia and, if we are not the surviving entity, the surviving entity assumes the payment of the principal of, premium, if any, and interest on the notes and the performance of our other covenants under the indenture; and

- immediately after giving effect to the transaction, no event of default, and no event that, after notice or lapse of time or both, would become an event of default, will have occurred and be continuing.

EVENTS OF DEFAULT

The following are events of default under the indenture:

- we fail to pay principal of or premium, if any, on any note when due, whether or not prohibited by the subordination provisions of the indenture;

- we fail to pay any interest on any note when due, which failure continues for 30 days, whether or not prohibited by the subordination provisions of the indenture;

- we fail to provide notice of a change in control, whether or not the notice is prohibited by the subordination provisions of the indenture;

- we fail to perform any agreement or other covenant in the notes or the indenture, which failure continues for 60 days following notice as provided in the indenture;

- any indebtedness under any bonds, debentures, notes or other evidences of indebtedness for money borrowed, or any guarantee thereof, by us or any of our significant subsidiaries, in an aggregate principal amount in excess of $15 million is not paid when due either at its stated maturity or upon acceleration thereof, and the indebtedness is not discharged, or the acceleration is not rescinded or annulled, within a period of 30 days after notice as provided in the indenture; and

- particular events of bankruptcy, insolvency or reorganization involving us or any of our significant subsidiaries.

Subject to the provisions of the indenture relating to the duties of the trustee in case an event of default shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any holder unless the holder shall have offered reasonable indemnity to the trustee. Subject to providing indemnification of the trustee, the holders of a majority in aggregate principal amount of the outstanding notes will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the trustee or exercising any trust or power conferred on the trustee.

If an event of default other than an event of default arising from events of insolvency, bankruptcy or reorganization occurs and is continuing, either the trustee or the holders of at least 25% in principal amount of the outstanding notes may, subject to the subordination provisions of the indenture, accelerate the maturity of all notes. However, after acceleration, but before a judgment or decree based on acceleration, the holders of a majority in aggregate principal amount of outstanding notes may, under specific circumstances, rescind and annul the acceleration if all events of default, other than the non-payment of principal of the notes that have become due solely by declaration of acceleration, have been cured or waived as provided in the indenture. If an event of default arising from events of insolvency, bankruptcy or reorganization occurs, then the principal of, and accrued interest on, all the notes will automatically become immediately due and payable without any declaration or other act on the part of the holders of the notes or the trustee. For information as to waiver of defaults, see "Meetings, Modification and Waiver" below.

You will not have any right to institute any proceeding with respect to the indenture, or for any remedy under the indenture, unless:

- you give the trustee written notice of a continuing event of default;

- the holders of at least 25% in aggregate principal amount of the outstanding notes have made written request and offered reasonable indemnity to the trustee to institute proceedings;

- the trustee has not received from the holders of a majority in aggregate principal amount of the outstanding notes a direction inconsistent with the written request; and

- the trustee shall have failed to institute the proceeding within 60 days of the written request.

However, these limitations do not apply to a suit instituted by you for the enforcement of payment of the principal of, premium, if any, or interest on your note on or after the respective due dates expressed in your note or your right to convert your note in accordance with the indenture.

We will be required to furnish to the trustee annually a statement as to our performance of some of our obligations under the indenture and as to any default in performance.

MEETINGS, MODIFICATION AND WAIVER

The indenture contains provisions for convening meetings of the holders of notes to consider matters affecting their interests.

Particular limited modifications of the indenture may be made without the necessity of obtaining the consent of the holders of the notes.

Other modifications and amendments of the indenture may be made, compliance by us with some restrictive provisions of the indenture may be waived and any past defaults by us under the indenture (except a default in the payment of principal, premium, if any, or interest) may be waived, either:

- with the written consent of the holders of not less than a majority in aggregate principal amount of the notes at the time outstanding; or

- by the adoption of a resolution, at a meeting of holders of the notes at which a quorum is present, by the holders of at least 66 2/3% in aggregate principal amount of the notes represented at the meeting.

The quorum at any meeting called to adopt a resolution will be persons holding or representing a majority in aggregate principal amount of the notes at the time outstanding and, at any reconvened meeting adjourned for lack of a quorum, 25% of the aggregate principal amount.

However, a modification or amendment requires the consent of the holder of each outstanding note affected if it would:

- change the stated maturity of the principal or interest of a note;

- reduce the principal amount of, or any premium or interest on, any note;

- reduce the amount payable upon a redemption or mandatory repurchase;

- modify the provisions with respect to the repurchase rights of holders of notes in a manner adverse to the holders;

- modify our right to redeem the notes in a manner adverse to the holders;

- change the place or currency of payment on a note;

- impair the right to institute suit for the enforcement of any payment on any note;

- modify our obligation to maintain an office or agency in New York City;

- modify the subordination provisions in a manner that is adverse to the holders of the notes;

- adversely affect the right to convert the notes other than a modification or amendment required by the terms of the indenture;

- modify our obligation to deliver information required under Rule 144A to permit resales of the notes and common stock issued upon conversion of the notes if we cease to be subject to the reporting requirements under the Exchange Act;

- reduce the above-stated percentage of the principal amount of the holders whose consent is needed to modify or amend the indenture;

- reduce the percentage of the principal amount of the holders whose consent is needed to waive compliance with some provisions of the indenture or to waive some defaults; or

- reduce the percentage required for the adoption of a resolution or the quorum required at any meeting of holders of notes at which a resolution is adopted.

NOTICES

Notice to holders of the registered notes will be given by mail to the addresses as they appear in the security register. Notices will be deemed to have been given on the date of mailing.

Notice of a redemption of notes will be given to the holders of notes to be redeemed not less than 30 nor more than 60 days prior to the redemption date and will specify the redemption date. A notice of redemption of the notes will be irrevocable. In addition, concurrently with the giving of notice to holders, we will issue a press release containing the same information included in the notices of redemption.

REPLACEMENT OF NOTES

We will replace any note that becomes mutilated, destroyed, stolen or lost at the expense of the holder upon delivery to the trustee of the mutilated notes or evidence of the loss, theft or destruction satisfactory to us and the trustee. In the case of a lost, stolen or destroyed note, indemnity satisfactory to the trustee and us may be required at the expense of the holder of the note before a replacement note will be issued.

PAYMENT OF STAMP AND OTHER TAXES

We will pay all stamp and other duties, if any, that may be imposed by the United States or any political subdivision thereof or taxing authority thereof or therein with respect to the issuance of the notes or of shares of stock upon conversion of the notes. We will not be required to make any payment with respect to any other tax, assessment or governmental charge imposed by any government or any political subdivision thereof or taxing authority thereof or therein.

GOVERNING LAW

The indenture and the notes are governed by and construed in accordance with the laws of the State of New York, United States of America.

THE TRUSTEE

If an event of default occurs and is continuing, the trustee will be required to use the degree of care of a prudent person in the conduct of his own affairs in the exercise of its powers. Subject to these provisions, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of notes, unless they have furnished to the trustee reasonable security or indemnity.

DESCRIPTION OF COMMON STOCK

Our authorized capital stock consists of 55,000,000 shares of common stock, $0.001 par value, and 1,000,000 shares of preferred stock, $0.001 par value. As of December 31, 2001, 31,847,735 shares of common stock were outstanding, held by 1,055 holders of record, and no shares of preferred stock were outstanding. In addition, as of December 31, 2001, 2,624,133 shares were available for grant under our 1995 Stock Option Plan, 100,000 shares were available for grant under our 1995 Non-Employee Director Stock Option Plan, 82,320 shares were available for purchase under our Employee Stock Purchase Plan and 539,150 shares were available for grant under our 2001 Stock Option Plan. As of December 31, 2001, options to purchase an aggregate of 2,197,669 shares of common stock were outstanding under these plans.

The holders of common stock are entitled to one vote for each share held of record on all matters submitted to a vote of stockholders. Subject to preferences that may be applicable to any outstanding shares of preferred stock that may be issued, the holders of common stock are entitled to receive ratably any dividends that may be declared from time to time by the board of directors out of funds legally available for the payment of dividends. See "Dividend Policy." The holders of our common stock are entitled to share ratably in all assets remaining after payment of liabilities and liquidation preferences of any outstanding shares of preferred stock in the event of our liquidation, dissolution or winding up. Holders of common stock have no preemptive rights or rights to convert their common stock into any other securities. There are no redemption or sinking fund provisions applicable to the common stock. All outstanding shares of common stock are fully paid and non-assessable.

SECTION 203 OF THE DELAWARE GENERAL CORPORATION LAW

We are subject to Section 203 or the Delaware General Corporation Law ("Section 203"), which, subject to specific exceptions, prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years following the time that the stockholder became an interested stockholder, unless: (i) prior to that time, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested holder; (ii) upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the number of shares outstanding those shares owned (a) by persons who are directors and also officers and (b) by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or (iii) at or subsequent to that time, the business combination is approved by the board of directors and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 2/3 of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 generally defines a business combination to include: (i) any merger or consolidation involving the corporation and the interested stockholder, (ii) any sale, transfer, pledge or other disposition of 10% or more of the assets of the corporation involving the interested stockholder, (iii) subject to specific exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder, (iv) any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder or (v) the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation. Section 203 generally defines interested stockholder as an entity or person

beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

TRANSFER AGENT

The transfer agent and registrar for our common stock is American Stock Transfer.

CERTAIN UNITED STATES FEDERAL INCOME TAX CONSEQUENCES

This section describes the material United States federal income tax consequences of purchasing, owning and disposing of the notes we are offering and the common stock into which the notes may be converted and is the opinion of Sullivan & Cromwell, special tax counsel to Advanced Energy. It applies to you only if you are a United States holder that holds your notes or common stock as capital assets for tax purposes. You are a United States holder if you are a beneficial owner of a note and you are:

- a citizen or resident of the United States,

- a domestic corporation,

- an estate whose income is subject to United States federal income tax regardless of its source, or

- a trust if a United States court can exercise primary supervision over the trust's administration and one or more United States persons are authorized to control all substantial decisions of the trust.

This section does not apply to you if you are a member of a class of holders subject to special rules, such as:

- a dealer in securities or currencies,

- a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings,

- a bank,

- a life insurance company,

- a tax-exempt organization,

- a person that owns notes that are a hedge or that are hedged against interest rate risks,

- a person that owns notes as part of a straddle or conversion transaction for tax purposes, or

- a person whose functional currency for tax purposes is not the U.S. dollar.

This section is based on the Internal Revenue Code of 1986, as amended, its legislative history, existing and proposed regulations under the Internal Revenue Code, published rulings and court decisions, all as currently in effect. These laws are subject to change, possibly on a retroactive basis.

PLEASE CONSULT YOUR OWN TAX ADVISOR CONCERNING THE CONSEQUENCES OF OWNING THESE NOTES IN YOUR PARTICULAR CIRCUMSTANCES UNDER THE CODE AND THE LAWS OF ANY OTHER TAXING JURISDICTION.

PAYMENT OF INTEREST

You will be taxed on any interest on your note as ordinary income at the time you receive the interest or when it accrues, depending on your method of accounting for tax purposes.

NOTES PURCHASED AT A PREMIUM

If you purchase your note for an amount in excess of its principal amount, you may elect to treat the excess as amortizable bond premium. If you make this election, you will reduce the amount required to be included in your income each year with respect to interest on your note by the amount of amortizable bond premium allocable to that year, based on your note's yield to maturity. If you make an election to amortize bond premium, it will apply to all debt instruments, other than debt instruments the interest on which is excludible from gross income, that you hold at the beginning of the first taxable year to which the election applies or that you thereafter acquire, and you may not revoke it without the consent of the Internal Revenue Service.

MARKET DISCOUNT

You will be treated as if you purchased your note at a market discount, and your note will be a market discount note if:

- you purchase your note for less than its stated redemption price at maturity and

- the difference between the note's stated redemption price at maturity and the price you paid for your note is equal to or greater than 1/4 of 1 percent of your note's stated redemption price at maturity multiplied by the number of complete years to the note's maturity.

If your note's stated redemption price at maturity exceeds the price you paid for the note by less than 1/4 of 1 percent multiplied by the number of complete years to the note's maturity, the excess constitutes de minimis market discount, and the rules discussed below are not applicable to you.

You must treat any gain you recognize on the maturity or disposition of your market discount note as ordinary income to the extent of the accrued market discount on your note. Alternatively, you may elect to include market discount in income currently over the life of your note. If you make this election, it will apply to all debt instruments with market discount that you acquire on or after the first day of the first taxable year to which the election applies. You may not revoke this election without the consent of the Internal Revenue Service. If you own a market discount note and do not make this election, you will generally be required to defer deductions for interest on borrowings allocable to your note in an amount not exceeding the accrued market discount on your note until the maturity or disposition of your note.

You will accrue market discount on your market discount note on a straight-line basis unless you elect to accrue market discount using a constant-yield method. If you make this election, it will apply only to the note with respect to which it is made and you may not revoke it.

SALE, EXCHANGE OR REDEMPTION OF THE NOTES

You will generally recognize gain or loss on the sale, redemption or exchange of your note (other than a conversion of your note into common stock) equal to the difference between the amount you realize on the sale or redemption and your tax basis in your note. Your tax basis in your note will generally be the amount paid for your note, increased by any market discount and de minimis market discount previously included in income with respect to your note, and decreased by any amortizable bond premium applied to reduce interest on your note. This gain or loss will be capital gain or loss when you sell or exchange or we redeem your note, except to the extent attributable to accrued but unpaid interest or market discount. Gain attributable to accrued but unpaid interest or market discount will be taxable as ordinary income. Capital gain of a noncorporate United States holder is generally taxed at a maximum rate of 20% where the property is held more than one year. Your ability to deduct capital losses may be limited.

CONVERSION OF THE NOTES

You generally will not recognize any income, gain or loss upon conversion of a note into shares of our common stock except (i) to the extent such shares are considered attributable to accrued interest or market discount not previously included in income and, thus, are taxable as ordinary income or (ii) with respect to cash received in lieu of a fractional share. Your tax basis in the shares received on conversion of a note will be the same as your adjusted tax basis in the note at the time of the conversion, reduced by any basis allocable to a fractional share interest for which you received cash. The holding period for the shares received on conversion will generally include the holding period of the note converted. However, your tax basis in shares considered attributable to accrued interest or market discount generally will equal the amount of such accrued interest or market discount included in income, and the holding period for such shares will begin on the day after the conversion. Moreover, the tax consequences of receiving a cash "make whole" payment in connection with a provisional redemption are unclear.

Although neither the applicable Treasury Regulations nor any case law specifically address whether a cash "make whole" payment should be treated as gain from the sale of a capital asset or interest income, it would be reasonable to treat the receipt of this payment as capital gain. However, the Internal Revenue Service could contend that the payment should be treated as additional interest income. Your basis in any shares received in a conversion should not be affected by receipt of a cash "make whole" payment. Your basis in any shares received in connection with any stock "make whole" payment should equal their fair market value on the redemption date.

Cash received in lieu of a fractional share upon conversion will be treated as a payment in exchange for the fractional share. Accordingly, the receipt of cash in lieu of fractional shares generally will result in capital gain or loss (measured by the difference between the cash received for the fractional share and your adjusted tax basis in the fractional share).

DIVIDENDS AND CONSTRUCTIVE DIVIDENDS

If you convert your notes into our common stock, you must include in your gross income the gross amount of any dividend paid by us out of our current or accumulated earnings and profits, as determined for United States federal income tax purposes. Distributions in excess of our current and accumulated earnings and profits will be treated as a return of capital to the extent of your basis in the common stock, and thereafter as capital gain. If you are a corporate U.S. shareholder, you would be able to claim a deduction equal to a portion of any dividends received, subject to generally applicable limitations on that deduction.

You may, in certain circumstances, be deemed to have received a constructive distribution if the conversion price of your notes is adjusted. Adjustments to the conversion price pursuant to a bona fide reasonable adjustment formula which has the effect of preventing the dilution of the interest of the holders of the notes, however, will generally not be considered to result in a constructive distribution of stock. Certain of the possible adjustments provided in your notes, including, without limitation, adjustments made to reflect taxable dividends to our stockholders, will not qualify as being pursuant to a bona fide reasonable adjustment formula. If these adjustments are made, you will be deemed to have received constructive distributions taxable as dividends to the extent of our current and accumulated earnings and profits, even though you have not received any cash or property as a result of these adjustments. In certain circumstances, the failure of the notes to provide for such an adjustment may also result in taxable dividend income to you.

If you convert your notes into our common stock, any distributions of additional shares to you with respect to common stock that are made as part of a pro rata distribution to all of our shareholders generally will not be subject to United States federal income tax.

SALE OF COMMON STOCK

If you sell or otherwise dispose of your common stock, you will recognize capital gain or loss for United States federal income tax purposes equal to the difference between the proceeds you receive and your tax basis in your common stock. Capital gain of a noncorporate United States holder is generally taxed at a maximum rate of 20% where the property is held more than one year, and 18% where the property is held for more than five years. Your ability to deduct capital losses may be limited.

BACKUP WITHHOLDING AND INFORMATION REPORTING

In general, if you are a noncorporate United States holder, we and other payors are required to report to the Internal Revenue Service all payments of principal, any interest or constructive dividends on your note, and any dividends on your common stock. In addition, we and other payors are required to report to the Internal Revenue Service any payment of proceeds of the sale of your note or common stock before maturity within the United States.

Additionally, backup withholding will apply to any interest or dividend payments if you fail to provide an accurate taxpayer identification number, or you are notified by the Internal Revenue Service that you have failed to report all interest and dividends required to be shown on your federal income tax returns.

SELLING SECURITYHOLDERS

The notes were originally issued by us to the initial purchaser in a transaction exempt from the registration requirements of the Securities Act of 1933, and were immediately resold by the initial purchaser to persons reasonably believed by them to be "qualified institutional buyers" as defined by Rule 144A under the Securities Act. The selling securityholders, including their transferees, pledgees or donees or their successors, may from time to time offer and sell pursuant to this prospectus or a supplement hereto any or all of the notes and common stock into which the notes are convertible.

The table below sets forth the name of each selling securityholder, the aggregate principal amount of notes beneficially owned by each selling securityholder that may be offered under this prospectus and the number of shares of common stock into which the notes are convertible. We have prepared the table based on information given to us by or on behalf of the selling securityholders on or prior to January 22, 2002. Unless set forth below, to our knowledge, none of the selling securityholders has, or within the past three years has had, any material relationship with us or any of our predecessors or affiliates or beneficially owns in excess of 1% of our outstanding common stock (the percentage of beneficial ownership is based on Rule 13d-3(d)(i) of the Exchange Act, using 31,847,735 shares of stock outstanding as of December 31, 2001 and, for each holder, treating as outstanding the number of shares of common stock issuable upon conversion of all that holder's notes, but assuming no conversion of any other holder's notes and not including shares of common stock that may be issued by us upon purchase of notes by us at the option of the holder. The selling securityholders may offer all, some or none of the notes or common stock into which the notes are convertible. Because the selling securityholders may offer all or some portion of the notes or the common stock, no estimate can be given as to the amount of the notes or the common stock that will be held by the selling securityholders upon termination of any sales. In addition, the selling securityholders identified below may have sold, transferred or otherwise disposed of all or a portion of their notes since the date on which they provided the information regarding their notes in transactions exempt from the registration requirements of the Securities Act.

Information concerning the selling securityholders may change from time to time and any changed information will be set forth in supplements to this prospectus if and when necessary.

