APPLIED MATERIALS INC /DE
Form 10-K
December 06, 2011
Table of Contents

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

(Mark one)

þ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended October 30, 2011

or

¨ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission file number 000-06920

Applied Materials, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**94-1655526**
(State or other jurisdiction of incorporation or organization)	*(I.R.S. Employer Identification No.)*
3050 Bowers Avenue, P.O. Box 58039	**95052-8039**
Santa Clara, California	*(Zip Code)*
(Address of principal executive offices)	

Registrant s telephone number, including area code:

(408) 727-5555

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

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, par value $.01 per share	The NASDAQ Stock Market LLC

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

None

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

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

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. þ

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

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

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

Aggregate market value of the voting stock held by non-affiliates of the registrant as of May 1, 2011, based upon the closing sale price reported by the NASDAQ Global Select Market on that date: $20,652,343,218

Number of shares outstanding of the registrant s Common Stock, $.01 par value, as of November 20, 2011: 1,305,637,099

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the definitive Proxy Statement for Applied Materials, Inc. s 2012 Annual Meeting of Stockholders are incorporated by reference into Part III of this Form 10-K.

Table of Contents

Caution Regarding Forward-Looking Statements

Certain information in this Annual Report on Form 10-K (report or Form 10-K) of Applied Materials, Inc. and its subsidiaries (Applied or the Company), including Management s Discussion and Analysis of Financial Condition and Results of Operations in Item 7, is forward-looking in nature. All statements in this report, including those made by the management of Applied, other than statements of historical fact, are forward-looking statements.

Examples of forward-looking statements include statements regarding Applied s future financial or operating results, cash flows and cash deployment strategies, declaration of dividends, share repurchases, business strategies, projected costs, products, competitive positions, management s plans and objectives for future operations, research and development, growth opportunities, working capital, liquidity, financing plans, investment portfolio and policies, cost controls, taxes, supply chain, manufacturing, properties, and legal proceedings and claims; the acquisition of Varian Semiconductor Equipment Associates, Inc. and other businesses; customer demand and spending; end-use demand; market and industry trends and outlooks; and general economic conditions. These forward-looking statements are based on management s estimates, projections and assumptions as of the date hereof and include the assumptions that underlie such statements. Forward-looking statements may contain words such as may, will, should, could, would, expect, plan, anticipate, believe, estimate, potential and continue, terms, or other comparable terminology. Any expectations based on these forward-looking statements are subject to risks and uncertainties and other important factors, including those discussed in Part II, Item 1A, Risk Factors, below and elsewhere in this report. Other risks and uncertainties may be disclosed in Applied s prior Securities and Exchange Commission (SEC) filings. These and many other factors could affect Applied s future financial condition and operating results and could cause actual results to differ materially from expectations based on forward-looking statements made in this document or elsewhere by Applied or on its behalf. Applied undertakes no obligation to revise or update any forward-looking statements.

The following information should be read in conjunction with the Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included in this report.

Table of Contents

APPLIED MATERIALS, INC.

FORM 10-K FOR THE FISCAL YEAR ENDED OCTOBER 30, 2011

TABLE OF CONTENTS

Table of Contents

PART I

Item 1: ***Business***

Incorporated in 1967, Applied, a Delaware corporation, provides manufacturing equipment, services and software to the global semiconductor, flat panel display, solar photovoltaic (PV) and related industries. Applied s customers include manufacturers of semiconductor wafers and chips, flat panel liquid crystal displays (LCDs), solar PV cells and modules, and other electronic devices. These customers may use what they manufacture in their own end products or sell the items to other companies for use in advanced electronic components. The Company s fiscal year ends on the last Sunday in October.

Applied is the world s largest semiconductor fabrication equipment supplier based on revenue, with the capability to provide global deployment and support services. Applied also is the leading supplier of LCD fabrication equipment to the flat panel display industry, and the leading supplier of solar PV manufacturing systems to the solar industry, based on revenue.

Applied operates in four reportable segments: Silicon Systems Group, Applied Global Services, Display, and Energy and Environmental Solutions. Applied manages its business based upon these segments. A summary of financial information for each reportable segment is found in Note 16 of Notes to Consolidated Financial Statements. A discussion of factors that could affect Applied s operations is set forth under Risk Factors in Item 1A, which is incorporated herein by reference.