NAME	AGGREGATE PRINCIPAL AMOUNT OF NOTES BENEFICIALLY OWNED AND OFFERED	PERCENTAGE OF NOTES OUTSTANDING	NUMBER OF SHARES OF COMMON STOCK OFFERED(1)
Alpine Associates	6,420,000	5.1	215,255
Alpine Partners, L.P.	880,000	*	29,505
Bank Austria Cayman Islands, Ltd.	4,525,000	3.6	151,718
Bankers Trust Company Trustee for Daimler Chrysler Corp. Emp. #1 Pension Plan Dated April 1, 1989(3)	3,780,000	3.0	126,739
BTPO Growth vs Value	2,000,000	1.6	67,057
CALAMOS Market Neutral Fund -- CALAMOS Investment Trust	8,600,000	6.9	288,348
CFFX, LLC(3)	2,000,000	1.6	67,057
Clinton Multistrategy Master Fund, Ltd.	1,600,000	1.3	53,646
Clinton Riverside Convertible Portfolio Limited	2,400,000	1.9	80,469
Consulting Group Capital Markets Funds	345,000	*	11,567
DE Shaw Investments, L.P.(3)	900,000	*	30,176
DE Shaw Valence, L.P.(3)	3,600,000	2.9	120,704
Deutsche Banc Alex Brown Inc.(2)	13,237,000	10.6	443,822

NAME	AGGREGATE PRINCIPAL AMOUNT OF NOTES BENEFICIALLY OWNED AND OFFERED	PERCENTAGE OF NOTES OUTSTANDING	NUMBER OF SHARES OF COMMON STOCK OFFERED(1)
Fidelity Advisor Series VII: Fidelity Advisor Electronics Fund	500,000	*	16,764
Fidelity Financial Trust: Fidelity Convertible SECS Fund	3,000,000	2.4	100,586
First Union Securities Inc.(2)	14,500,000	11.6	486,169
Franklin and Marshall College	215,000	*	7,208
Franklin Investors Series Trust -- Convertible SECS Fund	2,000,000	1.6	67,057
Goldman, Sachs & Co.(2)	65,000	*	2,179
HFR CA Select Fund	200,000	*	6,705
Highbridge International LLC(3)	6,500,000	5.2	217,937
JP Morgan Securities Inc.(2)	1,000,000	*	33,528
KBC Financial Products (Cayman Islands)(3)	2,000,000	1.6	67,057
KBC Financial Products USA Inc.(3)	225,000	*	7,544
Kentfield Trading, Ltd.(3)	18,307,000	14.6	613,813
Onex Industrial Partners Limited	1,645,000	1.3	55,155
Ramius Capital Group	200,000	*	6,705
RAM Trading Ltd	1,000,000	*	33,528
RCG Halifax	350,000	*	11,735
RCG Latitude Master Fund	2,195,000	1.8	73,595
RCG Multi Strategy, LP	1,530,000	1.2	51,299
Sage Capital	4,000,000	3.2	134,115
San Diego County Employees Retirement Association	2,000,000	1.6	67,057
SG Cowen Securities Corp.(2)	4,000,000	3.2	134,115
Silvercreek II Limited	980,000	*	32,858
Silvercreek Limited Partnership	875,000	*	29,337
State Street Bank Custodian for GE Pension Trust(3)	1,725,000	1.4	57,837
Zazove Hedged Convertible Fund L.P	2,000,000	1.6	67,057
Zazove Income Fund L.P	1,800,000	1.4	60,352
Zurich Institutional Benchmarks Master Fund Ltd	1,000,000	*	33,528
Other selling securityholders	901,000	*	30,210

* Less than one percent.

(1) Assumes conversion of all of the holder's notes at a conversion rate of 33.5289 shares of common stock per $1,000 principal amount of the notes. This conversion rate is subject to adjustment, however, as described under "Description of Notes -- Conversion Rights". As a result, the number of shares of common stock issuable upon conversion of the notes may increase or decrease in the future. Does not include shares of common stock that may be issued by us upon purchase of notes by us at the option of the holder. In addition, the number of shares of common stock listed for each holder does not include fractional shares. Holders will receive a cash adjustment for any fractional share amount resulting from conversion of the notes, as described under "Description of Notes -- Conversion Rights."

(2) Selling securityholder is a broker-dealer and may be deemed an underwriter under the Securities Act. It purchased its securities in the ordinary course of business and, at the time

of purchase, had no agreements or understandings, directly or indirectly, with any person regarding the distribution of the securities.

(3) Selling securityholder is an affiliate of a broker-dealer, purchased its securities in the ordinary course of business and, at the time of purchase, had no agreements or understandings, directly or indirectly, with any person regarding the distribution of the securities.

PLAN OF DISTRIBUTION

The notes and the common stock into which the notes are convertible are being registered to permit public secondary trading of these securities by the holders thereof from time to time after the date of this prospectus. We will not receive any of the proceeds from the offering of the notes or the common stock by selling securityholders.

The selling securityholders, including their pledgees or donees, may sell the notes and the common stock into which the notes are convertible directly to purchasers or through underwriters, broker-dealers or agents. If the notes or the common stock into which the notes are convertible are sold through underwriters or broker-dealers, the selling securityholder will be responsible for underwriting discounts or commissions or agent's commissions. These discounts, concessions or commissions as to any particular underwriter, broker-dealer or agent may be in excess of those customary in the types of transactions involved.

The notes and the common stock into which the notes are convertible may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at varying prices determined at the time of sale, or at negotiated prices. Sales may be effected in transactions, which may involve block transactions:

- on any national securities exchange or quotation service on which the notes or the common stock may be listed or quoted at the time of sale;

- in the over-the-counter market;

- in transactions otherwise than on exchanges or services or in the over-the-counter market; or

- through the writing of options.

In connection with sales of the notes and the common stock into which the notes are convertible or otherwise, the selling securityholders may enter into hedging transactions with broker-dealers, which may in turn engage in short sales of the notes and the common stock into which the notes are convertible in the course of hedging the positions they assume. The selling securityholders may also sell short the notes and the common stock into which the notes are convertible and deliver the notes or the common stock into which the notes are convertible to close out short positions, or loan or pledge the notes or the common stock into which the notes are convertible to broker-dealers that in turn may sell the securities.

The aggregate proceeds to the selling securityholders from the sale of the notes or common stock into which the notes are convertible offered by them hereby will be the purchase price of the notes or common stock less discounts and commissions, if any. Each of the selling securityholders reserves the right to accept and, together with their agents from time to time, to reject, in whole or in part, any proposed purchase of notes or common stock to be made directly or through agents. We will not receive any of the proceeds from this offering.

In order to comply with the securities laws of some states, if applicable, the notes and common stock into which the notes are convertible may be sold in these jurisdictions only through registered or licensed brokers or dealers. In addition, in some states the notes and common stock may not be sold unless they have been registered or qualified for sale or an exemption from registration or qualification requirements is available and is complied with.

The selling securityholders and any underwriters, broker-dealers or agents that participate in the sale of the notes and common stock may be "underwriters" within the meaning of Section 2(11) of the Securities Act. Any discounts, commissions, concessions or profit they earn on any resale of the shares may be underwriting discounts and commissions under the Securities Act. Selling securityholders who are "underwriters" within the meaning of Section 2(11) of the Securities Act will be subject to the prospectus delivery requirements of the Securities Act. The

selling securityholders have acknowledged that they understand their obligations to comply with the provisions of the Exchange Act and the rules thereunder relating to stock manipulation, particularly Regulation M.

In addition, any securities covered by this prospectus that qualify for sale pursuant to Rule 144 or Rule 144A of the Securities Act may be sold under Rule 144 or Rule 144A rather than pursuant to this prospectus.

To the extent required, the specific notes or common stock to be sold, the names of the selling securityholders, the respective purchase prices and public offering prices, the names of any agent, dealer or underwriter and any applicable commissions or discounts with respect to a particular offer will be set forth in an accompanying prospectus supplement or, if appropriate, a post-effective amendment to the registration statement of which this prospectus is a part.

We entered into a registration rights agreement for the benefit of the holders of the notes to register their notes and common stock under applicable federal and state securities laws under specific circumstances and at specific times. The registration rights agreement provides for cross-indemnification of the selling securityholders and us and their and our respective directors, officers and controlling persons against specific liabilities in connection with the offer and sale of the notes and the common stock, including liabilities under the Securities Act. We have agreed, among other things, to bear all expenses (other than underwriting discounts and selling commissions) in connection with the registration and sale of the notes and the common stock covered by this prospectus.

VALIDITY OF THE SECURITIES

The validity of the notes and of the common stock offered by this prospectus will be passed upon for Advanced Energy by Sullivan & Cromwell, Palo Alto, California.

EXPERTS

The consolidated financial statements and schedule of Advanced Energy Industries, inc. as of December 31, 2000 and 1999 and for each of the three years in the period ended December 31, 2000 incorporated by reference in this prospectus and elsewhere in the registration statement have been audited by Arthur Andersen LLP, independent public accountants, as indicated in their reports with respect thereto, and are included herein in reliance upon the authority of said firm as experts in giving said reports.

ADDITIONAL INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission, or SEC. You may read and copy any document we file at the SEC's public reference rooms in Washington, D.C. and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. The SEC's website is located at www.sec.gov and contains reports, proxy and information statements and other information regarding issuers who file electronically. Our website is located at www.aei.com.

In this document, we "incorporate by reference" the information we file with the SEC, which means that we can disclose important information to you by referring to that information. The information incorporated by reference is considered to be part of this prospectus, and later information filed with the SEC will update and supersede this information. We incorporate by

reference the documents listed below and any future filings made with the SEC under Section 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed:

1. Our annual report on Form 10-K for the year ended December 31, 2000, including the information incorporated by reference therein from our definitive proxy statement relating to our 2001 annual meeting of stockholders;

2. Our quarterly reports on Form 10-Q for the quarters ended March 31, June 30, and September 30, 2001;

3. Our current reports on Form 8-K filed on February 20, 2001, July 11, 2001 and September 10, 2001; and

4. Our Form 8-A for registration of our common stock filed on October 12, 1995, as amended.

You may obtain copies of these filings, at no cost, by writing or telephoning us at the following address:

Advanced Energy Industries, Inc. 1625 Sharp Point Drive
Fort Collins, Colorado 80525
Attention: Investor Relations
Telephone: (970) 221-4670

You should rely only on the information provided in this document or incorporated in this document by reference. We have not authorized anyone to provide you with different information. You should not assume that the information in this document, including any information incorporated herein by reference, is accurate as of any date other than that on the front of the document.

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by the Registrant in connection with the sale of the securities being registered. All the amounts shown are estimates except for the registration fee and the filing fee.

Registration fee	$ 31,250
Legal fees and expenses	$210,000
Accounting fees and expenses	$ 50,000
Trustee's fees	$ 16,000
Printer's fees	$ 50,000
Other Expenses	$190,000
TOTAL	$547,250

ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS

As permitted by the Delaware General Corporation Law ("DGCL"), Advanced Energy's Restated Certificate of Incorporation, as amended (the "AE Certificate"), provides that no director shall be personally liable to Advanced Energy or any stockholder for monetary damages for breach of fiduciary duty as a director, except for liability: (i) for any breach of the duty of loyalty to Advanced Energy or its stockholders; (ii) for acts or omissions not in good faith or involving intentional misconduct or a knowing violation of the law;
(iii) under Section 174 of the DGCL; or (iv) for any transaction from which the director derived an improper personal benefit. While the AE Certificate provides protection from awards for monetary damages for breaches of fiduciary duty, it does not eliminate the director's duty of care. Accordingly, the AE Certificate will not affect the availability of equitable remedies, such as an injunction, based on a director's breach of the duty of care. The provisions of the AE Certificate described above apply to officers of Advanced Energy only if they are directors of Advanced Energy and are acting in their capacity as directors, and does not apply to officers of Advanced Energy who are not directors.

In addition, Advanced Energy's Bylaws provide that Advanced Energy shall indemnify its Executive Officers (as defined in Rule 3b-7 promulgated under the Exchange Act) and directors, and any employee who serves as an Executive Officer or director of any corporation at Advanced Energy's request, to the fullest extent permitted under and in accordance with the DGCL; provided, however, that Advanced Energy may modify the extent of such indemnification by individual contracts with its Executive Officers and directors; and, provided further, that Advanced Energy shall not be required to indemnify any Executive Officer or director in connection with any proceeding (or part thereof) initiated by such person unless: (i) such indemnification is expressly required to be made by law;
(ii) the proceeding was authorized by the directors of Advanced Energy; (iii) such indemnification is provided by Advanced Energy, in its sole discretion, pursuant to the powers vested in Advanced Energy under the DGCL; or (iv) such indemnification is required to be made under Article XI, Section 43, Subsection
(d) of Advanced Energy's Bylaws. Under the DGCL, directors and officers as well as employees and individuals may be indemnified against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement in connection with specified actions, suits or proceedings, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation as a derivative action), if they acted in good faith and in a manner they reasonably believed to be in or not opposed to the best interests of the corporation, and with respect to any criminal action or proceeding, had no reasonable cause to believe their conduct was unlawful. Advanced Energy maintains a policy of directors' and officers' liability insurance that insures Advanced Energy's

directors and officers against the costs of defense, settlement or payment of a judgment under certain circumstances.

ITEM 16. EXHIBITS

EXHIBIT NUMBER		DESCRIPTION OF THE DOCUMENT
2.1	--	Stock Purchase Agreement, dated November 16, 2001, by and among Advanced Energy Industries, Inc., Advanced Energy Japan K.K., Aera Japan Limited and Certain Stockholders of Aera Japan Limited. The registrant agrees to furnish supplementally a copy of Exhibits A through F-2 and Schedule I through 11.4 to the SEC upon request.
(1)3.1	--	Restated Certificate of Incorporation of Advanced Energy Industries, Inc.
(2)3.2	--	Bylaws of Advanced Energy Industries, Inc.
(3)4.1	--	Registration Rights Agreement, dated as of August 22, 2001, between Advanced Energy Industries, Inc. and Goldman, Sachs & Co.
(4)4.2	--	Indenture, dated as of August 22, 2001, between Advanced Energy Industries, Inc. and State Street Bank and Trust Company of California, N.A., as Trustee
(*)5.1	--	Opinion of Sullivan & Cromwell
(*)8.1	--	Tax Opinion of Sullivan & Cromwell
(*)12.1	--	Computation of Ratio of Earnings to Fixed Charges
23.1	--	Consent of Arthur Andersen LLP, independent public accountants
(*)23.2	--	Consent of Sullivan & Cromwell (included in Exhibit 5.1)
(*)23.3	--	Consent of Sullivan & Cromwell (included in Exhibit 8.1)
(*)24.1	--	Power of Attorney
(*)25.1	--	Form T-1 Statement of Eligibility and Qualification of Trustee

(1) Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (File No. 000-26966), filed August 13, 2001.

(2) Incorporated by reference to the Company's Registration Statement on Form S-1 (File No. 33-97188), filed September 20, 1995, as amended.

(3) Incorporated by reference to Exhibit 4.2 of the Registrant's current report on Form 8-K filed September 10, 2001.

(4) Incorporated by reference to Exhibit 4.1 of the Registrant's current report on Form 8-K filed September 10, 2001.

(*) Previously filed.

ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of The Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from

the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (1)(i) and (1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934, or the Exchange Act, that are incorporated by reference in this registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

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

(4) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(5) Insofar as indemnification for liabilities under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to provisions described in Item 15 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in a successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Fort Collins, Colorado on January 23, 2002.

ADVANCED ENERGY INDUSTRIES, INC.

BY: /s/ MICHAEL EL-HILLOW
MICHAEL EL-HILLOW
(Senior Vice President and Chief Financial Officer)

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

SIGNATURE	TITLE	DATE
*	Chief Executive Officer President & Chairman of the Board (Principal Executive Officer)	January 23, 2002
Douglas S. Schatz		
/s/ MICHAEL EL-HILLOW	Senior Vice President and Chief Financial Officer (Principal Financial Officer & Principal Accounting Officer)	January 23, 2002
Michael El-Hillow		
*	Director	January 23, 2002
G. Brent Backman		
/s/ RICHARD P. BECK	Director	January 23, 2002
Richard P. Beck		
*	Director	January 23, 2002
Trung Doan		
*	Director	January 23, 2002
Arthur A. Noeth		
*	Director	January 23, 2002
Elwood Spedden		
*	Director	January 23, 2002
Gerald Starek		
*	Director	January 23, 2002
Arthur W. Zafiropoulo		
*By: /s/ RICHARD P. BECK		
As Attorney-in-Fact		

EXHIBIT INDEX

EXHIBIT NUMBER		DESCRIPTION OF THE DOCUMENT
2.1	--	Stock Purchase Agreement, dated November 16, 2001, by and among Advanced Energy Industries, Inc., Advanced Energy Japan K.K., Aera Japan Limited and Certain Stockholders of Aera Japan Limited. The registrant agrees to furnish supplementally a copy of Exhibits A through F-2 and Schedule I through 11.4 to the SEC upon request.
(1)3.1	--	Restated Certificate of Incorporation of Advanced Energy Industries, Inc.
(2)3.2	--	Bylaws of Advanced Energy Industries, Inc.
(3)4.1	--	Registration Rights Agreement, dated as of August 22, 2001, between Advanced Energy Industries, Inc. and Goldman, Sachs & Co.
(4)4.2	--	Indenture, dated as of August 22, 2001, between Advanced Energy Industries, Inc. and State Street Bank and Trust Company of California, N.A., as Trustee
(*)5.1	--	Opinion of Sullivan & Cromwell
(*)8.1	--	Tax Opinion of Sullivan & Cromwell
(*)12.1	--	Computation of Ratio of Earnings to Fixed Charges
23.1	--	Consent of Arthur Andersen LLP, independent public accountants
(*)23.2	--	Consent of Sullivan & Cromwell (included in Exhibit 5.1)
(*)23.3	--	Consent of Sullivan & Cromwell (included in Exhibit 8.1)
(*)24.1	--	Power of Attorney
(*)25.1	--	Form T-1 Statement of Eligibility and Qualification of Trustee

(1) Incorporated by reference to the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2001 (File No. 000-26966), filed August 13, 2001.

(2) Incorporated by reference to the Company's Registration Statement on Form S-1 (File No. 33-97188), filed September 20, 1995, as amended.

(3) Incorporated by reference to Exhibit 4.2 of the Registrant's current report on Form 8-K filed September 10, 2001.

(4) Incorporated by reference to Exhibit 4.1 of the Registrant's current report on Form 8-K filed September 10, 2001.

(*) Previously filed.

EXHIBIT 2.1

STOCK PURCHASE AGREEMENT

BY AND AMONG

ADVANCED ENERGY INDUSTRIES, INC.

ADVANCED ENERGY JAPAN K.K.

AERA JAPAN LIMITED

AND

CERTAIN STOCKHOLDERS OF AERA JAPAN LIMITED

Dated November 16, 2001

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EXHIBITS

SCHEDULES

STOCK PURCHASE AGREEMENT

This Stock Purchase Agreement ("Agreement") is made as of the 16th day of November, 2001, by and among Advanced Energy Industries, Inc., a Delaware corporation with its principal office at 1625 Sharp Point Drive, Fort Collins, Colorado 80525 (the "Parent"), Advanced Energy Japan K.K., a Japanese corporation with its principal office at Towa Edogawabashi Building, 347, Yamabuki-cho, Shinjuku-ku, Tokyo, Japan (or such other entity designated by the Parent, the "Buyer"), Aera Japan Limited, a Japanese corporation with its principal office at 2971-8, Ishikawa-Cho, Hachioji-Shi, Tokyo, Japan (the "Company"), and the stockholders of the Company listed on Schedule I attached hereto (the "Stockholders").

Preliminary Statements

1. Each of the Stockholders owns, or has the right to purchase, as indicated, the number of the issued and outstanding shares (collectively, the "Shares") of the common stock, Y.500 par value per share (the "Common Stock"), of the Company set forth opposite such Stockholder's name on Schedule I.

2. The Buyer desires to purchase, and the Stockholders desire to sell, the Shares for the consideration set forth below, subject to the terms and conditions of this Agreement.

3. Simultaneously with the Closing (as defined in Section 1.1 below), the Buyer shall purchase, pursuant to Minority Stock Purchase Agreements, the form of which is attached hereto as Exhibit A ("Minority Stock Purchase Agreement"), from some or all of the stockholders of the Company set forth on Schedule II attached hereto (the "Minority Stockholders") the shares of Common Stock held by such Minority Stockholders (the "Minority Shares"). The Shares and the Minority Shares together shall represent at least 97.1% of the outstanding capital stock of the Company. The Minority Stockholders who agree to sell Minority Shares to the Buyer are referred to herein as the "Selling Minority Stockholders."

NOW, THEREFORE, in consideration of the mutual promises hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereby agree as follows:

1. PURCHASE AND SALE OF THE SHARES.

1.1 PURCHASE OF THE SHARES FROM THE STOCKHOLDERS. Subject to and upon the terms and conditions of this Agreement, at the closing of the transactions contemplated by this Agreement (the "Closing"), each Stockholder shall sell, transfer, convey, assign and deliver to the Buyer, and the Buyer shall purchase, acquire and accept from each Stockholder, all the Shares owned by such Stockholder, as set forth opposite such Stockholder's name on Schedule I. At the Closing, each Stockholder shall deliver to the Buyer certificates evidencing the Shares owned by such Stockholder.

1.2 FURTHER ASSURANCES. At any time and from time to time after the Closing, at the Buyer's request and without further consideration, each of the Stockholders shall promptly execute and deliver such instruments of sale, transfer, conveyance, assignment and

confirmation, and take all such other action as the Buyer may reasonably request to effect the transfer, conveyance and assignment of the Shares to the Buyer, to register the Buyer's name in the Company's stockholders' register, to confirm the Buyer's title to all of the Shares owned by such Stockholder immediately prior to the Closing, to put the Buyer in actual possession and operating control of the assets, properties and business of the Company and the Subsidiaries (as defined in Section 3.3 hereof), to assist the Buyer in exercising all rights with respect thereto and otherwise to carry out the full purpose and intent of this Agreement.

1.3 PURCHASE PRICE FOR THE SHARES.

(a) The purchase price per Share shall be cash in an amount equal to Y.5,784,000,000 subject to any Adjustments (as defined in Section 1.4) (the "Base Price"), divided by the aggregate number of shares of Common Stock outstanding as of the Closing (such per Share price multiplied by the total number of Shares, the "Purchase Price"). The Shares underlying the Aoyama Warrant (as defined in Section 8.11) shall be deemed to be outstanding as of the Closing, for purposes of calculating the Purchase Price.

(b) At the Closing, except as provided pursuant to the Indemnification Agreement dated as of the date hereof between the Buyer and Hisanori Aoyama (the "Aoyama Indemnification Agreement"), the Buyer shall deliver the Purchase Price, less the Escrow Amount (as defined in paragraph (c) below), to the Stockholders by wire transfer of immediately available funds in Japanese yen to the accounts that shall be designated by the Stockholders at least 5 business days prior to the Closing, provided that no Stockholder shall designate more than one account to which such Stockholder's funds are to be delivered. The yen amount to be delivered to each Stockholder, assuming no Adjustments are made, is set forth on Schedule I.

(c) At the Closing, the Buyer shall deliver to State Street Bank and Trust Company, as escrow agent ("Escrow Agent") cash in an amount equal to twelve percent (12%) of the Purchase Price (the "Escrow Amount"), to be held in an account (the "Reserve Account") pursuant to the terms of an escrow agreement among the Buyer, the Stockholders and the Escrow Agent in the form attached hereto as Exhibit B (the "Escrow Agreement"), to satisfy all or part of any claims for indemnity pursuant to Section 10 hereof.

(d) The Escrow Amount shall be deducted pro rata from the portion of the Purchase Price payable to each Stockholder, it being understood that, for purposes of calculating each Stockholder's pro rata share of the Escrow Amount, the portion of the Purchase Price payable to Hisanori Aoyama shall be determined without regard to the Aoyama Indemnification Agreement. Each Stockholder's proportionate share of the Escrow Amount is set forth on Schedule I.

1.4 ADJUSTMENTS TO THE BASE PRICE. The Base Price shall be adjusted as follows (each an "Adjustment" and, collectively, "Adjustments"):

(a) If the Company's stockholders' equity as of November 30, 2001 (as reflected in the November 2001 Financial Statements, as defined in Section 6.3) is less than Y.3.0 billion, and if the Buyer elects (in its sole discretion) to complete the purchase of the Shares, then the Base Price shall be reduced by the amount of the shortfall.

(b) If Section 12.4 is applicable, the Base Price shall be adjusted as set forth therein.

1.5 CLOSING. The Closing shall take place at the offices of Mitsui, Yasuda, Wani & Maeda, Akasaka 2.14 Plaza Building, 14-32, Akasaka 2-chome, Minatu-ku, Tokyo, Japan at 10:00 a.m., Tokyo Time, on January 10, 2002, or at such other place, time or date as may be mutually agreed upon in writing by the parties. The above-referenced scheduled date for the Closing, or such other date as may be mutually agreed upon in writing by the parties, is hereinafter referred to as the "Closing Date."

1.6 STOCKHOLDERS' REPRESENTATIVE.

(a) In order to administer efficiently (i) the determination of the Adjustment Amount (as defined in Section 12.4 hereof), (ii) waiver of any condition to the obligations of the Stockholders to consummate the transactions contemplated hereby, (iii) the defense and/or settlement of any claims for which the Stockholders may be required to indemnify the Buyer or the Company pursuant to Section 10 hereof, and (iv) any rights or obligations of the Stockholders pursuant to this Agreement or the Escrow Agreement, the Stockholders hereby designate Hisanori Aoyama as their representative (the "Stockholders' Representative").

(b) The Stockholders hereby authorize the Stockholders' Representative (i) to make all decisions relating to the determination of the Adjustment Amount, (ii) to take all action necessary in connection with the waiver of any condition to the obligations of the Stockholders to consummate the transactions contemplated hereby, or the defense and/or settlement of any claims for which the Stockholders may be required to indemnify the Buyer or the Company pursuant to Section 10 hereof, (iii) to give and receive all notices required to be given under this Agreement, and (iv) to take any and all additional action as is contemplated, permitted or required by the terms of this Agreement or the Escrow Agreement to be taken by or on behalf of the Stockholders.

(c) In the event that the Stockholders' Representative dies, becomes unable to perform his responsibilities hereunder or resigns from such position, Stockholders (or their respective successors, heirs or executors) holding, prior to the Closing, a majority of the Shares as set forth on Schedule I shall promptly select another representative to fill such vacancy and such substituted representative shall be deemed to be the Stockholders' Representative for all purposes of this Agreement.

(d) All decisions and actions by the Stockholders' Representative, including, without limitation, any agreement between the Stockholders' Representative and the Buyer relating to the determination of the Adjustment Amount or the defense or settlement of any claims for which the Stockholders may be required to indemnify the Buyer and/or the Company pursuant to Section 10 hereof, shall be binding upon all of the Stockholders, and no Stockholder shall have the right to object, dissent, protest or otherwise contest the same.

(e) By their execution of this Agreement, the Stockholders agree that:

(i) the Buyer and the Parent shall be able to rely conclusively on the instructions and decisions of the Stockholders' Representative as to the determination of the Adjustment Amount, the settlement of any claims for indemnification by the Buyer or the Company pursuant to Section 10 hereof, the taking of any action pursuant to the Escrow Agreement or as to any other actions authorized to be taken by the Stockholders' Representative hereunder, and no party hereunder shall have any cause of action against the Buyer or the Parent for any action taken by the Buyer or the Parent in reliance upon the instructions or decisions of the Stockholders' Representative;

(ii) all actions, decisions and instructions of the Stockholders' Representative shall be conclusive and binding upon all of the Stockholders, and no Stockholder shall have any cause of action against the Stockholders' Representative for any action taken, decision made or instruction given by the Stockholders' Representative under this Agreement or the Escrow Agreement;

(iii) the provisions of this Section 1.6 are independent and severable, are irrevocable and coupled with an interest and shall be enforceable notwithstanding any rights or remedies that any Stockholder may have in connection with the transactions contemplated by this Agreement;

(iv) money damages for any breach of the provisions of this Section 1.6 would be inadequate;

(v) the provisions of this Section 1.6 shall be binding upon the executors, heirs, legal representatives and successors of each Stockholder, and any references in this Agreement to a Stockholder or the Stockholders shall mean and include the successors to the Stockholder's or Stockholders' rights hereunder, whether pursuant to testamentary disposition, the laws of descent and distribution or otherwise; and

(vi) the Stockholders' Representative shall have the right, power and authority to execute and deliver on behalf of each Stockholder the Escrow Agreement and any other agreements, certificates and instruments contemplated by this Agreement or necessary or appropriate to facilitate the Closing.

(f) All fees and expenses incurred by the Stockholders' Representative shall be paid by the Stockholders in proportion to their ownership of Shares as set forth on Schedule I.

1.7 CURRENCY. All references herein to "dollars" or "$" shall refer to the currency of the United States, and all references herein to "yen" or "Y." shall refer to the currency of Japan. Amounts given in this Agreement in yen shall include amounts in other currencies, on an as-converted-to-yen basis, based upon the applicable exchange rate, as quoted by The Wall Street Journal, on the date of this Agreement.

2. REPRESENTATIONS OF THE STOCKHOLDERS REGARDING THE SHARES.

Each Stockholder severally represents and warrants to the Buyer and the Parent as follows:

2.1 OWNERSHIP OF SHARES. Except as set forth in Schedule 2.1, such Stockholder has good and marketable title, free and clear of any and all Share Encumbrances (as defined below), to all of the Shares listed on Schedule I as being owned by such Stockholder. The Shares listed opposite such Stockholder's name on Schedule I constitute all of the shares of capital stock of the Company beneficially owned by such Stockholder. Subject to approval by the Board of Directors of the Company pursuant to the Company's Articles of Incorporation, which approval has been (or on or prior to the Closing will have been) obtained, such Stockholder has the full right, power and authority to transfer, convey and deliver to the Buyer at the Closing the Shares owned by such Stockholder and, upon consummation of the sale of the Shares contemplated hereby, the Buyer will acquire from such Stockholder good and marketable title to such Shares, free and clear of all Share Encumbrances. "Share Encumbrances" means any title defect, liens, charges, claims, options, pledges, voting trusts, proxies, stockholder or similar agreements, security interests, mortgages, encumbrances or restrictions of any kind, other than applicable securities law restrictions and restrictions under the Company's Articles of Incorporation.

2.2 AUTHORITY. Such Stockholder has all requisite power and authority to execute and deliver this Agreement and to perform such Stockholder's obligations hereunder. This Agreement has been duly and validly executed and delivered by such Stockholder and constitutes valid and legally binding obligations of such Stockholder, enforceable against such Stockholder in accordance with its terms.

2.3 NONCONTRAVENTION. Neither the execution and delivery of this Agreement by such Stockholder nor the consummation by such Stockholder of the transactions contemplated hereby will: (i) conflict with or violate any provision of (A) the Articles of Incorporation, Share Handling Regulation or Regulations of the Board of Directors of the Company or (B) the articles of incorporation, certificate of incorporation, bylaws or other charter documents of any of its Subsidiaries (as defined in Section 3.3 hereof); (ii) except as set forth in Schedule 2.3, require on the part of such Stockholder any filing with, or any permit, authorization, consent or approval of, any court, arbitral tribunal, administrative agency or commission or other governmental or regulatory authority or agency except where the failure to obtain the same will not have a material adverse effect on the Shares, Buyer's rights and title thereto or the transactions contemplated hereby; (iii) result in the imposition of any Share Encumbrance upon the Shares owned by such Stockholder; or (iv) violate any order, writ, injunction, decree, law, statute, rule or regulation applicable to such Stockholder or to the Shares owned by such Stockholder.

2.4 ENGLISH LANGUAGE AGREEMENT. This Agreement has been prepared in English. Any translations of this Agreement or any portion thereof have been for reference purposes only and shall not control the content or interpretation of any provision of this Agreement. The Stockholder either (a) has a sufficient command of the English language to understand the full intent of each provision of this Agreement or (b) has consulted with such Stockholder's advisors who have such command of the English language to ensure that such Stockholder understands the full intent of each provision of this Agreement.

3. REPRESENTATIONS OF THE STOCKHOLDERS AND THE COMPANY REGARDING THE COMPANY.

Each of the Stockholders and the Company, jointly and severally, represents and warrants to the Buyer that:

3.1 ORGANIZATION. The Company is a corporation duly organized and validly existing under the laws of Japan, and has all requisite power and authority (corporate and other) to own its properties, to carry on its business as now being conducted, to execute and deliver this Agreement and the agreements contemplated herein, and to consummate the transactions contemplated hereby and thereby. The Company is duly qualified to do business and in good standing in all jurisdictions in which its ownership of property or the character of its business requires such qualification. A certified copy of the Articles of Incorporation of the Company, as amended to date, has been previously delivered to the Buyer, is complete and correct, and no amendments have been made thereto or have been authorized since the date thereof.

3.2 CAPITALIZATION OF THE COMPANY. The Company's authorized capital stock consists of 250,000 shares of Common Stock, Y.500 par value per share, of which 68,000 shares are issued and outstanding on the date hereof and 73,000 shares shall be issued and outstanding immediately prior to the Closing, and, in each case, held of record and beneficially by the Stockholders and Minority Stockholders. All such issued and outstanding shares of Common Stock have been, and on the Closing Date will be, duly and validly issued and are, and on the Closing Date will be, fully paid and non-assessable. Except as set forth in Schedule 3.2 attached hereto, there are not, and on the Closing Date there will not be, outstanding (i) any options, warrants or other rights to purchase from the Company any capital stock of the Company; (ii) any securities issued by the Company convertible into or exchangeable for shares of such stock; or (iii) any other commitments of any kind for the issuance of additional shares of capital stock or options, warrants or other securities of the Company. No other type of stock (other than common stock) of the Company is issued and outstanding. The Company holds no shares of the issued and outstanding shares of Common Stock in the treasury of the Company. The Company has complied in full with the Japanese Corporation Law and other applicable laws with respect to the provision to its stockholders of corporate, financial and other information.

3.3 SUBSIDIARIES.

(a) Schedule 3.3 attached hereto sets forth:

(i) the name and percentage ownership by the Company of each corporation, partnership, joint venture or other entity in which the Company has, directly or indirectly, an equity interest representing more than 50% of the capital stock thereof or other equity interests therein (individually, a "Subsidiary" and, collectively, the "Subsidiaries");

(ii) the name and percentage ownership by any Stockholder of each corporation, partnership, joint venture or other entity in which such Stockholder has, directly or indirectly, an equity interest representing more than 50% of the capital stock thereof or other equity interests therein, which has or at any time in the past five years has had a

relationship with the Company or any of the Subsidiaries (individually, an "Affiliated Entity" and collectively, the "Affiliated Entities");

(iii) the jurisdiction of incorporation or organization, capitalization and ownership of each Subsidiary and Affiliated Entity;

(iv) the names of the officers, directors, partners and members (as the case may be) of each Subsidiary and Affiliated Entity; and

(v) the jurisdictions in which each Subsidiary and Affiliated Entity is qualified or holds licenses to do business as a foreign corporation or other foreign entity.

(b) Except as set forth in Schedule 3.3, the Company owns of record and beneficially all of the outstanding shares of capital stock of each of the Subsidiaries free and clear of all covenants, conditions, restrictions, liens, charges and encumbrances.

(c) Each of the Subsidiaries and Affiliated Entities is a corporation or other entity duly organized and validly existing and in good standing under the laws of the jurisdiction of its incorporation or organization and has all requisite power and authority to own its properties and carry on its business as now being conducted. Each of the Subsidiaries and Affiliated Entities is duly qualified to do business and in good standing in all jurisdictions in which its ownership of property or the character of its business requires such qualification. Certified copies of the Articles of Incorporation, Bylaws (if any) and other governing instruments of the Subsidiaries and Affiliated Entities, each as amended to date, have been previously delivered to the Buyer, are complete and correct, and no amendments have been made thereto or have been authorized since the date of such delivery. The Company does not own, directly or indirectly, any capital stock of or other equity interest representing more than 10% of the equity of any corporation, partnership or other entity, other than the Subsidiaries. The shares of capital stock of each Subsidiary as set forth in Schedule 3.3 have been duly and validly issued and are fully paid and non-assessable.

(d) Except as set forth in Schedule 3.3, none of the Subsidiaries holds shares of its capital stock in its treasury, and there are not, and on the Closing Date there will not be, outstanding any (i) options, warrants or other rights with respect to the capital stock of any of the Subsidiaries, (ii) any securities convertible into or exchangeable for shares of such stock, or (iii) any other commitments of any kind for the issuance of additional shares of capital stock or options, warrants or other securities of any of them.

3.4 AUTHORIZATION.

(a) The execution and delivery by the Company of this Agreement and the agreements provided for herein, and the consummation by the Company of all transactions contemplated hereunder and thereunder by the Company, have been or will be prior to the Closing duly authorized by all requisite corporate action, including approval by the Board of Directors of the Company. The board of directors of the Company has duly approved, or prior to the Closing will duly approve, the transfer of the Shares by the Stockholders to the Buyer, in

accordance with the Articles of Incorporation of the Company, and such approval as of the Closing will not have been modified or rescinded.

(b) This Agreement has been duly executed by the Company and the Stockholders. This Agreement and all other agreements and obligations entered into and undertaken in connection with the transactions contemplated hereby to which the Company or any of the Stockholders is a party constitute the valid and legally binding obligations of the Company and the Stockholders, enforceable against them in accordance with their respective terms, except as enforceability of the same may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally or by the exercise of judicial discretion in accordance with general principles applicable and similar remedies.

(c) The execution, delivery and performance by the Company and the Stockholders of this Agreement and the agreements provided for herein, and the consummation by the Company and the Stockholders of the transactions contemplated hereby and thereby, will not, with or without the giving of notice or the passage of time or both, (i) violate the provisions of any law, rule or regulation applicable to the Company or any of the Stockholders; (ii) violate or conflict with any provision of the (A) Articles of Incorporation, Share Handling Regulation or Regulations of the Board of Directors of the Company, or (B) articles of incorporation, certificate of incorporation, bylaws or other charter documents of any of the Subsidiaries;
(iii) violate any judgment, decree, order or award of any court, governmental body or arbitrator; or (iv) conflict with, result in a breach of, constitute (with or without due notice or lapse of time or both) a default under, result in the acceleration of obligations under, create in any party the right to accelerate, terminate, modify or cancel, or require any payment or any notice, consent or waiver under, any agreement, instrument, contract or arrangement to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries, or any of their properties, is or may be bound, or cause the creation of any lien, charge or encumbrance upon the properties or assets of the Company or any of the Subsidiaries.

(d) Schedule 3.4 attached hereto sets forth a true, correct and complete list of all consents and approvals of third parties that are required in connection with the consummation by the Company and the Stockholders of the transactions contemplated by this Agreement.

3.5 FINANCIAL STATEMENTS.

(a) The Company or the Stockholders have previously delivered to the Buyer (i) the audited consolidated balance sheet of the Company and the Subsidiaries as of June 30, 2001 (the "Current Balance Sheet") and the related statements of income, stockholders' equity, retained earnings and cash flows of the Company and the Subsidiaries for the fiscal year then ended (the "Current Financial Statements"), and (ii) the audited consolidated balance sheet of the Company and the Subsidiaries as of June 30, 2000 (collectively with the Current Balance Sheet, the "Audited Balance Sheets") and the related statements of income, stockholders' equity, retained earnings and cash flows of the Company and the Subsidiaries for the fiscal year then ended (collectively with the Current Financial Statements, the "Audited Financial Statements"). The Company or the Stockholders have also previously delivered to the Buyer the unaudited

consolidated balance sheets of the Company and the Subsidiaries as of March 31, 2000, September 30, 2000, December 31, 2000, March 31, 2001 and the statements of income, stockholders' equity, retained earnings and cash flows of the Company and the Subsidiaries for each of the three month periods then ended (the "Historical Unaudited Financial Statements"). The Audited Financial Statements, the Historical Unaudited Financial Statements and the Interim Financial Statements (as defined in Section 6.3 hereof) are collectively referred to herein as the "Financial Statements." The Audited Financial Statements and the Historical Unaudited Financial Statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP"). The Audited Financial Statements have been audited by Deloitte Touche Tomatsu, the Company's independent public accountants, who issued unqualified Independent Auditor's Reports thereon.

(b) The Financial Statements fairly present, or, in the case of the Interim Financial Statements, will fairly present, as of their respective dates, the financial condition, retained earnings, assets and liabilities of the Company and the Subsidiaries and the results of operations of the Company's and the Subsidiaries' business for the periods indicated. With respect to contracts and commitments for the sale of goods or the provision of services by the Company and the Subsidiaries, the Audited Financial Statements and the Historical Unaudited Financial Statements contain and reflect adequate reserves, which are consistent with previous reserves taken, for all reasonably anticipated material losses and an adequate accrual for all appropriate costs and expenses, and the Interim Financial Statements will contain and reflect adequate reserves for all reasonably anticipated material losses and an adequate accrual for all appropriate costs and expenses. The amounts shown, or, in the case of the Interim Financial Statements, which will be shown, as accrued for current and deferred income and other taxes in the Financial Statements are, or, in the case of the Interim Financial Statements, will be, sufficient for the payment of all accrued and unpaid income taxes, interest, penalties, assessments or deficiencies applicable to the Company or any Subsidiary, whether disputed or not, for the applicable period then ended and periods prior thereto.

(c) The book value of inventory reflected on the Audited Balance Sheets, as computed on an average cost method basis, is true and correct and in conformity with GAAP. The related reserves set forth in the footnotes to the Audited Financial Statements are adequate and in conformity with GAAP.