Silicon Systems Group Segment

Applied s Silicon Systems Group segment develops, manufactures and sells a wide range of manufacturing equipment used to fabricate semiconductor chips, also referred to as integrated circuits (ICs). Most chips are built on a silicon wafer base and include a variety of circuit components, such as transistors and other devices, that are connected by multiple layers of wiring (interconnects). Applied offers systems that perform most of the primary processes used in chip fabrication, including atomic layer deposition (ALD), chemical vapor deposition (CVD), physical vapor deposition (PVD), electrochemical deposition (ECD), rapid thermal processing (RTP), chemical mechanical planarization (CMP), wet cleaning, and wafer metrology and inspection, as well as systems that etch or inspect circuit patterns on masks used in the photolithography process. Applied s semiconductor manufacturing systems are used by integrated device manufacturers and foundries to build and package memory, logic and other types of chips.

Most chips currently are fabricated using 45 nanometer (nm) and larger linewidth dimensions, although Applied is also working with customers on leading-edge technology for advanced nodes using 32nm, 22nm and smaller dimensions. To build a chip, the transistors, capacitors and other circuit components are first created on the surface of the wafer by performing a series of processes to deposit and selectively remove portions of successive film layers. Similar processes are then used to build the layers of wiring structures on the wafer. As the density of the circuit components increases to enable greater computing capability in the same or smaller physical area, the complexity of building the chip also increases, necessitating more process steps to form smaller structures and more intricate wiring schemes. A typical, simplified process sequence for building the wiring or interconnect portion of a chip involves initially depositing a dielectric film layer onto the base layer of circuit components using a CVD system. An etch system is then used to create openings and patterns in the dielectric layer. To form the metal interconnects, these openings and patterns are filled with conducting material using PVD and ECD technologies. A CMP step then polishes the wafer to achieve a flat surface. Additional deposition, etch and CMP steps are then performed to build up the layers needed to complete the interconnection of the circuit elements. Advanced chip designs require more than 500 steps involving these and other processes to complete the manufacturing cycle.

While some device manufacturers are still using aluminum as the main conducting material for building interconnect structures, most have transitioned to copper. Copper has lower resistance than aluminum and can carry more current in a smaller area. Applied is the leading supplier of systems for manufacturing copper-based chips, including equipment for depositing, etching and planarizing copper interconnect layers. Complementing

Table of Contents

the transition to copper to improve chip speed is the use of low dielectric constant (low k) films to replace silicon dioxide material as the insulator between the copper wiring structures. Applied also leads the industry in providing systems for depositing low k dielectric films.

The transistor is another key area of the chip where semiconductor manufacturers are improving their device designs to enhance performance. Applied has the industry s largest portfolio of technically advanced products for building smaller and faster transistors. One method of enhancing chip performance is strain engineering, a technique that stretches or compresses the space between atoms, allowing electrical current to flow more quickly. Multiple strain films are typically used in advanced devices since they have an additive effect on increasing transistor speed. Applied has a comprehensive portfolio of systems to enable these applications using CVD and epitaxial deposition technologies.

Major chipmakers are integrating new high dielectric constant (high-k) and metal materials and processes in their transistor gate structures to increase chip performance and reduce power consumption. Applied has a comprehensive portfolio of fully characterized processes for building these high-k/metal gates. These solutions include an integrated dielectric gate stack tool that combines four critical processes in a single system, a portfolio of metallization technologies using ALD and PVD, and an innovative high temperature etch system.

A new type of chip packaging is also emerging, known as three-dimensional (3D) ICs, as new consumer products demand higher performance in a smaller space. Providing greater functionality in a smaller footprint, 3D-ICs stack multiple chips together and electrically connect them using deep holes, called through-silicon via (TSV) structures. Applied has the industry s most comprehensive line of production-proven systems and processes required for the majority of advanced packaging manufacturing steps, including etch, CVD, PVD, ECD, wafer cleaning and CMP systems. To facilitate the adoption of packaging technology, Applied is working with consortiums and other equipment suppliers to lower customers implementation costs.