3.6 ABSENCE OF UNDISCLOSED LIABILITIES. Except as disclosed on Schedule 3.6 attached hereto, the Company has no liability or commitment (whether known or unknown, whether absolute or contingent, whether liquidated or unliquidated and whether due or to become due), other than (i) the liabilities shown on the Company's Current Balance Sheet, (ii) liabilities, similar in nature to those shown on such balance sheet, which have arisen since June 30, 2001 in the ordinary course of business consistent with past practice including with respect to frequency and amount (the "Ordinary Course of Business") and
(iii) any contractual and other liabilities incurred in the Ordinary Course of Business not required by GAAP to be reflected on a balance sheet.

3.7 LITIGATION. Except as set forth on Schedule 3. 7 attached hereto (a) there is no action, suit or proceeding to which the Company or any of the Subsidiaries is a party (either as a plaintiff or defendant) pending or, to the best knowledge of the Company and the

Stockholders, threatened before any court or governmental agency, authority, body or arbitrator and, to the best knowledge of the Company and the Stockholders, there is no basis for any such action, suit or proceeding; (b) neither the Company nor any of the Subsidiaries, nor, to the best knowledge of the Company and the Stockholders, any officer, director or employee of any of the foregoing, has been permanently or temporarily enjoined by any order, judgment or decree of any court or any governmental agency, authority or body from engaging in or continuing any conduct or practice in connection with the business, assets, or properties of the Company or any of the Subsidiaries; and (c) there is not in existence on the date hereof any order, judgment or decree of any court, tribunal or agency enjoining or requiring the Company or any of the Subsidiaries to take any action of any kind with respect to its business, assets or properties.

3.8 INSURANCE. Schedule 3.8 attached hereto sets forth a true, correct and complete list of all fire, theft, casualty, general liability, workers compensation, business interruption, environmental impairment, product liability, automobile and other insurance policies maintained by the Company or any of the Subsidiaries and of all life insurance policies maintained on the lives of any of their employees, specifying the type of coverage, the amount of coverage, the premium, the insurer and the expiration date of each such policy (collectively, the "Insurance Policies") and all claims (including pending claims) made under such Insurance Policies. True, correct and complete copies of all Insurance Policies have been previously delivered or disclosed by the Stockholders or the Company to the Buyer. The Insurance Policies are in full force and effect and are in amounts of a nature which are adequate and customary for the Company's and the Subsidiaries' business. All premiums due on the Insurance Policies or renewals thereof have been paid, and there is no default under the Insurance Policies. Except as set forth on Schedule 3.8, neither the Company nor any of the Subsidiaries has received any notice or other communication from any issuer of the Insurance Policies canceling or materially amending any of the Insurance Policies, materially increasing any deductibles or retained amounts thereunder, or materially increasing the annual or other premiums payable thereunder, and, to the best knowledge of the Company and the Stockholders, no such cancellation, amendment or increase of deductibles, retainages or premiums is threatened. Except as set forth on Schedule 3.8, neither the Company nor any of the Subsidiaries has any outstanding claims or any dispute with any insurance carrier regarding claims, settlements or premiums and neither the Company nor any of the Subsidiaries has failed to give any notice or present any claim under any Insurance Policy in due and timely fashion. There are no outstanding requirements or recommendations by any issuer of the Insurance Policies or by any governmental authority which requires or recommends any changes in the conduct of the business of, or any repairs or other work to be done on or with respect to any of the properties or assets of, the Company or any of the Subsidiaries.

3.9 PERSONAL PROPERTY. Schedule 3.9 attached hereto sets forth
(i) a true, correct and complete list of all items of tangible personal property (A) owned by the Company or any of the Subsidiaries as of the date hereof having either a net book value per unit or an estimated fair market value per unit in excess of Y.2,400,500; or (B) not owned by the Company or any Subsidiary but in the possession of or used or useful in the business of the Company or any of the Subsidiaries and having rental payments therefor in excess of Y.180,000 per month or Y.1.8 million per year (collectively, the "Personal Property"); and
(ii) a description of the owner of, and any agreement relating to the use of, each item of Personal Property not owned by the

Company or a Subsidiary and the circumstances under which such Property is used. Except as disclosed in Schedule 3.9:

(a) with respect to the Personal Property owned by the Company or any Subsidiary, the Company or the relevant Subsidiary, as the case may be, has good and marketable title to each item of Personal Property free and clear of all liens, leases, encumbrances, claims under bailment and storage agreements, equities, conditional sales contracts, security interests, charges and restrictions, except for liens, if any, for personal property taxes not due;

(b) no officer, director, stockholder or employee of the Company or any Subsidiary, nor any spouse, child or other relative or affiliate thereof, owns, or holds any interest in, directly or indirectly, in whole or in part, any of the Personal Property described in Schedule 3.9;

(c) each item of Personal Property not owned by the Company or a Subsidiary is in such condition that upon the return of such property to its owner in its present condition at the end of the relevant lease term or as otherwise contemplated by the applicable agreement between the Company or the relevant Subsidiary, as the case may be, and the owner or lessor thereof, the obligations of the Company or the relevant Subsidiary, as the case may be, to such owner or lessor will be discharged;

(d) the Personal Property is in good operating condition and repair, normal wear and tear excepted, is currently used by either the Company or the relevant Subsidiary in the ordinary course of its business and normal maintenance has been consistently performed with respect to the Personal Property; and

(e) the Company and the Subsidiaries own or otherwise have the right to use all of the Personal Property now used or useful in the operation of their business or the use of which is necessary for or useful in the performance of any material contract, letter of intent or proposal to which any of them is a party.

3.10 INTANGIBLE PROPERTY. For purposes of this Agreement, "Intangible Property" shall mean all intangible property owned by, or used or useful in connection with the business of, the Company or any of the Subsidiaries, including, but not limited to, trade secrets, know-how, any other confidential information of the Company or any of the Subsidiaries, Japanese and foreign patents, utility models, designs, integrated circuit models, trade names, trademarks, trade name and trademark registrations, domain names and domain name registrations, copyrights and copyright registrations, and applications for any of the foregoing. Schedule 3.10 attached hereto sets forth a true, correct and complete list of (i) all Intangible Property owned by the Company or any Subsidiary that is registrable under applicable law, (ii) all Intangible Property that is owned by a party other than the Company or the Subsidiaries, and (iii) all licenses or similar agreements or arrangements to which the Company or any of the Subsidiaries is a party, either as licensee or licensor, with respect to the Intangible Property. Except as otherwise disclosed in Schedule 3.10:

(a) with respect to Intangible Property owned by the Company or a Subsidiary, the Company or the relevant Subsidiary, as the case may be, is the sole and exclusive owner of all right, title and interest in and to the Intangible Property and all designs, permits, labels and packages used on or in connection therewith, free and clear of all liens, security interests, charges, encumbrances, equities or other adverse claims;

(b) the Company or the relevant Subsidiary, as the case may be, has the right and authority to use, and to continue to use after the Closing, the Intangible Property in connection with the conduct of its business in the manner presently conducted, and such use or continuing use does not and will not conflict with, infringe upon or violate any rights of any other person, corporation or entity;

(c) none of the Company, the Subsidiaries or any of the Stockholders has received notice of, or has any knowledge of any basis for, a pleading or threatened claim, interference action or other judicial or adversarial proceeding against the Company or any of the Subsidiaries that any of the operations, activities, products, services or publications of the Company or any of the Subsidiaries or any of their customers or distributors infringes or will infringe any patent, trademark, trade name, copyright, trade secret or other property right of a third party, or that the Company or any of the Subsidiaries is illegally or otherwise using the trade secrets, formulae or property rights of others;

(d) there are no outstanding, nor to the best knowledge of the Company and the Stockholders, any threatened disputes or other disagreements with respect to any licenses or similar agreements or arrangements described in Schedule 3.10 or with respect to infringement by a third party of any of the Intangible Property;

(e) the Intangible Property owned or licensed by the Company or the relevant Subsidiary, as the case may be, is sufficient to conduct the Company's or the relevant Subsidiary's business, as the case may be, as presently conducted;

(f) the Company or the relevant Subsidiary, as the case may be, has taken all steps reasonably necessary to protect its right, title and interest in and to the Intangible Property and the continued use of the Intangible Property;

(g) no officer, director, stockholder or employee of the Company or any Subsidiary, nor any spouse, child or other relative or affiliate thereof, owns, or holds any interest in, directly or indirectly, in whole or in part, any of the Intangible Property; and

(h) none of the Company, the Subsidiaries or any Stockholder has any knowledge that any third party is infringing, will infringe or is threatening to infringe upon or otherwise violate any of the Intangible Property in which the Company or any Subsidiary has ownership rights.

3.11 LEASES. Schedule 3.11 attached hereto sets forth (a) a true, correct and complete list as of the date hereof of all leases, rental agreements and licenses for the use of real property, identifying separately each lease, rental agreement and license, to which the Company or any of the Subsidiaries is a party (collectively, the "Leases"). True, correct and complete copies of all Leases and all amendments, modifications and supplemental agreements thereto,

have previously been delivered by the Stockholders or the Company to the Buyer. The Leases are in full force and effect, are binding and enforceable against each of the parties thereto in accordance with their respective terms and, except as set forth on Schedule 3.11, have not been modified or amended since the date of delivery to the Buyer. No party to any Lease has sent written notice to the other claiming that such party is in default thereunder. Except as set forth on Schedule 3.11, there has not occurred any event which would constitute a material breach of or default in the performance of any covenant, agreement or condition contained in any Lease, nor has there occurred any event which with the passage of time or the giving of notice or both would constitute such a material breach or default. Neither the Company nor any of the Subsidiaries is obligated to pay any leasing or brokerage commission relating to any Lease and, except as set forth on Schedule 3.11, will not have any obligation to pay any leasing or brokerage commission upon the renewal of any Lease. Except as set forth on Schedule 3.11, no construction, alteration or other leasehold improvement work with respect to any of the Leases remains to be paid for or to be performed by the Company or any of the Subsidiaries. The Financial Statements contain adequate reserves to provide for the restoration of the property subject to the Leases at the end of the respective Lease terms, to the extent required by the Leases and based on currently available information.

3.12 REAL ESTATE.

(a) Schedule 3.12A attached hereto contains a true, correct and complete list of (i) the addresses and legal descriptions of all real property owned by the Company or any Subsidiary (the "Real Estate"), (ii) the current use of each piece of Real Estate, including the names and positions of each of the occupants, if any, and (iii) all liabilities, liens, encumbrances, easements, restrictions, reservations, tenancies, agreements or other obligations affecting the Real Estate (collectively, the "Exceptions"). On the Closing Date, the Company or the relevant Subsidiary, as the case may be, will have good, clear, record and marketable title to the Real Estate, free and clear of all such Exceptions, other than the permitted exceptions set forth on Schedule 3.12B (the "Permitted Exceptions").

(b) Except as set forth on Schedule 3.12A, no work has been performed on or materials supplied to the Real Estate within any applicable statutory period which could give rise to mechanics or materialman's liens that can be enforced against the Real Estate.

(c) There is no pending or threatened condemnation or eminent domain proceeding with respect to the Real Estate.

(d) Except as set forth on Schedule 3.12A, there are no taxes or betterment assessments other than ordinary real estate taxes pending or payable against the Real Estate and there are no contingencies existing under which any assessment for real estate taxes may be retroactively filed against the Real Estate, and there are no taxes or levies, permit fees or connection fees which must be paid respecting existing curb cuts, sewer hookups, water-main hookups or services of a like nature.

(e) The Real Estate is legally subdivided and consists of separate tax lots so that it is assessed separate and apart from any other property.

(f) Except as set forth on Schedule 3.12A, all installation charges of all utility systems have been fully paid and all outstanding service charges therefor have been paid by the Company or the relevant Subsidiary, as the case may be. Neither the Company nor any of the Subsidiaries has experienced any material interruption in the delivery of adequate quantities of any utilities (including, without limitation, electricity, natural gas, potable water, water for cooling or similar purposes and fuel oil) or other public services (including, without limitation, sanitary and industrial sewer service) required in the operation of its business.

(g) Except as set forth on Schedule 3.12A, the Real Estate is not located in any special flood hazard area designated by any governmental authority, agency or instrumentality having jurisdiction over the Real Estate (collectively, "Governmental Agencies").

(h) The Real Estate complies with the requirements of all building, zoning, subdivision, health, safety, environmental, pollution control, waste products, sewage control and all other applicable statutes, laws, codes, ordinances, rules, orders, regulations, decrees and judgments (collectively, the "Governmental Regulations") of any and all Governmental Agencies. The Company and its Subsidiaries have obtained, and the Stockholders or the Company have previously provided the Buyer with copies of, all consents, permits, licenses and approvals required by such Governmental Regulations. Such consents, permits, licenses, variances and approvals are in full force and effect and have been properly and validly issued. Neither the Company nor any Subsidiary is aware of any fact, condition or reason for believing that any Permit will not be renewable on expiration. There is no action pending or threatened by any Governmental Agencies claiming that the Real Estate violates any Governmental Regulations or threatening to shut down or restrict the operations of the business of the Company or any of the Subsidiaries.

(i) There are no suits, petitions, notices or proceedings pending, given or threatened by any persons or Governmental Agencies before any court, Governmental Agencies or instrumentalities, administrative or otherwise, which if given, commenced or concluded would have or could be expected to have, an adverse effect on the business, assets, operations or prospects of the Company and its Subsidiaries, individually or taken as a whole (a "Material Adverse Effect").

(j) Neither the Company nor any of the Subsidiaries has received notice from any insurer of the Real Estate threatening to cancel any insurance coverage or requiring any changes or corrective work to the Real Estate which has not been satisfied.

(k) All of the buildings, fixtures and other improvements located on the Real Estate are in good operating condition and repair, and the operation thereof as presently conducted is not in violation of any applicable building code, zoning ordinance or other law or regulation.

(l) Schedule 3.12A sets forth a true, correct and complete list of all title insurance policies, surveys, engineering reports, hazardous waste reports, environmental studies, investigations and audits prepared with respect to property currently or formerly owned, leased, operated or controlled by the Company or any Subsidiary, copies of which have previously been delivered by the Stockholders or the Company to the Buyer. Schedule 3.12B

sets forth a true, correct and complete list of all reports, audits, investigations, surveys and studies concerning the environmental status of property currently or formerly owned, leased, operated or controlled by the Company or any Subsidiary of which the Company or any Subsidiary has knowledge, but does not possess.

3.13 INVENTORY. Except as set forth on Schedule 3.13, the inventory of the Company and the Subsidiaries (the "Inventory") consists of items of a quality and quantity which are usable or saleable within one year without discount in the ordinary course of the business conducted by the Company and the Subsidiaries. The value of all items of obsolete materials and of materials of below standard quality have been written down to realizable market value. The values at which the Inventory is carried reflect the normal inventory valuation policy of the Company and the Subsidiaries of stating inventory at the average cost method, and such valuation policy as applied is in accordance with GAAP.

3.14 ACCOUNTS RECEIVABLE. Schedule 3.14 attached hereto sets forth a true, correct and complete list of the accounts and notes receivable of the Company and the Subsidiaries as of September 30, 2001. All of the Company's current accounts receivable arose out of the sales of inventory or services in the Ordinary Course of Business and are collectible in the face value thereof within 120 days after the date of invoice, using normal collection procedures, net of the reserve for doubtful accounts set forth thereon, which reserve is adequate and was determined in accordance with GAAP. Receipt by the Company of a promissory note relating to an account receivable shall deem the account "collected" as of the date of receipt for purposes of this representation and warranty, provided that (a) since November 1, 2000, the maker of the promissory note shall not have defaulted, or failed to timely make any payment, on such promissory note or any other promissory note delivered by such maker to the Company or a Subsidiary (other than any failure to pay an immaterial amount, which failure was cured within 15 days thereafter) and (b) the full amount of the promissory note is paid to the Company within 150 days after the date the promissory note is received by the Company.

3.15 TAX MATTERS.

(a) Except as set forth on Schedule 3.15 attached hereto, the Company and each of the Subsidiaries has, in a timely manner, filed all tax returns and reports which are necessary or required for the conduct of its respective business (the "Tax Returns"), and the Tax Returns properly reflect the Taxes (as defined below) due for the periods covered thereby. All Taxes have been properly and fully paid to the extent due and payable. "Taxes" shall mean all governmental charges or impositions of each and every kind, regardless of whether measured by properties, assets, wages, gross or net income, profits, capital gains or otherwise.

(b) The Company has set up adequate reserves or provisions (in accordance with GAAP) for the payment of Taxes not yet due and payable in respect of all periods covered by the Tax Returns and all Taxes payable or anticipated to be payable for any and all periods ending on or before the Closing Date which are not covered by the Tax Returns.

(c) Except as set forth in Schedule 3.15, there are no disputes or disagreements pending or contemplated with any tax authorities regarding liability which could exceed Y.12 million in the aggregate or, to the best of the knowledge of the Stockholders,

potential liability for any Tax (including penalties and interest) recoverable from the Company or any Subsidiary or regarding the availability to the Company or any Subsidiary of any relief from Tax, which liability could exceed Y.12 million in the aggregate.

(d) All documents which are liable to stamp duty and under which the Company or any Subsidiary has any right have been properly stamped.

3.16 BOOKS AND RECORDS. The general ledgers and books of account of the Company and the Subsidiaries are in all material respects complete and correct and have been maintained in accordance with good business practice and in accordance with all applicable procedures required by laws and regulations.

3.17 CONTRACTS AND COMMITMENTS.

(a) Schedule 3.17 attached hereto contains a true, complete and correct list and description of the following contracts and agreements, whether written or oral (collectively, the "Contracts"), which, except for Contracts listed pursuant to Sections 3.17(a)(viii) through (x) below, involve payments or receipts by the Company or any of the Subsidiaries of more than Y.2.4 million:

(i) all loan agreements, indentures, mortgages and guaranties to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries or any of their property is bound;

(ii) all pledges, conditional sale or title retention agreements, security agreements, equipment obligations, personal property leases and lease purchase agreements to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries or any of their property is bound;

(iii) all contracts, agreements, commitments, purchase orders or other understandings or arrangements to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries or any of their property is bound which (A) involve payments or receipts by the Company or any of the Subsidiaries of more than Y.2.4 million in the case of any single contract, agreement, commitment, understanding or arrangement under which full performance (including payment) has not been rendered by all parties thereto or (B) which may have a Material Adverse Effect;

(iv) all collective bargaining agreements, employment and consulting agreements, executive compensation plans, bonus plans, deferred compensation agreements, pension plans, retirement plans, employee stock option or stock purchase plans and group life, health and accident insurance and other employee benefit plans, agreements, arrangements or commitments to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries or any of their property is bound;

(v) all agency, distributor, sales representative, franchise or similar agreements to which the Company or any of the Subsidiaries is a party or by which the Company or any of the Subsidiaries or any of their property is bound;

(vi) all contracts, agreements or other understandings or arrangements between the Company and any of the Subsidiaries (including, but not limited to, any tax sharing arrangements) or between the Company or any of the Subsidiaries, on the one hand, and any of the Stockholders or any of their Affiliated Entities, on the other hand;

(vii) all leases, whether operating, capital or otherwise, under which the Company or any of the Subsidiaries is lessor or lessee;

(viii) all contracts, agreements and other documents or information relating to past disposal of waste (whether or not hazardous);

(ix) all contracts, agreements or other arrangements imposing a non-competition or non-solicitation obligation on the Company or any of the Subsidiaries or in any way restricting the Company or any of the Subsidiaries from engaging in any business activities; and

(x) any other material agreements or contracts entered into by the Company or any of the Subsidiaries.

(b) Except as set forth on Schedule 3.17:

(i) each Contract is a valid and legally binding agreement of the Company or the relevant Subsidiary, enforceable against or by the Company or the relevant Subsidiary in accordance with its terms, except as enforceability of the same may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally or by the exercise of judicial discretion in accordance with general principles applicable to equitable and similar remedies, and the Company or the relevant Subsidiary does not have any knowledge that any Contract is not a valid and binding agreement of the other parties thereto;

(ii) the Company or the relevant Subsidiary has fulfilled all material obligations required pursuant to the Contracts to have been performed by the Company or the relevant Subsidiary, as the case may be, on its part prior to the date hereof, and the Company or the relevant Subsidiary, as the case may be, has no reason to believe that it will not be able to fulfill, when due, all of its obligations under the Contracts which remain to be performed after the date hereof;

(iii) the Company or the relevant Subsidiary is not in breach of or default under any Contract, and no event has occurred which with the passage of time or giving of notice or both would constitute such a default, result in a loss of rights or result in the creation of any lien, charge or encumbrance, thereunder or pursuant thereto;

(iv) to the best knowledge of the Company and the Stockholders, there is no existing breach or default by any other party to any Contract, and no event has occurred which with the passage of time or giving of notice or both would constitute a default by such other party, result in a loss of rights or result in the creation of any lien, charge or encumbrance thereunder or pursuant thereto;

(v) there are not and, since January 1, 1998 have not been, any claims of a non-routine nature relating to the Company or any Subsidiary by customers of the Company or any of the Subsidiaries under any warranties, whether express or implied;

(vi) the Company and the Subsidiaries are not restricted by any Contract from carrying on their business anywhere in the world;

(vii) neither the Company nor any of the Subsidiaries has any written or oral contracts to sell products or perform services which are expected to be performed at, or to result in, a loss; and

(viii) neither the Company nor any of the Subsidiaries has experienced any shortages of components, raw materials or other supplies (collectively "Supplies") within the twelve (12) month period preceding the date hereof, and the Company and the Subsidiaries have on hand, or have reason to believe they can timely obtain, a sufficient quantity of Supplies to satisfy all outstanding orders heretofore received and all orders anticipated to be received from the date hereof through the first anniversary of the Closing Date.

(c) True, correct and complete copies of all written Contracts, and true, correct and complete summaries of all oral contracts, have previously been disclosed by the Company or the Stockholders to the Buyer, and copies of any of the Contracts that are requested by the Buyer shall have been delivered to the Buyer by the Stockholders or the Company prior to the Closing.

3.18 COMPLIANCE WITH AGREEMENTS AND LAWS.

(a) The Company and the Subsidiaries each have all requisite licenses, consents, variances, permits, certificates and approvals, including environmental, health and safety permits, from all relevant governmental authorities agencies and instrumentalities necessary to conduct their respective business and own and operate their respective assets (collectively, the "Permits"). Schedule 3.18A attached hereto sets forth a true, correct and complete list of all such Permits, copies of which have previously been delivered by the Company or the Stockholders to the Buyer. Neither the Company nor any Subsidiary is aware of any fact, condition or reason for believing that any Permit will not be renewable on expiration. Schedule 3.18B attached hereto sets forth a true and complete list of all Permits that must be amended, modified, changed or transferred to the Buyer in order to consummate the transactions contemplated by this Agreement. The Company and each Subsidiary agrees to cooperate with the Buyer in affecting each such amendment, modification, change or transfer. Neither the Company nor any of the Subsidiaries is in violation of any law, regulation, order, ordinance, rule or judgment (including, without limitation, laws, regulations or ordinances relating to building, zoning, environmental, Materials of Environmental Concern (as defined below), land use or similar matters) relating to property it owns, occupies, leases or controls; its business; its assets; and its operations, which violation would have a Material Adverse Effect. The business of the Company and the Subsidiaries (which includes matters relating to real property owned, occupied, leased or controlled by the Company or any Subsidiary) as conducted since their respective inceptions has not violated, and on the date hereof does not violate any laws, ordinances, rules, judgments, regulations or orders (including, but not limited to, any of the foregoing relating to

employment discrimination, occupational safety, environmental protection, Materials of Environmental Concern, conservation, or corrupt practices), the enforcement of which could have a Material Adverse Effect. Except as set forth on Schedule 3.18B, neither the Company nor any of the Subsidiaries has had notice or communication from any person, including, without limitation, any governmental authority, agency or instrumentality or otherwise of any such violation or noncompliance. "Materials of Environmental Concern" means any chemicals, pollutants, contaminants, hazardous substances, solid waste, hazardous wastes, toxic materials, oil, petroleum and petroleum products, PCBs or asbestos.

(b) Neither the Company nor any of the Subsidiaries is in violation of any law, ruling, order, decree, regulation, permit, common law doctrine, or other environmental or hazardous waste requirement applicable to the Company, any of the Subsidiaries, or any of the Real Estate, or any part thereof, relating to health, safety, pollution, hazardous waste, Materials of Environmental Concern, environmental or other similar matters, which has not been entirely corrected. Neither the Company nor any of the Subsidiaries has received, nor has any reason to believe that it will receive, notice from any governmental authority, agency or instrumentality alleging any such violation in respect to any of the real property currently or formerly owned, leased, operated or controlled by the Company or any of its Subsidiaries, or any part thereof.

(c) Neither the Company nor any Subsidiary has been named a "potentially responsible party" or received or been informed of any correspondence requesting information relating to locations where Materials of Environmental Concern may be located or received or been informed of any fact, condition or correspondence which might cause the Company or any Subsidiary to be named a party responsible or a party potentially responsible for a release of any Materials of Environmental Concern to the environment.

(d) There are no pending or threatened actions, claims, charges, suits, controversies, demands, investigations or proceedings against or involving the Company or any Subsidiary relating to: (i) exposure to or release of any Materials of Environmental Concern; or (ii) noises, vibrations, odors at or from any real property or facility formerly or currently owned, leased, occupied, operated or controlled by the Company or any Subsidiary.

(e) There have been no releases or discovery of any Materials of Environmental Concern into the environment at any parcel of real property or any facility formerly or currently owned, leased, operated or controlled by the Company or any Subsidiary; or to the knowledge of the Company or any Subsidiary, at any facility to which waste of the Company or any Subsidiary has been transported for processing, storage or disposal. Neither the Company nor any Subsidiary is aware of any releases of Materials of Environmental Concern at parcels of real property or facilities other than those owned, leased, operated or controlled by the Company or any Subsidiary that could reasonably be expected to have an impact on the real property or facilities currently or formerly owned, leased, operated or controlled by the Company or any Subsidiary.

3.19 EMPLOYEE RELATIONS.

(a) The Company and each of the Subsidiaries is in compliance with all laws respecting employment and employment practices, terms and conditions of employment,

and wages and hours; none of such companies is engaged in any unfair labor practice; there are no arrears in the payment of wages or social security or similar taxes; nor is there currently pending (nor has there been in the last three years) any claim by any employee or governmental agency or body that the Company or any of the Subsidiaries was (i) not in compliance with any of such laws, (ii) engaged in an unfair labor practice or (iii) in arrears in the payment of wages or social security or similar taxes.

(b) Except as set forth on Schedule 3.19 attached hereto:

(i) none of the employees of the Company or any of the Subsidiaries is represented by any labor union;

(ii) there is not currently, nor has there been in the last three years, any unfair labor practice complaint against the Company or any of the Subsidiaries pending before any government agency;

(iii) there is not currently, nor has there been in the last three years, any pending labor strike or other material labor trouble affecting the Company or any of the Subsidiaries (including, without limitation, any organizational drive);

(iv) there is not currently, nor has there been in the last three years, any material labor grievance pending against the Company or any of the Subsidiaries;

(v) there is not currently, nor has there been in the last three years, any pending arbitration proceedings arising out of or under any collective bargaining agreement to which the Company or any of the Subsidiaries is a party, or to the best knowledge of the Company and the Stockholders, any basis for which a claim may be made under any collective bargaining agreement to which the Company or any of the Subsidiaries is a party; and

(vi) neither the Company nor any of the Subsidiaries has any continuing obligation for health, life, medical insurance or other similar fringe benefits to any former employee of the Company or any Subsidiary.

(c) Schedule 3.19 sets forth a true, correct and complete list of the following:

(i) the position of each director, officer and employee of the Company and the Subsidiaries;

(ii) all remuneration and other benefits paid to or conferred on each director, officer and employee of the Company and the Subsidiaries since January 1, 2000 through the date of this Agreement;

(iii) the period of service of each director, officer and employee of the Company and the Subsidiaries and the accrued leave, annual leave and sick leave entitlements of each employee of the Company and the Subsidiaries, and such accruals are reflected in the Financial Statements in accordance with GAAP; and

(iv) each written or oral contract of service or consultance to which the Company or any of the Subsidiaries are a party.

(d) Except as disclosed in Schedule 3.19 hereto, no amount due to or in respect of any director, officer or employee or former director, former officer or former employee of the Company is in arrears and unpaid other than his/her current salary for the relevant period at the date of this Agreement.

(e) For purposes of this Section 3.19, the term "employee" shall be construed to include sales agents and other independent contractors who spend a majority of their working time on the business of the Company or any of the Subsidiaries and who, to the knowledge of the Company, are paid yearly compensation of Y.4.8 million or more with respect to services rendered for the Company.

3.20 EMPLOYEE BENEFIT PLANS.

(a) A list of all employee benefit plans maintained by the Company or the Subsidiaries (the "Employee Plans") is provided on Schedule 3.20 attached hereto. No Employee Plan provides benefits, including, without limitation, death or medical benefits (whether or not insured) with respect to any current or former employee of the Company and the Subsidiaries beyond his or her retirement or other termination of service (other than (i) coverage mandated by applicable statute, (ii) retirement or death benefits under any funded employee pension plan, (iii) disability benefits under any employee welfare plan that have been fully provided for by insurance or otherwise, (iv) deferred compensation benefits accrued as liabilities on the books of the Company or the Subsidiaries, or (v) benefits in the nature of severance payments).

(b) Except as otherwise contemplated herein, the consummation of the transactions contemplated by this Agreement will not (i) entitle any employee or former employee of the Company and the Subsidiaries to severance pay, unemployment compensation or any other payment, (ii) accelerate the time of payment or vesting, or increase the amount of compensation due to any such employee or former employee or (iii) result in any payment or series of payments by the Company or the Subsidiaries to any person.

(c) Each of the Employee Benefit Plans has been administered in compliance with all applicable laws, rules regulations.

(d) Neither the Company nor any of the Subsidiaries has announced any plan or legally binding commitment to create any additional employee benefit plans or to amend or modify any existing employee benefit plan.

3.21 ABSENCE OF CERTAIN CHANGES OR EVENTS.

(a) Except as set forth on Schedule 3.21 attached hereto, since June 30, 2001, neither the Company nor any of the Subsidiaries has entered into any transaction which is not in the usual and Ordinary Course of Business, and, without limiting the generality of the foregoing, neither the Company nor any of the Subsidiaries has:

(i) incurred any material obligation or liability for borrowed money;

(ii) discharged or satisfied any lien or encumbrance or paid any obligation or liability other than current liabilities reflected in the Current Balance Sheet;

(iii) mortgaged, pledged or subjected to lien, charge or other encumbrance any of their respective properties or assets;

(iv) sold or purchased, assigned or transferred any of its tangible assets or cancelled any debts or claims, except for inventory sold and raw materials purchased in the Ordinary Course of Business;

(v) made any material amendment to or termination of any Contract or done any act or omitted to do any act which would cause the breach of any Contract;

(vi) suffered any losses of personal or real property, whether insured or uninsured, and whether or not in the control of the Company or the relevant Subsidiary, as the case may be, in excess of Y.6.0 million in the aggregate, or waived any rights of any value;

(vii) authorized any declaration or payment of dividends by the Company or any Subsidiary which is not wholly owned by the Company, or paid any such dividends, or authorized any transfer of assets of any kind whatsoever by the Company or any such Subsidiary to any of their respective stockholders with respect to any shares of their capital stock;

(viii) authorized or issued recall notices for any of its products or initiated any safety investigations;

(ix) received notice of any litigation, warranty claim or products liability claims;

(x) made any material change in the terms, status or funding condition of any Employee Plan, as defined in Section 3.20 hereof;

(xi) engaged any new employee for a salary in excess of Y.7.2 million per annum;

(xii) made, or committed to make, any changes in the compensation payable to any officer, director, employee or agent of the Company or any Subsidiary, or any bonus payment or similar arrangements made to or with any of such officers, directors, employees or agents;

(xiii) incurred any capital expenditure in excess of Y.6.0 million in any one instance or Y.12.0 million in the aggregate;

(xiv) made any material alteration in the manner of keeping the books, accounts or records of the Company or any Subsidiary, or in the accounting practices therein reflected; or

(xv) suffered any material adverse change in the consolidated results of operations, condition (financial or otherwise), assets, liabilities (whether absolute, accrued, contingent or otherwise), business or prospects of the Company and the Subsidiaries taken as a whole.

(b) Neither the Company nor any of the Stockholders have knowledge of any existing or threatened occurrence, event or development which, as far as can be reasonably foreseen, could have a Material Adverse Effect.

3.22 CUSTOMERS; MARKET LEADERSHIP. Schedule 3.22 attached hereto sets forth a true, correct and complete list of the names and locations of each of the top 20 customers (based on annual sales) of the Company and the Subsidiaries (the "Customers"). The aggregate sales amounts by the Company and the Subsidiaries to each of the Customers during the 12 months ended June 30, 2001, and the name of the company responsible for the majority of such sales, are set forth on Schedule 3.22 opposite the applicable Customer's name. Prior to the Closing, the Company will amend Schedule 3.22 to include the aggregate sales amounts by the Company and the Subsidiaries to each of the Customers during the five months ending November 30, 2001. Except as set forth on Schedule 3.22, the Company's and each of its Subsidiaries' relationships with the Customers are good. To the best knowledge of the Company and the Subsidiaries, no Customer has any material complaints with respect to the Company's or any Subsidiary's products, personnel or business practices. To the best knowledge of the Company and the Subsidiaries, no Customer intends to effect or is considering a reduction, discontinuance or other adverse change in its relationship with the Company or the relevant Subsidiary. The Company is one of the two leaders in the worldwide mass flow controller market. To the best knowledge of the Company and the Subsidiaries, there are no facts or circumstances relating to any of the Customers that would jeopardize the generation of new sales or the continued market leadership position of the Company for the foreseeable future.

3.23 SUPPLIERS. Schedule 3.23 attached hereto sets forth a true, correct and complete list of (i) the names and locations of each of the suppliers of the Company and the Subsidiaries and (ii) the present sole source suppliers of significant goods or services, other than utilities, for any product with respect to which practical alternative sources of supply are not available on comparable terms and conditions, indicating the contractual arrangements for continued supply from each such supplier. Except as set forth on Schedule 3.23, (a) the Company and each of the Subsidiaries has good relations with all of its suppliers, and (b) neither the Company nor any of the Subsidiaries is more than 30 days in arrears in any trade accounts payable or other payments owing to any supplier (other than trade accounts payable to the Company by any of the Subsidiaries).

3.24 WARRANTY AND PRODUCT LIABILITY CLAIMS. Schedule 3.24 attached hereto contains a true, correct and complete list of all warranty and product liability claims in excess of Y.240,000 made against the Company or any of the Subsidiaries from July 1, 1998 through the date hereof, the current status of all such claims and the costs of all actions taken in satisfaction

of such claims. All information relative to such claims and those made after the date hereof shall be available to the Buyer from and after the date hereof.

3.25 PREPAYMENTS AND DEPOSITS. Schedule 3.25 attached hereto sets forth all prepayments and deposits, which have been received by the Company or any of the Subsidiaries as of the date hereof, from customers for products to be shipped, or services to be performed, after the Closing Date.

3.26 INDEBTEDNESS TO AND FROM OFFICERS, DIRECTORS AND STOCKHOLDERS. Except as set forth on Schedule 3.26 attached hereto and except for intercompany indebtedness payable among the Company and any Subsidiary or among the Subsidiaries, neither the Company nor any of the Subsidiaries is indebted, directly or indirectly, to any person who is an officer, director or stockholder of any of the foregoing entities or any affiliate of any such person in any amount whatsoever other than for salaries for services rendered or reimbursable business expenses, all of which have been reflected on the Current Financial Statements, and no such officer, director, stockholder or affiliate is indebted to the Company or any of the Subsidiaries except for advances made to employees of the Company or any of the Subsidiaries in the Ordinary Course of Business to meet reimbursable business expenses anticipated to be incurred by such obligor.

3.27 BANKING FACILITIES. Schedule 3.27 attached hereto sets forth a true, correct and complete list of:

(a) each bank, savings and loan or similar financial institution in which the Company or any of the Subsidiaries has an account or safe deposit box and the accounts and safe deposit boxes maintained by the Company or any of the Subsidiaries thereat; and

(b) the names of all persons authorized to draw on each such account or to have access to any such safe deposit box facility, together with a description of the authority (and conditions thereof, if any) of each such person with respect thereto.

3.28 POWERS OF ATTORNEY AND SURETYSHIPS. Except as set forth on Schedule 3.28 attached hereto, neither the Company nor any of the Subsidiaries has any general or special powers of attorney outstanding (whether as grantor or grantee thereof) or has any obligation or liability (whether actual, accrued, accruing, contingent or otherwise) as guarantor, surety, co-signer, endorser, co-maker, indemnitor or otherwise in respect of the obligation of any person, corporation, partnership, joint venture, association, organization or other entity, except as endorser or maker of checks or letters of credit, respectively, endorsed or made in the Ordinary Course of Business.

3.29 CONFLICTS OF INTEREST. Except as set forth on Schedule 3.29 attached hereto, no officer, director or Stockholder of the Company or any Subsidiary nor, to the best knowledge of the Company and the Stockholders, any affiliate of any such person, now has or within the last three (3) years had, either directly or indirectly:

(a) except for a portfolio investment, an equity or debt interest in any corporation, partnership, joint venture, association, organization or other person or entity which

furnishes or sells or during such period furnished or sold services or products to the Company or any of the Subsidiaries, or purchases or during such period purchased from the Company or any of the Subsidiaries any goods or services, or otherwise does or during such period did business with the Company or any of the Subsidiaries; or

(b) a beneficial interest in any contract, commitment or agreement to which the Company or any of the Subsidiaries is or was a party or under which any of them is or was obligated or bound or to which any of their respective properties may be or may have been subject, other than stock options and other contracts, commitments or agreements between the Company or any of the Subsidiaries and such persons in their capacities as employees, officers, directors of the Company or such Subsidiary.

3.30 REGULATORY APPROVALS. All consents, approvals, authorizations or other requirements prescribed by any law, rule or regulation which must be obtained or satisfied by the Company or any of the Subsidiaries and which are necessary for the execution and delivery by the Stockholders and the Company of this Agreement or any documents to be executed and delivered by the Stockholders or the Company in connection herewith are set forth on Schedule 3.30 attached hereto and have been, or prior to the Closing Date will be, obtained and satisfied.

3.31 DISCLOSURE. The information concerning the Company and the Subsidiaries set forth in this Agreement, the Exhibits and Schedules attached hereto and any document, statement or certificate furnished or to be furnished to the Buyer pursuant hereto, does not and will not contain any untrue statement of a material fact or omit to state a material fact required to be stated herein or therein or necessary to make the statements and facts contained herein or therein, in light of the circumstances in which they are made, not false and misleading in any material respect. The Stockholders and the Company have disclosed to the Buyer all material facts pertaining to the transactions contemplated by this Agreement and the Exhibits hereto. Copies of all documents heretofore or hereafter delivered or made available to the Buyer pursuant to this Agreement were or will be (prior to the Closing Date) complete and accurate copies of such documents.

3.32 ENGLISH LANGUAGE AGREEMENT. This Agreement has been prepared in English. Any translations of this Agreement or any portion thereof have been for reference purposes only and shall not control the content or interpretation of any provision of this Agreement. Each of the officers and directors of the Company who have participated in the preparation and/or negotiation of this Agreement either (a) has a sufficient command of the English language to understand the full intent of each provision of this Agreement or
(b) has consulted with such advisors of the Company who have such command of the English language to ensure that such officer and/or director understands the full intent of each provision of this Agreement.

4. REPRESENTATIONS OF THE BUYER AND THE PARENT.

Each of the Parent and the Buyer jointly and severally represents and warrants to each Stockholder as follows:

4.1 ORGANIZATION AND AUTHORITY. The Buyer is a corporation (kabushiki kaisha) duly organized and validly existing under the laws of Japan, and has all requisite power and authority to own its properties and to carry on its business as now being conducted. The Parent is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and has all requisite power and authority to own its properties and to carry on its business as now being conducted. The Parent owns, directly or indirectly through its subsidiaries, all of the outstanding capital stock of the Buyer. Each of the Buyer and the Parent has full power to execute and deliver this Agreement and the agreements contemplated herein to which it will be a party, and each of the Buyer and the Parent has full power to consummate the transactions contemplated hereby and thereby. Certified copies of the corporate registry of the Buyer, and the Certificate of Incorporation of the Parent, have been previously made available to the Stockholders, are complete and correct, and no amendments have been made thereto or have been authorized since the date thereof.

4.2 CAPITALIZATION OF THE PARENT. On September 30, 2001, the Parent's authorized capital stock consisted of (a) 55 million shares of common stock, $0.001 par value, of which 31,810,745 shares were issued and outstanding, and (b) 1,000,000 shares of preferred stock, $0.001 par value per share, none of which were issued or outstanding.