Some chip manufacturers have announced that they will be employing the new 3D manufacturing methods to enhance chip performance. One method is based on new 3D transistor designs that replace the traditional two-dimensional gate with a thin 3D gate. This new structure, targeted for the 22nm technology node and below, improves the performance and energy efficiency of the chip. In 2011, the Company introduced the Applied Centura Conforma system, which uses conformal plasma doping technology to modify the electrical properties of 3D and planar transistor structures.

Most of Applied s semiconductor equipment products are single-wafer systems with multiple process chambers attached to a base platform. This enables each wafer to be processed separately in its own environment, allowing precise process control, while the system s multiple chambers enable simultaneous, high productivity manufacturing. Applied sells most of its single-wafer, multi-chamber systems on five basic platforms: the Centura®, Endura®, Producer®, Raider® and Vantage® platforms. These platforms support ALD, CVD, PVD, ECD, etch and RTP technologies.

Over time, the semiconductor industry has migrated to increasingly larger wafers to build chips. The predominant or common wafer size used today for volume production of advanced chips is 300 millimeter (mm), or 12-inch, wafers. Applied offers a comprehensive range of 300mm systems through its Silicon Systems Group segment. Applied also offers earlier-generation 200mm systems, as well as products and services to support all of its systems, which are reported under its Applied Global Services segment.

The following summarizes Applied s portfolio of products and their associated process technology areas reported under its Silicon Systems Group segment.

Deposition

Deposition is a fundamental step in fabricating a chip. During deposition, layers of dielectric (an insulator), barrier, or electrically conductive (typically metal) films are deposited or grown on a wafer. Applied currently provides equipment to perform four types of deposition: ALD, CVD, ECD and PVD. In addition, Applied s RTP systems can be used to perform certain types of dielectric deposition.

Table of Contents

Atomic Layer Deposition

ALD is an advanced technology in which atoms are deposited one layer at a time to build chip structures. This technology enables customers to fabricate thin films of either conducting or insulating material with uniform coverage in nanometer-sized structures. One of the most critical areas of the transistor is its gate, which is built by depositing layers of dielectric films. At the 22nm node and below, these film layers are so thin that they must be atomically engineered. To meet this challenge, in 2011, Applied introduced its Applied Centura Integrated Gate Stack system with advanced ALD technology. The system builds ultrathin high-k film layers less than 2nm in thickness about one hundred thousandth the width of a human hair.

Chemical Vapor Deposition

CVD is used to deposit dielectric and metal films on a wafer. During the CVD process, gases that contain atoms of the material to be deposited react on the wafer surface, forming a thin film of solid material. Films deposited by CVD may be silicon oxide, single-crystal epitaxial silicon, amorphous silicon, silicon nitride, dielectric anti-reflective coatings, low k dielectric (for highly efficient insulating materials), aluminum, titanium, titanium nitride, polysilicon, tungsten, refractory metals or silicides. Applied offers the following CVD products and technologies:

The Applied Producer CVD platform This high-throughput platform features Twin-Chamber® modules that have two single-wafer process chambers per unit. Up to three Twin-Chamber modules can be mounted on each Producer platform, giving it a simultaneous processing capacity of six wafers. Many dielectric CVD processes can be performed on this platform. The highest productivity model of this system is the Applied Producer GT, which has achieved rapid customer acceptance due to its fast wafer handling performance and compact design.

Low k Dielectric Films Low k dielectric materials are used in copper-based chip designs to further improve interconnect speed. Using conventional CVD equipment, the Applied Producer Black Diamond® family of low k systems provides customers with a proven, cost-effective way to integrate a variety of low k films into advanced interconnect structures. In 2011, the Company introduced its third-generation low k technologies, the Applied Producer Black Diamond 3 system and Applied Producer Nanocure 3 system. Together, these products are designed to enable smaller, higher performance and more power-efficient devices at 22nm and below.

Lithography-Enabling Solutions Applied offers several technologies on the Producer system to help chipmakers extend their current 193nm lithography tools, including a line of Applied APF® (advanced patterning film) films and Applied DARC® (dielectric anti-reflective coating) films. Together, they provide a film stack with the precise dimensional control and compatibility needed to cost-effectively pattern nano-scale features without additional integration complexity.

Gap Fill Films There are many steps during the chipmaking process in which very small and deep, or high aspect ratio (HAR), structures must be filled void-free with a dielectric film. Many of these applications include the deposition of silicon oxides in substrate isolation structures, contacts and interconnects. In addition to its Applied Centura Ultima HDP-CVD® (high-density plasma CVD) and Applied Producer HARP (high aspect ratio process) systems, the Company offers its breakthrough Applied Producer Eterna FCVD system. Targeted for 20nm and below chips, the Eterna system delivers a liquid-like film that flows freely into virtually any structure to provide void-free dielectric fill.

Strain Engineering Solutions The Applied Producer HARP system also plays a key role in enhancing transistor performance, enabling chipmakers to boost chip speed by depositing strain-inducing dielectric films. Offering the industry s first integrated stress nitride deposition and ultraviolet (UV) cure solution, the Applied Producer Celera CVD delivers benchmark levels of high-stress tensile silicon nitride films. The Company also offers the Applied Centura SiNgenPlus low pressure CVD system for low temperature silicon nitride films. Used together, and in conjunction with silicon germanium (SiGe) films using Applied s epitaxial deposition technologies, these systems can provide additive strain engineering benefits.

Table of Contents

Through-Silicon Via Films The Company has a comprehensive portfolio of products for TSV fabrication, including the Applied Producer InVia system. This product uses a unique process to deposit the critical oxide liner film layer in HAR TSV structures, enabling robust electrical isolation of the TSV, which is vital for reliable device performance. For applications where higher temperatures can damage the manufacturing process, the Applied Producer Avila CVD system allows high quality dielectric film deposition at stable substrate temperatures at a low cost of ownership.

Epitaxial Deposition Epitaxial silicon (epitaxy or epi) is a layer of pure silicon grown in a uniform crystalline structure on the wafer to form a high quality base for the device circuitry. Epi technology is used in an increasing number of integrated circuit devices in both the wafer substrate and transistor areas of a chip to enhance speed. The Applied Centura Epi system integrates pre- and post-epi processes on the same system to improve film quality and reduce production costs. This system is also used for SiGe epi technology, which reduces power usage and increases speed in certain types of advanced chips. For emerging transistor designs, the Applied Centura RP Epi system offers selective epi processes to enable faster transistor switching through strain engineering techniques.

Polysilicon Deposition Polysilicon is a type of silicon used to form portions of the transistor structure within the integrated circuit device. The Applied Centura Polygen LPCVD system is a single-wafer, multi-chamber product that deposits thin polysilicon films at high temperatures to create transistor gate structures. To address the challenging requirements of shrinking gate dimensions, the Applied Centura DPN Gate Stack system integrates chambers for decoupled plasma nitridation (DPN), RTP anneal and polysilicon deposition on one platform to enable superior film quality and material properties.

Tungsten Deposition Tungsten is used in the contact area of a chip that connects the transistors to the wiring circuitry. In aluminum-based devices, tungsten is also used in the structures that connect the multiple layers of aluminum wiring. Applied has two products for depositing tungsten: the Applied Centura Sprint® Tungsten CVD system for 90nm and below devices and the Applied Centura iSprint ALD/CVD system for more advanced applications. The latter product combines ALD technology and CVD chambers on the same platform.

Electrochemical Deposition

Electrochemical deposition is a process by which metal atoms from a chemical fluid (an electrolyte) are deposited on the surface of an immersed object. Its main application in the semiconductor industry is to deposit copper in interconnect wiring structures. This process step follows the deposition of barrier and seed layers which prevent the copper from contaminating other areas of the device, improve the adhesion of the copper film and enable electrodeposition to occur. Applied offers two ECD systems: the Applied Raider GT ECD for electroplating advanced chip interconnect structures, and the Applied Raider S ECD for advanced TSV packaging applications.

Physical Vapor Deposition

PVD is a physical process in which atoms of a gas, such as argon, are accelerated toward a metal target. The metal atoms chip off, or sputter away, and are then deposited on the wafer. The Applied Endura PVD system offers a broad range of advanced metal deposition processes, including aluminum, aluminum alloys, cobalt, titanium/titanium nitride, tantalum/tantalum nitride, tungsten/tungsten nitride, nickel, vanadium and copper. In 2010, Applied celebrated the 20th year of its Applied Endura platform, the most successful metal deposition system in the history of the semiconductor industry.