4.3 AUTHORIZATION. The execution and delivery of this Agreement by each of the Parent and the Buyer, and the agreements provided for herein, and the consummation by each of the Parent and the Buyer of the transactions contemplated hereby and thereby, have been, or will be prior to the Closing, duly authorized by all requisite corporate action. This Agreement and all such other agreements and written obligations entered into and undertaken in connection with the transactions contemplated hereby constitute the valid and legally binding obligations of each of the Parent and the Buyer, enforceable against such party in accordance with their respective terms, except as enforceability of the same may be limited by bankruptcy, insolvency, reorganization, moratorium or other similar laws affecting creditors' rights generally or by the exercise of judicial discretion in accordance with general principles applicable and similar remedies. Except as will be set forth in Schedule 4.3 as of the Closing Date, the execution, delivery and performance of this Agreement and the agreements provided for herein, and the consummation by each of the Buyer and the Parent of the transactions contemplated hereby and thereby, will not, with or without the giving of notice or the passage of time or both, (a) violate the provisions of any law, rule or regulation applicable to the Buyer or the Parent; (b) violate the provisions of the Articles of Incorporation of the Buyer or the Certificate of Incorporation of the Parent;
(c) violate any judgment, decree, order or award of any court, governmental body or arbitrator specifically naming the Buyer or the Parent; or (d) conflict with or result in the breach or termination of any term or provision of, or constitute a default under, or cause any acceleration under, or cause the creation of any lien, charge or encumbrance upon the properties or assets of the Buyer or the Parent pursuant to, any indenture, mortgage, deed of trust or other agreement or instrument to which the Buyer or the Parent is a party or by which either the Buyer or the Parent is or may be bound. As of the Closing, Schedule 4.3 will set forth a true, correct and complete list of all consents and approvals of third parties that are required in connection with the consummation by each of the Parent and the Buyer of the transactions contemplated by this Agreement.

4.4 REGULATORY APPROVALS. All consents, approvals, authorizations and other requirements prescribed by any law, rule or regulation which must be obtained or satisfied by the Parent or the Buyer and which are necessary for the consummation of the transactions contemplated by this Agreement have been, or will be prior to the Closing Date, obtained and satisfied.

4.5 PARENT REPORTS AND FINANCIAL STATEMENTS. The Parent has previously furnished to the Stockholders the Annual Report of the Parent on Form 10-K for the year ended December 31, 2000, and the Quarterly Reports of the Parent on Form 10-Q for the quarters ended March 31, 2001, June 30, 2001 and September 30, 2001 (collectively, the "Parent Reports"). The financial statements of the Parent included in the Parent Reports (i) comply as to form with applicable accounting requirements and the published rules and regulations of the SEC with respect thereto and (ii) fairly present the consolidated financial condition, results of operations and cash flows of the Parent as of the respective dates thereof and for the periods referred to therein in accordance with GAAP.

4.6 INVESTMENT REPRESENTATION. The Buyer is acquiring the Shares from each Stockholder for its own account for investment and not with a view to, or for sale in connection with, any distribution thereof, nor with any present intention of distributing or selling the same; and, except as contemplated by this Agreement and the agreements contemplated herein, the Buyer has no present or contemplated agreement, undertaking, arrangement, obligation, indebtedness or commitment providing for the disposition thereof.

5. ACCESS TO INFORMATION; PUBLIC ANNOUNCEMENTS.

5.1 ACCESS TO MANAGEMENT, PROPERTIES AND RECORDS.

(a) From the date of this Agreement until the Closing Date, the Stockholders and the Company shall afford the officers, attorneys, accountants and other authorized representatives of the Buyer and the Parent free and full access upon reasonable notice and during normal business hours to all management personnel, offices, properties, books and records of the Company and the Subsidiaries, so that the Buyer and the Parent may have full opportunity to make such investigation as it shall desire to make of the management, business, properties (including conducting environmental surveys and property appraisals) and affairs of the Company and the Subsidiaries, and the Buyer and the Parent shall be permitted to make abstracts from, or copies of, all such books and records and to take survey samples from such real property. The Stockholders and the Company shall furnish to the Buyer or the Parent, as applicable, such financial and operating data and other information as to the business of the Company and the Subsidiaries as the Buyer or the Parent shall reasonably request.

(b) The Stockholders and the Company shall authorize the release to the Buyer and the Parent of all files pertaining to the business or operations of the Company and the Subsidiaries held by any governmental authorities, agencies or instrumentalities. The Stockholders' and the Company's authorization shall specifically waive all previous claims of privilege or other restrictions, and in any case where a release by a present or former officer, director, partner, member, or employee of the Company or any Subsidiary is necessary, the Stockholders and the Company shall exercise their best efforts to obtain such a release.

(c) All information concerning the Company or its Subsidiaries that is disclosed to the Buyer or the Parent shall be treated as confidential information protected from unauthorized disclosure pursuant to the Confidentiality Agreement referred to in Section 17.

5.2 PUBLIC ANNOUNCEMENTS. The parties agree that prior to the Closing Date any and all general public pronouncements or other general public communications by any party hereto concerning this Agreement and the purchase and sale of the Shares, and the timing, manner and content of such disclosures, shall be subject to the mutual agreement of the Company, the Stockholders' Representative and the Buyer, except to the extent that such pronouncement or communication is required by applicable law or regulation, including without limitation the regulations of the Nasdaq National Market.

5.3 INFORMATION TO MINORITY STOCKHOLDERS. The Stockholders and the Company shall provide or make available to each of the Minority Stockholders all of the information relating to the transactions contemplated by this Agreement or the Company's business, operations, financial condition and prospects that (a) is required by applicable law to be provided to such person in connection with his, her or its (i) evaluation of a Minority Stock Purchase Agreement or the transactions contemplated thereby, or (ii) execution and delivery of a Minority Stock Purchase Agreement; or (b) has been requested by such Minority Stockholder in connection with his, her or its evaluation of a Minority Stock Purchase Agreement and the transactions contemplated thereby. The Stockholders who are members of management of the Company shall make themselves available to the Minority Stockholders in order to give the Minority Stockholders the opportunity to ask questions (and receive answers) relating to the transactions contemplated by this Agreement or the Company's business, operations, financial condition and prospects. For purposes of this Section 5.3, references to the Company's business, operations, financial condition and prospects shall mean the business, operations, financial condition and prospects of the Company and its Subsidiaries.

6. PRE-CLOSING COVENANTS.

From and after the date hereof and until the Closing Date:

6.1 CONDUCT OF BUSINESS. The Company shall, and shall cause the Subsidiaries to, carry on their business diligently and substantially in the same manner as heretofore conducted and shall not, and shall cause the Subsidiaries not to, (a) make or institute any unusual or new methods of manufacture, purchase, sale, shipment or delivery, lease, management, accounting or operation, or (b) ship or deliver any quantity of products in excess of normal shipment or delivery levels, except as agreed to in writing by the Buyer. All of the property of the Company and the Subsidiaries shall be used, operated, repaired and maintained in a normal business manner consistent with past practice.

6.2 ABSENCE OF MATERIAL CHANGES. Without the prior written consent of the Buyer, the Company shall not, and shall cause the Subsidiaries not to:

(a) take any action to amend its respective charter, or bylaws (if any)

(b) issue any stock, bonds or other corporate securities or grant any option or issue any warrant to purchase or subscribe for any of such securities or issue any securities convertible into such securities;

(c) incur any debt for borrowed money or incur any other obligation or liability (absolute or contingent) that (i) is in excess of Y.30 million, except current liabilities incurred and obligations under contracts entered into in the Ordinary Course of Business, or (ii) causes the Company's Total Debt (as defined in Section 8.10) to exceed Y.4.6 billion;

(d) declare or make any payment or distribution to its stockholders with respect to its stock or purchase or redeem any shares of its capital stock;

(e) mortgage, pledge, or subject to any lien, charge or any other encumbrance any of their respective assets or properties;

(f) sell, assign, or transfer any of its assets, except for inventory sold in the Ordinary Course of Business, at a normal profit margin, and for not less than replacement cost;

(g) cancel any debts or claims, except in the Ordinary Course of Business;

(h) merge or consolidate with or into any corporation or other entity;

(i) make, accrue or become liable for any bonus, profit sharing or incentive payment, except for accruals under existing plans, if any, or increase the rate of compensation payable or to become payable by it to any of its officers, directors or employees, other than increases in the Ordinary Course of Business;

(j) make any election or give any consent under any relevant tax statutes or make any termination, revocation or cancellation of any such election or any consent or compromise or settle any claim for past or present tax due;

(k) waive any rights of material value;

(l) modify, amend, alter or terminate any of its material contracts;

(m) take or permit any act or omission constituting a breach or default under any contract, indenture or agreement by which it or its properties are bound;

(n) fail to (i) preserve the possession and control of its assets and business, (ii) keep in faithful service its present officers and key employees, (iii) preserve the goodwill of its consumers, suppliers, agents, brokers and others having business relations with it, and (iv) keep and preserve its business existing on the date hereof;

(o) fail to operate its business and maintain its books, accounts and records in the customary manner and in the Ordinary Course of Business and maintain in good repair its business premises, fixtures, machinery, furniture and equipment;

(p) enter into any lease, contract, agreement or understanding, other than those entered into in the Ordinary Course of Business calling for payments which in the aggregate do not exceed Y.12 million for each such lease, contract, agreement or understanding;

(q) incur any capital expenditure in excess of Y.12 million in any instance or Y.24 million in the aggregate;

(r) engage any new employee for a salary in excess of Y.7.3 million per annum;

(s) materially alter the terms, status or funding condition of any Employee Plan; or

(t) commit or agree to do any of the foregoing in the future.

6.3 DELIVERY OF INTERIM FINANCIAL STATEMENTS.

(a) As promptly as possible following execution of this Agreement, the Stockholders or the Company shall deliver to the Buyer and the Parent the unaudited balance sheet of the Company and the Subsidiaries as of September 30, 2001 and the related unaudited statements of income, stockholders' equity, retained earnings and cash flows for the quarter then ended (the "September 2001 Financial Statements"), certified by the chief financial officer of the Company to the effect that such interim financial statements fairly present the financial condition of the Company as of the date thereof and for the period covered thereby.

(b) As promptly as possible following November 30, 2001, but in any event at least 2 business days prior to the Closing, the Stockholders or the Company shall deliver to the Buyer and the Parent the balance sheet of the Company and the Subsidiaries as of November 30, 2001 and the related statements of income, stockholders' equity, retained earnings and cash flows for the quarter then ended (the "November 2001 Financial Statements" and, together with the September 2001 Financial Statements and the December 2001 Financial Statements (as defined in Section 11.5), the "Interim Financial Statements"), certified by the chief financial officer of the Company to the effect that such interim financial statements fairly present the financial condition of the Company as of the date thereof and for the period covered thereby. The Company shall cause its independent accountants to perform agreed upon procedures on the November 2001 Financial Statements and shall deliver the results of such procedures (the "Interim Report") to the Buyer and the Parent at least 2 business days prior to the Closing. The Buyer's independent accountants also shall be entitled to review the November 2001 Financial Statements and the performance by the Company's independent accountants of the agreed upon procedures. The Buyer's independent accountants shall be given full access to the information made available to, and work papers of, the Company's independent accountants, as well as such further information as the Buyer's independent accountants shall request in connection with their review of the November 2001 Financial Statements. Any comments of the Buyer's independent accountants with respect to the November 2001 Financial Statements shall be addressed or reflected in the Interim Report, if the Buyer's independent accountants deem such comments to be relevant to the Interim Report.

6.4 COMMUNICATIONS WITH CUSTOMERS AND SUPPLIERS.

(a) Unless instructed otherwise by the Buyer in writing, the Company shall, and shall cause each of the Subsidiaries to, continue to accept customer orders in the Ordinary Course of Business for all products offered by the Company and the Subsidiaries but expected to be shipped after the Closing Date.

(b) The Company and the Buyer shall, and the Company shall cause the Subsidiaries to, cooperate in communications with suppliers and customers to advise them of the transfer of the Shares to the Buyer on the Closing Date and to facilitate continuity in the existing relationships with suppliers and customers.

(c) The Company shall, and shall cause each of the Subsidiaries to, provide the Buyer and the Parent with access to the Customers in order to enable the Buyer and the Parent to conduct due diligence reviews ("Customer Reviews") of any and all aspects of the Customers' current and anticipated future relationships with the Company and the Subsidiaries. The Company shall use its best efforts to assist the Buyer and the Parent in arranging and facilitating Customer Reviews, at the Buyer's or the Parent's request.

6.5 COMPLIANCE WITH LAWS. The Company shall, and shall cause each of the Subsidiaries to, comply with all laws and regulations which are applicable to it or to the conduct of its business and will perform and comply with all contracts, commitments and obligations by which they are bound.

6.6 CONTINUED TRUTH OF REPRESENTATIONS AND WARRANTIES. None of the Stockholders nor the Company shall, and the Company shall cause the Subsidiaries not to, take any actions which would result in any of the representations or warranties set forth in Sections 2 and 3 hereof being untrue. Neither the Parent nor the Buyer shall take any actions which would result in any of the representations or warranties set forth in Section 4 hereof being untrue.

6.7 CONTINUING OBLIGATION TO INFORM. From time to time prior to the Closing, the Company and the Stockholders will deliver or cause to be delivered to the Buyer supplemental information concerning events subsequent to the date hereof which would render any statement, representation or warranty in this Agreement or any information contained in any Schedule attached hereto inaccurate or incomplete in any material respect at any time after the date hereof until the Closing Date. None of such supplemental information shall constitute an amendment of any statement, representation or warranty in this Agreement or any Schedule, Exhibit or document furnished pursuant hereto unless the provisions of Section 17 regarding amendments are complied with.

6.8 EXCLUSIVE DEALING. None of the Stockholders nor the Company will, directly or indirectly, through any officer, director, agent or otherwise, (a) solicit, initiate or encourage submission of proposals or offers from any person relating to an acquisition or purchase of all or a material portion of the assets of or an equity interest in the Company or any of the Subsidiaries or any merger, consolidation or business combination with the Company or any of the Subsidiaries, or (b) participate in any discussions or negotiations regarding, or furnish to any other person, any non-public information with respect to or otherwise cooperate in any

way with, or assist or participate in, facilitate or encourage, any effort or attempt by any other person to do or seek any of the foregoing. The Stockholders and the Company agree to, and shall cause the Subsidiaries to, promptly notify the Buyer of any such proposal or offer, or any inquiry or contact with respect thereto received by the Company, any of the Stockholders or any Subsidiary.

6.9 REPORTS, TAXES. The Company shall, and shall cause the Subsidiaries to, duly and timely file all reports or returns required to be filed with federal, state, local and foreign authorities and will promptly pay all federal, state, local and foreign taxes, assessments and governmental charges levied or assessed upon them or any of their properties (unless contesting such in good faith and adequate provision has been made therefor).

7. BEST EFFORTS TO OBTAIN SATISFACTION OF CONDITIONS AND CONTINUATION OF CREDIT.

The Stockholders, the Company, the Buyer and the Parent covenant and agree to, and the Stockholders and the Company shall cause the Subsidiaries to, use their best efforts to (a) obtain the satisfaction of the conditions specified in this Agreement, and (b) cause the Company's banks and other lenders to continue in place the Company's credit arrangements on at least as favorable terms as are currently applicable to the Company.

8. CONDITIONS TO OBLIGATIONS OF THE BUYER AND THE PARENT.

The obligations of the Buyer and the Parent under this Agreement are subject to the fulfillment, at the Closing Date, of the following conditions precedent, each of which may be waived in writing in the sole discretion of the Buyer:

8.1 CONTINUED TRUTH OF REPRESENTATIONS AND WARRANTIES OF THE STOCKHOLDERS AND THE COMPANY; COMPLIANCE WITH COVENANTS AND OBLIGATIONS. The representations and warranties of the Stockholders and the Company set forth in this Agreement shall be true and correct as of the date of this Agreement and shall be true and correct in all material respects as of the Closing Date as though made as of the Closing Date. Each of the Stockholders and the Company shall have performed and complied with, and the Stockholders and the Company shall have caused each of the Subsidiaries to perform and comply with, all terms, conditions, covenants, obligations, agreements and restrictions required by this Agreement to be performed or complied with by each of them prior to or at the Closing Date. At the Closing, the Stockholders and the Company shall have delivered to the Buyer a certificate signed by the Stockholders' Representative on behalf of the Stockholders and the President of the Company, as to their compliance with this Section 8.1.

8.2 NO MATERIAL ADVERSE CHANGE. From the date of the Current Balance Sheet until the Closing, there shall be no material adverse change in the Company's business, financial condition, prospects, assets, properties or operations. Without the prior written consent of the Buyer, neither the Company nor the Subsidiaries shall have taken any of the actions set forth in Section 6.2 hereof.

8.3 GOVERNMENTAL APPROVALS. All governmental agencies, departments, bureaus, commissions and similar bodies, the consent, authorization or approval of which is necessary under any applicable law, rule, order or regulation for the consummation by the

Stockholders, the Company or the Subsidiaries of the transactions contemplated by this Agreement and the operation of the business of the Company and the Subsidiaries by the Buyer, shall have consented to, authorized, permitted or approved such transactions. Without limiting the generality of the foregoing, the Buyer and the Parent shall not be obligated to complete the transactions contemplated by this Agreement, if doing so would violate the Hart-Scott-Rodino Antitrust Improvements Act of 1974.

8.4 CONSENT OF LESSORS AND OTHER THIRD PARTIES. The Stockholders, the Company and the Subsidiaries shall have received (without the payment of any consideration, the waiving of any right or the incurring of any new obligation or liability by the Company, the Buyer or the Parent) all requisite consents and approvals of all lessors and other third parties (other then the Company's banks) whose consent or approval is required in order for the Stockholders and the Company to consummate the transactions contemplated by this Agreement, including without limitation those set forth on Schedule 3.4 attached hereto. All such consents and approvals shall be in form and substance reasonably acceptable to the Buyer.

8.5 ADVERSE PROCEEDINGS. No action or proceeding by or before any court or other governmental body shall have been instituted or threatened by any governmental body or person whatsoever which shall seek to restrain, prohibit or invalidate the transactions contemplated by this Agreement or which might affect the right of the Buyer to own the Shares or to own or operate the business of the Company and the Subsidiaries after the Closing.

8.6 OPINION OF COUNSEL. The Buyer shall have received an opinion of Hatasawa & Wakai, counsel to the Stockholders, the Company and the Subsidiaries (except Aera Corporation), dated as of the Closing Date, in substantially the form attached hereto as Exhibit C-1, and an opinion of Fulbright & Jaworski, counsel to Aera Corporation, dated as of the Closing Date, in substantially the form attached hereto as Exhibit C-2, and as to such other matters as may be reasonably requested by the Buyer or its counsel.

8.7 NON-COMPETITION AGREEMENTS. On or prior to the Closing Date, each of the Continuing Directors (as defined in Section 11.4) shall have entered into a non-competition and non-solicitation agreement with the Company and the Buyer, in substantially the forms attached hereto as Exhibit D (collectively, the "Non-Competition Agreements"), and each of the Non-Competition Agreements shall be in full force and effect as of the Closing.

8.8 ENVIRONMENTAL REPORT. On or prior to the Closing Date, the Buyer shall be reasonably satisfied with the results of any environmental survey of any property of the Company or any Subsidiary, whether such surveys are currently existing or conducted by or on behalf of the Buyer in connection with the transactions contemplated by this Agreement.

8.9 CUSTOMER RELATIONSHIPS. The Buyer and the Parent shall not have learned, whether through the Customer Reviews or otherwise, of any facts or circumstances that (a) indicate that the representations and warranties set forth in Section 3.22 relating to the Customers are not accurate and complete in all material respects, (b) are reasonably likely to result in such representations and warranties not being accurate and complete in all material respects following the Closing, or (c) are reasonably likely to have a material adverse effect on the Company's sales to or relationship with any Customer. Such facts or circumstances include

without limitation a Customer's stated intent to discontinue or significantly reduce (other than as a result of economic or industry conditions) its business with the Company or any of the Subsidiaries, a Customer's stated dissatisfaction with the quality of products purchased from or offered by the Company, the failure of the Company to have in its current product offerings products that meet the current and anticipated mass flow control needs of any of the Customers, a Customer complaint with respect to the Company's products, technology, personnel or business practices such that the Buyer and the Parent reasonably believe that the Customer is likely to reduce or discontinue the level of its purchases from the Company, and any other material issue in respect of the Company's or a Subsidiary's relationship with a Customer, which issue cannot be remedied in the ordinary course of business.