The Applied Endura CuBS (copper barrier/seed) PVD system is widely used by customers for fabricating copper-based chips. Using PVD technology, the system deposits a tantalum-based barrier film that prevents copper material from entering other areas of the device and then a copper seed layer that primes the structure for the subsequent deposition of bulk copper. The Applied Endura CuBS RFX PVD system extends cost-effective CuBS technology to the 22nm node. The Applied Endura Avenir RF PVD system sequentially deposits the

Table of Contents

multiple metal film layers that form the heart of the industry s new, faster, metal gate transistors. The Applied Endura iLB PVD/ALD system advances the state-of-the-art in ALD technology, enabling customers to shrink their speed-critical contact structures for 20nm and below devices.

Applied s Endura system has also been used for many years in back-end applications to deposit metal layers before final bump or wire bonding packaging steps are performed. The Applied Charger UBM PVD system, which is specifically designed for under-bump metallization (UBM) and other back-end processes, features linear architecture for reliable performance and very high productivity at a low cost per wafer.

Etch

Etching is used many times throughout the integrated circuit manufacturing process to selectively remove material from the surface of a wafer. Before etching begins, the wafer is coated with a light-sensitive film, called photoresist. A photolithography process then projects the circuit pattern onto the wafer. Etching removes material only from areas dictated by the photoresist pattern. Applied offers a wide range of systems for etching dielectric, metal and silicon films to meet the requirements of advanced processing.

Applied s Producer Etch system utilizes the Twin-Chamber Producer platform to target cost-sensitive dielectric etch applications. To address advanced dielectric etch applications, the Applied Centura Enabler® E5 Etch system enables customers to create the 40:1 HAR contact features that are critical to the yield and performance of 32nm and below DRAM and Flash memory chips. The Applied Centura Carina system uses innovative, high-temperature technology to deliver the etch capability essential for scaling logic and memory devices with high-k/metal gates at 45nm and below.

In 2011, the Company introduced its Applied Centris AdvantEdge Mesa silicon etch, which features an unprecedented eight process chambers for high wafer output and proprietary system intelligence software to assure every process on every chamber precisely matches. The system also saves on power, water and gas consumption, helping customers to lower operating costs and support their sustainable manufacturing initiatives. The Applied Centura Mariana Trench Etch system provides customers with the capability to scale DRAM capacitors by enabling the etching of 80:1 aspect ratio structures. The Applied Centura Silvia system is specifically designed for etching small, deep holes for TSV applications in 3D-ICs. For etching metals, the Applied Opus AdvantEdge Metal Etch uses an optimized 5-chamber platform configuration that enables customers to extend aluminum interconnect technology and productivity for flash and DRAM memory applications.

Rapid Thermal Processing

RTP is a process in which a wafer is subjected to rapid bursts of intense heat that can take the wafer from room temperature to more than 1,000 degrees Celsius in less than 10 seconds. A rapid thermal process is used mainly for annealing, which modifies the properties of deposited films. The Applied Centura Radiance®*Plus* and Applied Vantage RadOx RTP systems feature advanced RTP technology with differing platform designs. While the multi-chamber Centura platform offers exceptional process flexibility, the streamlined two-chamber Vantage platform is designed for dedicated high-volume manufacturing. These single-wafer RTP systems are also used for growing high quality oxide and oxynitride films, deposition steps that traditional large batch furnaces can no longer achieve with the necessary precision and control.

Applied s latest RTP systems address the critical need for controlling wafer temperature to increase chip performance and yield. The laser-based Applied Vantage Astra millisecond anneal system abruptly raises the surface temperature of the wafer locally to modify material properties at the atomic level. In 2011, the Company introduced the Applied Vantage Vulcan system, the first RTP system to heat the wafer entirely from the backside. This system brings a new level of precision and control to the anneal process, allowing chipmakers to produce more high performance devices per wafer.

Chemical Mechanical Planarization

The CMP process removes material from a wafer to create a flat (planarized) surface. This process allows subsequent photolithography patterning steps to occur with greater accuracy and enables film layers to build with

Table of Contents

minimal height variations. Applied has led the industry with its 300mm Applied Reflexion® LK system, with features such as integrated cleaning, film measurement and process control capabilities. Applied s latest CMP product, the Applied Reflexion GT system, has an innovative dual-wafer design that increases performance while lowering system cost of ownership in fabricating copper interconnects and tungsten contacts.

Surface Preparation

Cleaning the surface of the wafer is critical to the adhesion and quality of films that are subsequently deposited in the chip fabrication process. Applied offers several surface preparation systems. The Applied Raider SP can incorporate several types of cleaning methods, including spray, vapor, immersion, megasonics and anneal technologies with automated single or dual-side wafer processing for high volume manufacturing.

Metrology and Wafer Inspection

Applied offers several products for measuring features and inspecting defects on the wafer during various stages of the fabrication process. These systems enable customers to characterize and control critical dimension (CD) and defect issues, especially at advanced generation technology nodes.

Critical Dimension and Defect Review Scanning Electron Microscopes (CD-SEMs and DR-SEMs)

Scanning electron microscopes (SEMs) use an electron beam to form images of microscopic features of a patterned wafer at extremely high magnification. Applied s SEM products provide customers with full automation, along with the high accuracy and sensitivity needed for measuring very small CDs. The Applied VeritySEM® 4i metrology system uses proprietary SEM imaging technology to enable precise control of the lithography and etching processes, measuring CDs at a precision of less than 0.3nm. Applied s OPC Check software for the VeritySEM system performs automated qualification of OPC-based (optical proximity correction) chip designs, significantly reducing mask (see Mask Making section below) verification time over conventional manual methods.

DR-SEMs review defects on the wafer (such as particles, scratches or residues) that are first located by a defect detection system and then classify the defects to identify their source. The high-throughput, fully automatic Applied SEMVision Defect Analysis products enable customers to use this technology as an integral part of their production lines to analyze defects as small as 30nm with industry-leading throughput.

Wafer Inspection

Using deep ultraviolet (DUV) laser-based technology, defects can be detected on patterned wafers (wafers with printed circuit images) as they move between processing steps. Defects include particles, open circuit lines, and shorts between lines. The Applied UVision® 4 wafer inspection system detects yield-limiting defects in the critical patterning layers of 22nm and below logic and memory devices. In 2011, the Company introduced the Applied DFinder system, the first darkfield wafer inspection system to use DUV laser scanning to detect particles as small as 40nm in interconnect layers.

Mask Making

Masks are used by photolithography systems to transfer microscopic circuit designs onto wafers. Since an imperfection in a mask may be replicated on the wafer, the mask must be virtually defect-free. Applied provides systems for etching and inspecting masks.

The Applied Centura Tetra X Advanced Reticle Etch system is an advanced etch tool for fabricating leading-edge masks at 22nm and below. Applied s Tetra line of systems has been used by mask makers worldwide to etch the majority of high-end masks over the last five years. The Company also addresses the challenges of detecting defects on 22nm masks with its Applied Aera3 Mask inspection system. Using sophisticated aerial imaging technology, the Aera3 allows users to immediately see how the pattern on the mask will appear on the

Table of Contents

wafer, revealing only the defects most likely to print and significantly reducing inspection time. These systems also address the challenge of fabricating emerging extreme ultraviolet (EUV) lithography masks.

Ion Implantation

With the acquisition of Varian Semiconductor Associates, Inc. (Varian) in November 2011, Applied began to design, market, manufacture and service ion implantation systems. These systems are primarily used in the manufacture of transistors, which are a basic building block of ICs or microchips. Ion implantation systems create a beam of electrically charged particles called ions, which are implanted into transistor structures at precise locations and depths, changing the electrical properties of the semiconductor device. These implantation systems may also be used in other areas of IC manufacture for modifying the material properties of the semiconductor devices, as well as in manufacturing crystalline-silicon solar cells and light-emitting diodes (LEDs).

Applied Global Services Segment

The Applied Global Services segment encompasses products and services designed to improve the performance and productivity, and reduce the environmental impact, of the fab operations of semiconductor, LCD and solar PV manufacturers. The in-depth expertise and best known methods of Applied s extensive global support infrastructure enable Applied to continuously support customers production requirements. Trained customer engineers and process support engineers are deployed in more than a dozen countries. These engineers are usually located at or near customers fab sites and service over 37,000 installed Applied systems, as well as non-Applied systems. Applied offers the following general types of services and products:

Fab and Equipment Services Applied offers a portfolio of fab-wide operations services to maintain and optimize customers fabrication facilities. Applied Performance Services offers customers comprehensive equipment support with performance-based pricing and predictable costs to enable improved cost of ownership. Included in this program is Applied s ExpertConnect remote diagnostic capability, providing expert support around the clock.