8.10 SATISFACTORY NOVEMBER 2001 FINANCIAL STATEMENTS. The November 2001 Financial Statements, after agreed upon procedures have been performed and any adjustments suggested or referred to in the Interim Report have been made, shall reflect the following financial results:

o Total revenues for the five months ended November 30, 2001 not less than Y.2.4 billion

o Gross margin for the five months ended November 30, 2001 not less than 30%

o Stockholders' equity as of November 30, 2001 not less than Y.3.0 billion

o Total Debt as of November 30, 2001 not more than Y.4.3 billion

"Total Debt" for purposes of this Section 8.10 and Sections 6.2 and 11.5 shall mean the aggregate of (a) short-term debt of Current Liabilities, (b) current maturities of long-term debt of Current Liabilities and (c) long-term debt, less current maturities, of Long-Term Liabilities (as such capitalized terms are used in the Audited Financial Statements and the November 2001 Financial Statements).

8.11 EXERCISE OF WARRANT. On or prior to the Closing Date, Mr. Aoyama shall have exercised his warrant to purchase 5,000 shares of Common Stock of the Company (the "Aoyama Warrant"), in accordance with the terms of the warrant, and shall have paid to the Company the warrant exercise price of Y.100 million.

8.12 REPAYMENT OF AOYAMA LOANS. On or prior to the Closing Date, Hisanori Aoyama shall have repaid to the Company (a) the full amount of principal and unpaid interest outstanding as of the time of repayment under the loan agreement dated as of November 10, 2000 between Mr. Aoyama and the Company, and (b) all other amounts owing on or prior to the Closing by Mr. Aoyama to the Company.

8.13 AOYAMA INDEMNIFICATION AGREEMENT. The Aoyama Indemnification Agreement shall be in full force and effect.

8.14 SALE OF SHARES OF COMMON STOCK BY SELLING MINORITY STOCKHOLDERS. The Selling Minority Stockholders shall, simultaneously with the Closing and in accordance with

Minority Stock Purchase Agreements, sell to the Buyer that number of Minority Shares that, together with the Shares, represent at least 97.1% of the issued and outstanding shares of capital stock of the Company at the Closing.

8.15 CLOSING DELIVERIES. The Buyer shall have received at or prior to the Closing such documents, instruments or certificates as the Buyer may reasonably request including, without limitation:

(a) the stock certificates representing the Shares;

(b) such certificates of the Company's officers and directors and of the Stockholders and such other documents evidencing satisfaction of the conditions specified in this Section 8 as the Buyer shall reasonably request;

(c) a certified copy of the commercial registry (tokibo-tohon) of the Company issued by the Japanese Legal Affairs Bureau as to the legal existence of the Company in Japan and certificates of the appropriate governmental agency as to the legal existence and good standing (if applicable) of each of the Subsidiaries in their respective jurisdictions of organization;

(d) certificates of an authorized director of the Company attesting to the incumbency of the Company's officers, the authenticity of the resolutions authorizing the transactions contemplated by this Agreement (an executed original of such resolutions to be attached to such certificate), and the authenticity and continuing validity of the Articles of Incorporation delivered pursuant to Section 3.1;

(e) where required by the applicable Lease, estoppel certificates from each lessor from whom the Company or any Subsidiary leases real or personal property consenting to the acquisition of the Shares by the Buyer and the other transactions contemplated hereby, and representing that there are no outstanding claims against the Company or such Subsidiary under such Lease;

(f) where required by the applicable Lease, estoppel certificates from each tenant to whom the Company or any Subsidiary leases real property consenting to the acquisition of the Shares by the Buyer and the other transactions contemplated hereby, and representing that there are no outstanding claims against the Company or such Subsidiary under such Lease;

(g) certificates of appropriate governmental officials in each jurisdiction (other than Japan) in which the Company or any Subsidiary is required to qualify to do business as a foreign corporation as to the due qualification and good standing (including tax) of the Company or Subsidiary, as the case may be;

(h) written resignation of the Company's statutory auditor, effective upon the Closing;

(i) the written resignation of each non-employee officer and director of the Company or a Subsidiary as the Buyer, on or prior to December 20, 2001, shall have requested the Company or the Stockholders to obtain;

(j) the original corporate minute books of the Company and all corporate seals;

(k) a cross receipt executed by the Stockholders;

(l) stock certificates representing the Minority Shares being sold by the Selling Minority Stockholders, which together with the Shares, will equal 97.1% or more of all the outstanding shares of capital stock of the Company; and

(m) the Minority Stock Purchase Agreements, executed by the Selling Minority Stockholders, and any certificates, documents or other papers required to be delivered by the Selling Minority Stockholders at the closing of the Minority Stock Purchase Agreements.

9. CONDITIONS TO OBLIGATIONS OF THE STOCKHOLDERS.

The obligations of the Stockholders under this Agreement are subject to the fulfillment, at the Closing Date, of the following conditions precedent, each of which may be waived in writing in the sole discretion of the Stockholders' Representative, who shall have the power and authority to bind all of the Stockholders:

9.1 CONTINUED TRUTH OF REPRESENTATIONS AND WARRANTIES OF THE BUYER AND THE PARENT; COMPLIANCE WITH COVENANTS AND OBLIGATIONS. The representations and warranties of the Buyer and the Parent set forth in this Agreement shall be true and correct as of the date of this Agreement and shall be true and correct as of the Closing Date as though made as of the Closing Date, except to the extent that the inaccuracy of any such representation or warranty is the result of events or circumstances occurring subsequent to the date of this Agreement and any such inaccuracies, individually or in the aggregate, would not have a material adverse effect on the ability of the parties to consummate the transactions contemplated by this Agreement (it being agreed that any materiality qualifications contained in certain representations and warranties shall be disregarded in determining whether any such inaccuracies would have a material adverse effect for purposes of this Section 9.1). The Buyer shall have performed and complied with all terms, conditions, covenants, obligations, agreements and restrictions required by this Agreement to be performed or complied with by it prior to or at the Closing Date.

9.2 CORPORATE PROCEEDINGS. All corporate and other proceedings required to be taken on the part of the Buyer and the Parent to authorize or carry out this Agreement shall have been taken.

9.3 GOVERNMENTAL APPROVALS. All governmental agencies, departments, bureaus, commissions and similar bodies, the consent, authorization or approval of which is necessary under any applicable law, rule, order or regulation for the consummation by the Buyer of the transactions contemplated by this Agreement shall have consented to, authorized, permitted or approved such transactions.

9.4 CONSENTS OF LESSORS AND OTHER THIRD PARTIES; RELEASE OF GUARANTEE. The Buyer shall have received all requisite consents and approvals of all lessors and other third parties (other than the Buyer's banks) whose consent or approval is required in order for the Buyer to consummate the transactions contemplated by this Agreement. Effective on or prior to the Closing, Mr. Aoyama shall be released from all guarantee obligations relating to the Company's bank indebtedness and equipment leases, which guarantee obligations are set forth on Schedule 9.4 attached hereto.

9.5 ADVERSE PROCEEDINGS. No action or proceeding by or before any court or other governmental body shall have been instituted or threatened by any governmental body or person whatsoever which shall seek to restrain, prohibit or invalidate the transactions contemplated by this Agreement or which might affect the right of the Stockholders to transfer the Shares.

9.6 DIRECTORS' AND STATUTORY AUDITOR'S RELEASES. The Buyer shall have provided to each of the persons serving as a director or statutory auditor of the Company immediately prior to the Closing a release substantially in the form attached hereto as Exhibit E.

9.7 OPINION OF COUNSEL. The Stockholders shall have received opinions of Mitsui, Yasuda, Wani & Maeda, Japanese counsel to the Buyer and the Parent, dated as of the Closing Date, in substantially the form attached hereto as Exhibit F-1 and of Thelen Reid & Priest LLP, U.S. counsel to the Buyer and the Parent, dated as of the Closing Date, in substantially the form attached hereto as Exhibit F-2, and as to such other matters as may be reasonably requested by the Stockholders' Representative or its counsel.

9.8 CLOSING DELIVERIES. The Stockholders shall have received at or prior to the Closing such documents, instruments or certificates as the Stockholders' Representative may reasonably request including, without limitation:

(a) such certificates of the Buyer's officers and such other documents evidencing satisfaction of the conditions specified in this Section 9 as the Stockholders' Representative shall reasonably request;

(b) a certified copy of the corporate registry of the Buyer issued by the local legal affairs bureau as to the legal existence of the Buyer in Japan, and a certificate of the Secretary of State of Delaware as to the legal existence and good standing of the Parent in Delaware;

(c) a certificate of each of the Secretary of the Parent and an authorized director of the Buyer attesting to the incumbency of the Buyer's and the Parent's officers, respectively, the authenticity of the resolutions authorizing the transactions contemplated by this Agreement, and the authenticity and continuing validity of the charter documents and by-laws delivered pursuant to Section 4.1;

(d) payment of the Purchase Price less the Escrow Amount and the amount deliverable to the Escrow Agent pursuant to the Aoyama Indemnification Agreement; and

(e) a cross receipt executed by the Buyer.

10. INDEMNIFICATION.

10.1 BY THE STOCKHOLDERS AND THE COMPANY. Subject to the limitations set forth in this Section 10, if the Closing occurs, the Stockholders, jointly and severally, hereby indemnify and hold harmless the Buyer and the Company, and if the Closing does not occur, the Stockholders and the Company, jointly and severally, hereby indemnify and hold harmless the Buyer, from and against all claims, damages, losses, liabilities, costs and expenses (including, without limitation, settlement costs and any legal, accounting or other expenses for investigating or defending any actions or threatened actions) (collectively, "Losses") in connection with each and all of the following:

(a) any misrepresentation or breach of any representation or warranty made by any of the Stockholders or the Company in this Agreement;

(b) any breach of any covenant, agreement or obligation of any of the Stockholders or the Company contained in this Agreement or any other agreement, instrument or document contemplated by this Agreement (excluding such breaches by the Company occurring after the Closing);

(c) any misrepresentation contained in any statement, certificate or schedule furnished by any of the Stockholders or the Company pursuant to this Agreement or in connection with the transactions contemplated by this Agreement;

(d) any violation by the Company of, or any failure by the Company to comply with, any law, ruling, order, decree, common law doctrine, regulation or zoning, environmental or permit requirement applicable to the Company, its assets or its business, occurring or commencing before the Closing Date, whether or not any such violation or failure to comply has been disclosed to the Buyer, including any costs incurred by the Buyer (A) in order to bring the Company into compliance with environmental laws as a consequence of noncompliance with such laws on or before the Closing Date or (B) in connection with the transfer of the Shares;

(e) any warranty claim or product liability claim relating to (i) products manufactured or sold by the Company prior to the Closing Date or (ii) the Company's business or operation prior to the Closing Date;

(f) any tax liabilities or obligations of the Company relating to the Company's business or operation prior to the Closing Date;

(g) any claims against, or liabilities or obligations of, the Company with respect to obligations under Employee Plans which are outstanding on or prior to the Closing Date;

(h) the release or threatened release of any Material of Environmental Concern on or affecting any real property or facility formerly or currently owned, leased,

occupied or controlled by the Company or any Subsidiary, which occurred prior to the Closing Date;

(i) the release or threatened release of any Material of Environmental Concern at any facility or location to which waste of the Company or any Subsidiary has been transported prior to the Closing for processing, treatment, storage or disposal; and

(j) any forward contract or option or other hedging instrument purchased or entered into by the Buyer or the Parent in anticipation of the Closing, if the Closing does not occur as a result of the Company's or any Stockholder's failure to satisfy the conditions set forth in Section 8;

provided that, if the Closing occurs, the Stockholders shall not be liable to the Buyer under this Section 10.1 to the extent that such Losses were specifically reserved for on the Current Balance Sheet, and provided further that, if the Closing occurs, the Stockholders shall be liable for such Losses in excess of such reserves, subject to the limitations set forth in this Section 10.

10.2 BY THE BUYER AND THE PARENT. The Buyer and the Parent, jointly and severally, hereby indemnify and hold harmless the Stockholders and, if the Closing does not occur, the Stockholders and the Company, from and against all losses in connection with each and all of the following:

(a) any misrepresentation or breach of any representation or warranty made by the Buyer or the Parent in this Agreement;

(b) any breach of any covenant, agreement or obligation of the Buyer or the Parent contained in this Agreement or any other agreement, instrument or document contemplated by this Agreement; and

(c) any misrepresentation contained in any statement, certificate or schedule furnished by the Buyer or the Parent pursuant to this Agreement or in connection with the transactions contemplated by this Agreement.

10.3 CLAIMS FOR INDEMNIFICATION. Whenever any claim shall arise for indemnification under this Section 10, the Buyer, the Company or the Stockholders, as the case may be, seeking indemnification (the "Indemnified Party"), shall promptly notify the Stockholders' Representative (in the case that the Buyer, or, if the Closing occurs, the Company is seeking indemnification) or the Buyer (in the case that the Stockholders or, if the Closing does not occur, the Company is seeking indemnification) (in each case, the "Indemnifying Party") of the claim and, when known, the facts constituting the basis for such claim. In the event of any such claim for indemnification hereunder resulting from or in connection with any claim or legal proceedings by a third party, the notice shall specify, if known, the amount or an estimate of the amount of the liability arising therefrom. The Indemnified Party shall not settle or compromise any claim by a third party for which it is entitled to indemnification hereunder without the prior written consent, which shall not be unreasonably withheld or delayed, of the Indemnifying Party, (who, in the case of the Stockholders Representative shall have the power and authority to bind all of the Stockholders); provided, however, that if suit shall have been instituted against the Indemnified Party and the Indemnifying Party shall not have taken control of such suit after

notification thereof as provided in Section 10.4 of this Agreement, the Indemnified Party shall have the right to settle or compromise such claim upon giving notice to the Indemnifying Party as provided in Section 10.4.

10.4 DEFENSE. In connection with any claim which may give rise to indemnity hereunder resulting from or arising out of any claim or legal proceeding by a person other than the Indemnified Party, the Indemnifying Party, at the sole cost and expense of the Indemnifying Party (or, in the case of the Stockholders' Representative, at the sole cost and expense of the Stockholders), may, upon written notice to the Indemnified Party, assume the defense of any such claim or legal proceeding if the Indemnifying Party acknowledges to the Indemnified Party in writing the obligation of the Indemnifying Party (or in the case of the Stockholders' Representative, the Stockholders) to indemnify the Indemnified Party with respect to all elements of such claim. If the Indemnifying Party assumes the defense of any such claim or legal proceeding, the Indemnifying Party shall select counsel reasonably acceptable to the Indemnified Party to conduct the defense of such claims or legal proceedings and at the sole cost and expense of the Indemnifying Party (or in the case of the Stockholders' Representative, the sole cost and expense of the Stockholders) shall take all steps necessary in the defense or settlement thereof. The Indemnifying Party shall not consent to a settlement of, or the entry of any judgment arising from, any such claim or legal proceeding, without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld or delayed). The Indemnified Party shall be entitled to participate in (but not control) the defense of any such action, with its own counsel and at its own expense. If the Indemnifying Party does not assume the defense of any such claim or litigation resulting therefrom within 30 days after the date such claim is made: (a) the Indemnified Party may defend against such claim or litigation in such manner as it may deem appropriate, including, but not limited to, settling such claim or litigation, after giving notice of the same to the Indemnifying Party, on such terms as the Indemnified Party may deem appropriate, and (b) the Indemnifying Party shall be entitled to participate in (but not control) the defense of such action, with its counsel and at its own expense (or in the case of the Stockholders' Representative, at the expense of the Stockholders). If the Indemnifying Party (or, in the case of the Stockholders' Representative, the Stockholders) thereafter seeks to question the manner in which the Indemnified Party defended such third party claim or the amount or nature of any such settlement, the Indemnifying Party (or, in the case of the Stockholders, the Stockholders' Representative) shall have the burden to prove by a preponderance of the evidence that the Indemnified Party did not defend or settle such third party claim in a reasonably prudent manner.

10.5 PAYMENT OF INDEMNIFICATION OBLIGATION. The Company and each of the Stockholders hereby agrees that any claim for indemnification by the Buyer, or the Company (if the Closing occurs), under this Section 10 or under any other provision of this Agreement shall be satisfied first from amounts remaining in the Reserve Account in accordance with the Escrow Agreement. To the extent that funds in the Reserve Account are insufficient to satisfy the claim, the amount of the shortfall shall be paid to the Buyer or to the Company (if the Closing occurs), as appropriate, directly by the Stockholders, or by the Stockholders and the Company (if the Closing does not occur), jointly and severally. All indemnification by an Indemnifying Party hereunder (to the extent not satisfied in the manner specified in the preceding sentence), and any indemnification by the Company if the Closing does not occur (to the extent not satisfied in the

manner specified in the preceding sentence), shall be effected by immediate payment of cash or delivery of a cashier's or certified check in the amount of the indemnification liability.

10.6 SURVIVAL OF REPRESENTATIONS; CLAIMS FOR INDEMNIFICATION.

(a) All representations and warranties made by any of the Parties in this Agreement, or in any instrument or document furnished in connection with this Agreement or the transactions contemplated hereby, shall survive the Closing and any investigation at any time made by or on behalf of the Indemnified Party, and continue until 18 months after the Closing Date, and shall not be affected by any examination made for or on behalf of an Indemnified Party, except that (i) the representations and warranties contained in Sections 2, 3.1, 3.2, 3.3, 3.4, 4.1, 4.2 or 4.3 of this Agreement and in any certificate delivered pursuant to this Agreement (insofar as such certificate relates to the representations and warranties contained in such sections) shall survive the Closing and continue without limitation, (ii) the representations and warranties contained in Section 3.15 of this Agreement and in any certificate delivered pursuant to this Agreement (insofar as such certificate relates to the representations and warranties contained in such section) shall survive the Closing and continue until the fourth anniversary of the Closing Date, except for such representations and warranties relating to Aera Corporation, which shall survive the Closing and continue until the third anniversary of the filing of the final Aera Corporation tax return relating to the taxable period up to the Closing, and (iii) the representations and warranties contained in Section 3.18 of this Agreement and in any certificate delivered pursuant to this Agreement (insofar as such certificate relates to the representations and warranties contained in such section) shall survive the Closing and continue until the second anniversary of the Closing Date, except for such representations and warranties relating to Aera Corporation, which shall survive the Closing and continue until the third anniversary of the Closing Date. Any claim asserted in writing prior to the expiration of the representation or warranty that is the basis for such claim shall survive until such claim is finally resolved and satisfied. Any claim not asserted in writing prior to the expiration of the representation or warranty shall expire on the date that such representation or warranty expires, and the Parties hereto covenant not to sue, and not to permit any other Indemnified Party to sue, any Stockholder or the Company (if the Closing does not occur) with respect to any such claims.

(b) Notwithstanding anything to the contrary herein:

(i) the Stockholders, and the Company (if the Closing does not occur), shall not be liable under Section 10.1 unless and until the aggregate Losses exceed Y.24 million, at which point the Stockholders, and the Company (if the Closing does not occur), shall become liable for all of the aggregate Losses; and

(ii) in no event shall the maximum liability of the Stockholders (or, if the Closing does not occur, the combined maximum liability of the Stockholders and the Company) under Section 10.1 exceed Y.1 billion.

provided that, in each case, such limitation shall not apply to a claim relating to a breach of the representations and warranties set forth in Section 2.

(c) The Reserve Account is intended to secure the indemnification obligations of the Stockholders, and the Company (if the Closing does not occur), under this Agreement. However, subject to the limitation provided in Section 10.6(b)(ii), the rights of the Buyer under this Section 10 shall not be limited to the Reserve Account nor shall the Reserve Account be the exclusive means for the Buyer to enforce such rights.

(d) If the Closing occurs, no Stockholder shall have any right of contribution against the Company with respect to any breach of any of the representations, warranties, covenants or agreements under this Agreement relating to the Company.

11. POST-CLOSING AGREEMENTS.

11.1 PROPRIETARY INFORMATION. The Stockholders agree that from and after the Closing Date:

(a) Each of the Stockholders and each of their Affiliates shall hold in confidence, and shall use their best efforts to have all officers, directors and personnel who continue after the Closing to be employed by any such Stockholder or any Affiliate thereof to hold in confidence, all knowledge and information of a secret or confidential nature with respect to the business of the Company and the Subsidiaries and not to disclose, publish or make use of the same without the consent of the Buyer, except to the extent that such information shall have become public knowledge other than by breach of this Agreement by any of the Stockholders.

(b) If (i) the employment of an officer, director or other employee of a Stockholder or any Affiliate thereof, to whom secret or confidential knowledge or information concerning the business of the Company or the Subsidiaries has been disclosed, is terminated and (ii) such individual is subject to an obligation to maintain such knowledge or information in confidence after such termination, the Stockholders shall, upon request by the Buyer, take all reasonable steps at their expense to enforce such confidentiality obligation in the event of an actual or threatened breach thereof. Any legal counsel retained by any such Stockholder in connection with any such enforcement or attempted enforcement shall be selected by such Stockholder, but shall be subject to the approval of the Buyer, which approval shall not be unreasonably withheld.

(c) Each Stockholder agrees that the remedy at law for any breach of this Section 11.1 would be inadequate and that the Buyer shall be entitled to injunctive relief in addition to any other remedy it may have upon breach of any provision of this Section 11.1.

11.2 NO SOLICITATION OR HIRING OF FORMER EMPLOYEES. Except as provided by law, for a period of two years after the Closing Date, no Stockholder nor any Affiliate thereof shall (a) solicit any person who was an employee, officer, director, partner or member of either the Company or any of the Subsidiaries on the date hereof or the Closing Date to terminate his employment or other fiduciary relationship with the Buyer (or the Company or any of the Subsidiaries, as the case may be) or to become an employee, officer, director, partner or member of such Stockholder or Affiliate, or (b) hire or enter into a fiduciary relationship with any person who was such an employee, officer, director, partner or member on the date hereof or on the Closing Date.

11.3 SEVERANCE AND RETIREMENT PAYMENTS. Within fifteen business days following the Closing, the Company shall make a severance payment to Yoshiyuki Tanaka and a retirement payment to Hisanori Aoyama, in the respective amounts set forth on Schedule 11.3, provided that, in the case of the severance payment, Mr. Tanaka is a statutory auditor of the Company immediately prior to the Closing and that his service as such is terminated effective as of the Closing.

11.4 COMPENSATION OF THE CONTINUING DIRECTORS.

(a) Following the Closing, (i) each of Nobuo Kawakami and Tetsuo Yamada (collectively, the "Continuing Directors") shall be a director of the Company, and (ii) each of Hisanori Aoyama and Tetsuo Yamada shall be an employee of the Company, the Buyer or one of such companies' respective affiliates. Each of the Continuing Directors shall serve for a term of two years commencing on the Closing Date, which term will be subject to renewal, on the compensation terms set forth on Schedule 11.4.

(b) The retirement reserves that will be applicable to the Continuing Directors as of the Closing Date is set forth on Schedule 11.4. Following the Closing until such time as the Continuing Directors have been paid their retirement reserves, neither the Company nor the Buyer shall cause any amendment to the Regulations Relating to Officers of the Company that are in effect as of the date of this Agreement in any manner which would adversely affect the Continuing Directors' retirement reserves. Until such time as all of the Continuing Directors have retired and have been paid their retirement reserves by the Company, the Parent shall maintain aggregate cash and cash equivalents, as set forth in the Parent's consolidated financial statements prepared in accordance with GAAP, at least equal to the amount of the retirement reserves not paid to the Continuing Directors as of the date of the financial statements (the "Remaining Reserves"). Compliance with this covenant shall be monitored at the time that the Parent publicly files its quarterly financial statements with the United States Securities and Exchange Commission. For purposes of determining the Parent's compliance with this covenant, the amount of the Remaining Reserves shall be converted into Japanese yen based upon the exchange rate, as quoted by The Wall Street Journal, between the U.S. dollar and the Japanese yen as of the date of the applicable financial statements.

11.5 DECEMBER 2001 FINANCIAL STATEMENTS. (a) Following the Closing, the Buyer shall use commercially reasonable efforts to prepare the balance sheet of the Company and the Subsidiaries as of December 31, 2001 and the related statements of income, stockholders' equity, retained earnings and cash flows for the six months then ended (the "December 2001 Financial Statements"). The December 2001 Financial Statements shall be audited by the Company's independent accountants. The Buyer's independent accountants also shall be entitled to review the December 2001 Financial Statements and the performance by the Company's independent accountants of the audit. The Buyer's independent accountants shall be given full access to the information made available to, and work papers of, the Company's independent accountants, as well as such further information as the Buyer's independent accountants shall request in connection with their review. Any comments of the Buyer's independent accountants with respect to the December 2001 Financial Statements shall be addressed or reflected in the audit report prepared by the Company's independent accountants, if the Buyer's independent accountants deem such comments to be relevant to the audit report. The Stockholders covenant

and warrant that the audited December 2001 Financial Statements will reflect the following financial results:

o Stockholders' equity as of December 31, 2001 not less than the lesser of (a) Y.3.0 billion and (b) the stockholders' equity set forth in the November 2001 Financial Statements; and

o Total Debt as of December 31, 2001 not more than Y.4.3 billion.

In the event of a breach of either prong of the foregoing covenant and warranty, the amount of the shortfall shall be deemed to be a "Loss" for purposes of
Section 10.1 and the Buyer shall be entitled to recovery for such Loss in accordance with Section 10; provided, however, that in the event that neither the stockholders' equity nor the total debt comply with the foregoing, the Buyer shall be entitled to recovery only for the amount of the shortfall in respect of either the stockholders' equity or total debt, at Buyer's option.

12. TERMINATION OF AGREEMENT; OPTION TO PROCEED; DAMAGES.

12.1 TERMINATION BY LAPSE OF TIME. This Agreement shall terminate at 5:00 p.m. Tokyo Time, on March 31, 2002, if the transactions contemplated hereby have not been consummated, unless such date is extended by the written consent of the Company, the Buyer and the Stockholders' Representative (whose consent shall bind each of the Stockholders).

12.2 TERMINATION BY AGREEMENT OF THE PARTIES. This Agreement may be terminated by the mutual written agreement of the parties hereto. In the event of such termination by agreement, the Buyer shall not have any further obligation or liability to the Stockholders or the Company under this Agreement, and the Stockholders and the Company shall have no further obligation or liability to the Buyer under this Agreement.

12.3 TERMINATION BY REASON OF BREACH. This Agreement may be terminated by the Stockholders, if at any time prior to the Closing there shall occur a breach of any of the representations, warranties or covenants of the Buyer or the Parent or the failure by the Buyer or the Parent to perform any condition or obligation hereunder. This Agreement may be terminated by the Buyer, if at any time prior to the Closing there shall occur a breach of any of the representations, warranties or covenants of the Stockholders or the Company (including those made with respect to, or otherwise relating to, any of the Subsidiaries) or the failure of the Stockholders or the Company to perform any condition or obligation hereunder (including those made with respect to, or otherwise relating to, any of the Subsidiaries) (such a breach or failure of any of the Stockholders or the Company shall be referred to herein as a "Pre-Closing Breach").

12.4 OPTION TO PROCEED.

(a) In the event of a Pre-Closing Breach by the Stockholders or the Company, or the inability of the Stockholders to give title, make conveyance or deliver possession of any of the Shares, or the inability of the Stockholders or the Company to satisfy all of the terms and conditions precedent to Closing as set forth in this Agreement, all as herein stipulated, the Buyer may elect by written notice given to the Stockholders' Representative and

the Company at or prior to the Closing Date either to (i) terminate this Agreement, or (ii) extend the scheduled Closing Date by 30 days, during which period the Stockholders shall use their best efforts to cure the Pre-Closing Breach, remove all Share Encumbrances, if any, not permitted by the terms of this Agreement, remove all other defects in title, and to deliver possession and good, clear and marketable title to the Shares, and the Stockholders or the Company (as the case may be) shall use their best efforts to satisfy all other conditions to Closing as provided herein, and to make the assets of the Company and the Subsidiaries conform to the provisions herein, as the case may be. If the Stockholders or the Company (as the case may be) are unable, upon expiration of such 30-day period, to cure the Pre-Closing Breach, remove all such encumbrances and defects and to satisfy all such conditions to Closing, the Buyer may elect, by written notice given to the Stockholders' Representative and the Company, to (x) terminate this Agreement, (y) proceed with the Closing, or
(z) extend the Closing Date for an additional 30 days.

(b) If the Buyer elects to extend the Closing Date for an additional 30 days pursuant to clause (z) of paragraph (a) above, the Buyer and the Stockholders' Representative shall, within the 30-day period specified in clause (z) of paragraph (a) above, agree upon the amount of the diminution in the value of the Shares being transferred to the Buyer as a result of the Pre-Closing Breach or the cost to the Buyer of curing the applicable breach, failure or defect (the "Adjustment Amount"), and the Base Price shall be reduced by the Adjustment Amount. The Buyer and the Stockholders' Representative shall use their best efforts to agree upon the Adjustment Amount within such 30-day period; provided, however, that if the Buyer and the Stockholders' Representative cannot agree upon the Adjustment Amount within such 30-day period, the Buyer may terminate this Agreement.

12.5 AVAILABILITY OF REMEDIES AT LAW. In the event this Agreement is terminated pursuant to the provisions of this Section 12, the parties hereto shall have available to them all remedies afforded to them by applicable law.

13. DISPUTE RESOLUTION.

13.1 GENERAL. In the event that any dispute should arise between the parties hereto with respect to any matter covered by this Agreement, including, without limitation, the calculation of the Adjustment Amount, the occurrence of a Pre-Closing Breach or any claims for indemnification under
Section 10 hereof, the parties hereto shall resolve such dispute in accordance with the procedures set forth in this Section 13.

13.2 CONSENT OF THE PARTIES. In the event of any dispute between the parties with respect to any matter covered by this Agreement, the parties shall first use their best efforts to resolve such dispute among themselves. If the parties are unable to resolve the dispute within 30 calendar days after the commencement of efforts to resolve the dispute, or within 30 calendar days after the Closing Date in connection with any dispute in the Adjustment Amount, the dispute will be submitted to arbitration in accordance with Section 13.3 hereof.

13.3 ARBITRATION.

(a) Either the Parent or the Buyer, on the one hand, or the Stockholders' Representative or (if the Closing does not occur) the Company, on the other hand,

may submit any matter referred to in Section 13.1 hereof to arbitration by notifying the other party hereto and the Escrow Agent, in writing, of such dispute. Within 10 days after receipt of such notice, the Parent and/or the Buyer and the Stockholders' Representative and/or the Company shall designate in writing one arbitrator to resolve the dispute; provided, that if the parties hereto cannot agree on an arbitrator within such 10-day period, the arbitrator shall be selected by the Japan Commercial Arbitration Association ("JCAA"). The arbitrator so designated shall not be an employee, consultant, officer, director or stockholder of any party hereto or any Affiliate of any party to this Agreement.

(b) Within 15 days after the designation of the arbitrator, the arbitrator, the Parent and/or the Buyer and the Stockholders' Representative and/or the Company shall meet, at which time the Parent and/or the Buyer and the Stockholders' Representative and/or the Company shall be required to set forth in writing all disputed issues and a proposed ruling on each such issue.

(c) The arbitrator shall set a date for a hearing, which shall be no later than 30 days after the submission of written proposals pursuant to paragraph (b) above, to discuss each of the issues identified by the Parent and/or the Buyer and the Stockholders' Representative and/or the Company. Each such party shall have the right to be represented by counsel. The arbitration shall be governed by the rules of the JCAA; provided, that the arbitrator shall have sole discretion with regard to the admissibility of evidence.

(d) The arbitrator shall use his best efforts to rule on each disputed issue within 30 days after the completion of the hearings described in paragraph (c) above. The determination of the arbitrator as to the resolution of any dispute shall be binding and conclusive upon all parties hereto. All rulings of the arbitrator shall be in writing and shall be delivered to the parties hereto and the Escrow Agent.

(e) The prevailing party in any arbitration shall be entitled to an award of reasonable attorneys' fees incurred in connection with the arbitration. The non-prevailing party shall pay such fees, together with the fees of the arbitrator and the costs and expenses of the arbitration.

(f) Any arbitration pursuant to this Section 13.3 shall be conducted in Japanese and shall be located in Tokyo, Japan. Any arbitration award may be entered in and enforced by any court having jurisdiction thereover.

14. BROKERS.

14.1 FOR THE STOCKHOLDERS, THE COMPANY AND THE SUBSIDIARIES. Each of the Stockholders and the Company represents and warrants that no person, firm or corporation has acted in the capacity of broker or finder on its behalf (and, in the case of the Company, on behalf of the Subsidiaries) to bring about the negotiation of this Agreement. The Stockholders jointly and severally agree to indemnify and hold harmless the Buyer against any claims or liabilities asserted against it, the Company or the Subsidiaries by any person acting or claiming to act as a broker or finder on behalf of the Stockholders, the Company or any of the Subsidiaries.

14.2 FOR THE BUYER. The Buyer agrees to pay all fees, expenses and compensation owed to any person, firm or corporation who has acted in the capacity of broker or finder on its behalf to bring about the negotiation of this Agreement. The Buyer agrees to indemnify and hold harmless the Stockholders against any claims or liabilities asserted against them by any person acting or claiming to act as a broker or finder on behalf of the Buyer or the Parent.

15. NOTICES.

Any notices or other communications required or permitted hereunder shall be sufficiently given if delivered personally or sent by certified mail, postage prepaid or facsimile, addressed as follows or to such other address of which the parties may have given notice:

To the Buyer:	Advanced Energy Japan K.K. Towa Edogawabashi Building 347, Yamaguki-cho, Shinjuku-ku Tokyo, Japan Attn: President Fax: 81-3-3235-3580
To the Parent:	Advanced Energy Industries, Inc. 1625 Sharp Point Drive Fort Collins, CO 80525 Attn: Chief Executive Officer Fax: 970-407-6315
In each case with copies to (delivery of which copies shall not constitute notice to the Buyer or the Parent):	Thelen Reid & Priest LLP 333 South Grand Avenue, Suite 3400 Los Angeles, CA 90071 Attn: Carissa C. W. Coze, Esq. Fax: 415-369-8633 and Mitsui, Yasuda, Wani & Maeda Akasaka 2.14 Plaza Building 14-32, Akasaka 2-chome, Minato-ku Tokyo 107-0052 Japan Attn: Yoshitada Ogiso Fax: (03) 3224-3455

To the Stockholders:	c/o Hisanori Aoyama, as the Stockholders' Representative 13-6, Tamadaira 3-chome Hino-shi Tokyo 191-0062 Japan Fax: 81-42-584-7308
To the Company:	Aera Japan Limited 2971-8 Ishikawa-Cho Hachioji-Shi Tokyo, Japan Attn: President Fax: 81-426-44-2474
In each case with copies to (delivery of which copies shall not constitute notice to the Stockholders or the Company):	Hatasawa & Wakai Haix Hirakawa-Cho Bld. 10-10, Hirakawa-Cho, 2-Chome Chiyoda-Ku, Tokyo 102-0093 Japan Attn: Tamotsu Hatasawa Fax: 81-3-3261-5969

Unless otherwise specified herein, such notices or other communications shall be effective (a) on the date delivered, if delivered personally, (b) five (5) business days after being sent, if sent by registered or certified mail, and (c) upon receipt, if sent by facsimile.

16. SUCCESSORS AND ASSIGNS.

This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns, except that the Buyer, on the one hand, and the Stockholders and the Company, on the other hand, may not assign their respective obligations hereunder without the prior written consent of the other party; provided, however, that the Buyer may assign this Agreement, and its rights and obligations hereunder, to a subsidiary or Affiliate of the Buyer. Any assignment in contravention of this provision shall be void. No assignment shall release any of the parties hereto from any obligation or liability under this Agreement.

17. ENTIRE AGREEMENT; AMENDMENTS; ATTACHMENTS.

This Agreement, all Schedules and Exhibits hereto, all agreements and instruments to be delivered by the parties pursuant hereto and the Confidentiality Agreement dated March 19, 2001 by and between the Parent and the Company represent the entire understanding and agreement between the parties hereto with respect to the subject matter hereof and supersede all prior oral and written and all contemporaneous oral negotiations, commitments and understandings between such parties. The Parent and the Buyer by the consent of their

respective Boards of Directors or officers authorized by such Boards, the Company by the consent of its Board of Directors or officers authorized by such Board, and the Stockholders holding a majority of the Shares (who shall have the authority to bind all of the Stockholders) may amend or modify this Agreement, in such manner as may be agreed upon, by a written instrument executed by the Parent, the Buyer, the Company and such majority of the Stockholders.

If the provisions of any Schedule or Exhibit to this Agreement are inconsistent with the provisions of this Agreement, the provisions of the Agreement shall prevail. The Exhibits and Schedules attached hereto or to be attached hereafter are hereby incorporated as integral parts of this Agreement.

18. SEVERABILITY.

Any provision of this Agreement which is invalid, illegal or unenforceable in any jurisdiction shall, as to that jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability, without affecting in any way the remaining provisions hereof in such jurisdiction or rendering that or any other provision of this Agreement invalid, illegal or unenforceable in any other jurisdiction.

19. INVESTIGATION OF THE PARTIES.

All representations and warranties contained herein which are made to the best knowledge of a party shall require that such party make reasonable investigation and inquiry with respect thereto to ascertain the correctness and validity thereof. The "best knowledge" or "awareness" of an entity means the best knowledge of the officers, directors, partners and members of such entity and in the case of the Company, that of the Stockholders.

20. EXPENSES.

Except as otherwise expressly provided herein, the Buyer, the Stockholders and the Company will pay all fees and expenses (including, without limitation, legal and accounting fees and expenses) incurred by them in connection with the transactions contemplated hereby. If the Closing occurs, legal fees reasonably incurred by the Stockholders and the Company, up to $300,000 in the aggregate, will be paid by the Company or the Buyer. Any legal fees in excess of $300,000, as well as all other fees and expenses, incurred by the Company or the Stockholders in connection with the transactions contemplated hereby shall be paid by the Stockholders. In no event will any of the fees or expenses incurred in connection with this transaction by the Stockholders or the Stockholders' Representative, including without limitation the fees and expenses of counsel to the Stockholders, be billed to or paid by or secured or guaranteed by the Company or any Subsidiary. Each Stockholder shall be responsible for payment of all income, sales or transfer taxes arising out of the conveyance of the Shares owned by such Stockholder.

21. LEGAL FEES.

In the event that legal proceedings are commenced by the Buyer or the Parent against the Stockholders (or against the Company, if the transactions contemplated hereby are not consummated), or by the Stockholders against the Buyer, in connection with this Agreement

or the transactions contemplated hereby, the party or parties which do not prevail in such proceedings shall pay the reasonable attorneys' fees and other costs and expenses, including investigation costs, incurred by the prevailing party in such proceedings. The Stockholders shall be jointly and severally liable for their obligations under this Section 21. If the transactions contemplated hereby are not consummated, the Stockholders and the Company shall be jointly and severally liable for their obligations under this Section 21.

22. PARENT'S COMMITMENT.

The Parent hereby agrees to cause the Buyer and the Company (if the Closing occurs) to perform any and all obligations and liabilities provided under this Agreement.

23. GOVERNING LAW.

This Agreement shall be governed by and construed in accordance with the laws of Japan.

24. SECTION HEADINGS.

The section headings are for the convenience of the parties and in no way alter, modify, amend, limit or restrict the contractual obligations of the parties.

25. COUNTERPARTS.

This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which shall be one and the same document.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, this Agreement has been duly executed by the parties hereto as of and on the date first above written.

COMPANY:

AERA JAPAN LIMITED

By: /s/ Hisanori Aoyama
Name: Hisanori Aoyama
Title: Representative Director & President

BUYER:

ADVANCED ENERGY JAPAN K.K.

By: /s/ Douglas S. Schatz
Name: Douglas S. Schatz
Title: Attorney-in-Fact

PARENT:

ADVANCED ENERGY INDUSTRIES, INC.

By: /s/ Douglas S. Schatz
Name: Douglas S. Schatz
Title: Chief Executive Officer

STOCKHOLDERS:

/s/ Hisanori Aoyama
Hisanori Aoyama

/s/ Takenobu Inagaki
Takenobu Inagaki

/s/ Hiroko Aoyama

Hiroko Aoyama

/s/ Nobuo Kawakami

Nobuo Kawakami

/s/ Tetsuo Yamada

Tetsuo Yamada

EXHIBIT 23.1

[ANDERSEN LOGO]

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement on Form S-3 dated January 23, 2002 (Registration Number 333-72748) of our report dated February 12, 2001 included in Advanced Energy Industries, Inc.'s Form 10-K for the year ended December 31, 2000 and to all references to our Firm included in this Registration Statement.

/s/ ARTHUR ANDERSEN LLP

Denver, Colorado,
January 22, 2002