Applied also offers its Total Parts Management program with spare parts manufactured to Applied s strict technical specifications and quality standards.

In addition to advanced 300mm fabs, Applied offers a wide range of products and services to extend the productive life of 200mm semiconductor fabs, including new and remanufactured 200mm equipment, system enhancements and fab transition services. Designed to maximize productivity and lower cost of ownership, these products also assist customers in implementing green manufacturing solutions. Applied s 200mm systems are available in a broad range of production-proven technologies, including CVD, PVD, etch, implant, RTP, CMP, epitaxy, metrology and inspection tools.

Automation Systems Applied offers automated factory-level and tool-level control software systems for semiconductor, LCD and solar PV manufacturing facilities. These enterprise solutions include manufacturing execution systems (MES) to automate the production of wafers and LCD and solar substrates, advanced process control systems, and scheduling and materials handling control systems. The Applied SmartFactory MES software is a factory automation solution designed to help accelerate the production ramp of emerging technologies for solar PV, chip-packaging, and LED applications.

Applied also offers computerized maintenance management systems, performance tracking and modeling and simulation tools for improving asset utilization. Applied s E3 equipment engineering system solution, for example, integrates all critical equipment automation and process control components. The Applied SmartSched system is the semiconductor industry s first predictive scheduling solution for optimizing the movement of wafers during the lithography process to reduce cycle time and increase tool utilization.

Thin Film Solar As a result of Applied s restructuring of its Energy and Environmental Solutions segment in fiscal 2010, the Company discontinued sales to new customers of its fully-integrated SunFab thin film solar production lines, but continues to support existing SunFab customers with services, upgrades and capacity

Table of Contents

increases through the Applied Global Services segment. Thin film solar technologies are well-suited for large-scale applications, such as utility scale solar farms and commercial rooftops, where space is not a constraint.

Display Segment

Applied s products for manufacturing thin film transistor liquid crystal displays (TFT- LCDs) for televisions, personal computers (PCs), tablet PCs, smartphones and other consumer-oriented electronic applications are reported under its Display segment. While similarities exist between the technologies utilized in chipmaking and LCD fabrication, the most significant differences are in the size and composition of the substrate. Substrates used to manufacture LCD panels can be more than 120 times larger in area than 300mm wafers and are made of glass, while wafers are made of silicon.

Applied supplies a wide range of systems that process and test different glass substrate sizes. To meet consumer demand for larger, more cost-effective LCD TVs, Applied s latest generation (Gen) 10 systems can process substrates sized at approximately 2.85 x 3.05 meters, with each substrate enabling the production of up to six 65-inch LCD TV screens. Applied is also extending its core LCD equipment technology into new mobility display segments that require smaller, high-performance LCD or organic LED (OLED) screens and touch capability.

For fabricating the transistor layer of these panels, Applied offers a line of plasma-enhanced CVD (PECVD) systems that use multi-chamber platform architecture to deposit dielectric and semiconducting films. In 2011, the Company introduced the Applied AKT-20K PX PECVD system for manufacturing high-performance LCD and OLED displays for advanced smartphones and tablet PC products. The system deposits highly-uniform low-temperature polysilicon (LTPS) films on 1.95m^2 glass sheets that are three times larger than the previous standard size, enabling larger, higher resolution screen sizes compared to previous-generation mobile products.

The AKT-PiVot 55KV system employs high-productivity, cost-efficient PVD technology to deposit metal and transparent conductive oxide films on the substrate. For manufacturing the color filter of LCD panels, Applied offers the AKT-NEW ARISTO for transparent conductive oxide film deposition. Providing customers with new levels of productivity and flexibility, the Company introduced in 2011 the Applied AKT-AristoTwin system for manufacturing touch-enabled displays. The system features two independent processing tracks on a single system, enabling customers to achieve 50% more capacity using half the manufacturing space.

To complement these systems, Applied also offers a line of electron beam test (EBT) systems for testing substrates during production for defective pixels and other imperfections, including the Gen-10 AKT-90K EBT product. Featuring one of the industry s fastest and most accurate pixel test technologies with the lowest operating cost, the EBT systems non-contact test technology enables the safe testing of high-value LCD TV panels without damaging or scratching the display.

Energy and Environmental Solutions Segment

The Energy and Environmental Solutions segment includes manufacturing systems to produce products for the generation and conservation of energy. To increase the conversion efficiency and yields of solar PV devices and help reduce the cost per watt of solar-generated electricity, Applied offers manufacturing solutions for wafer-based crystalline silicon (c-Si) applications.

Applied s portfolio of solar PV wafer and cell fabrication technologies has made it the leading supplier of c-Si equipment worldwide in terms of revenue. In addition to innovative technology, these systems offer key manufacturing benefits to customers in high productivity, advanced ultra-thin wafer handling, and extensive automation.

Wafer manufacturing Applied s precision wafering systems crop and square silicon ingots into bricks and slice silicon bricks into thin wafers with high productivity and minimal silicon loss. These wafers are subsequently processed by cell manufacturing systems to create the PV cells used in making c-Si solar panels. The

Table of Contents

Applied HCT wire saw cropper and squarer systems cut silicon ingots into bricks with high productivity and minimal silicon loss. The Applied HCT B5 wire saw, a leading wafer slicing system, was designed for large load capacity in volume manufacturing and has a unique four-position architecture that provides the load flexibility for optimizing yield and productivity.

Cell manufacturing Applied offers a comprehensive line of automated metallization and test systems for c-Si cell manufacturing with its Applied Baccini products. These systems include high-precision printing capability for increasing the efficiency of c-Si solar cells. In 2011, the Company introduced the Applied Baccini Pegaso platform for next-generation solar cell manufacturing. In addition to increased yield and output, a key feature of the Pegaso system is its proprietary smart capabilities which bring a new level of precision and control to the cell manufacturing process. The system s modular architecture allows customers to rapidly add modules for additional processing capability, reducing the time, cost and risk of implementing new cell designs.

Other products offered under the Energy and Environmental Solutions segment include roll-to-roll, vacuum web coating systems for high-performance deposition of a range of films on flexible substrates for functional, aesthetic or optical properties. The Applied TopMet 4450, is the world s largest and fastest roll-to-roll machine for depositing ultra-thin aluminum films for flexible packaging applications. The Applied SmartWeb system uses PVD technology to deposit critical multi-layer films required for fabricating advanced touch panels in mobile devices and other flexible electronic substrates. The system s modular design allows up to 12 different thin film layers to be deposited simultaneously on flexible material, enabling complex structures to be created in a single pass.

Backlog

Applied manufactures systems to meet demand represented by order backlog and customer commitments. Backlog consists of: (1) orders for which written authorizations have been accepted and assigned shipment dates are within the next 12 months, or shipment has occurred but revenue has not been recognized; (2) contractual service revenue and maintenance fees to be earned within the next 12 months; and (3) orders for SunFab lines that are anticipated to be recognized as revenue within the next 12 months. Applied s backlog at any particular time is not necessarily indicative of actual sales for any future periods, due to the potential for customer changes in delivery schedules or cancellation of orders.

Applied s backlog decreased from $3.2 billion at October 31, 2010 to $2.4 billion at October 30, 2011. Applied s backlog on any particular date is not necessarily indicative of actual sales for any succeeding period. Customers may delay delivery of products or cancel orders prior to shipment, subject to possible cancellation penalties. Delays in delivery schedules and/or a reduction of backlog during any particular period could have a material adverse effect on Applied s business and results of operations.

Manufacturing, Raw Materials and Supplies

Applied s manufacturing activities consist primarily of assembly, test and integration of various proprietary and commercial parts, components and subassemblies (collectively, parts) that are used to manufacture systems. Applied has implemented a distributed manufacturing model under which manufacturing and supply chain activities are conducted in various countries, including the United States, Europe, Israel, Singapore, Taiwan and other countries in Asia, and assembly of some systems is completed at customer sites. Applied uses numerous vendors, including contract manufacturers, to supply parts and assembly services for the manufacture and support of its products. Although Applied makes reasonable efforts to assure that parts are available from multiple qualified suppliers, this is not always possible. Accordingly, some key parts may be obtained from only a single supplier or a limited group of suppliers. Applied seeks to reduce costs and to lower the risks of manufacturing and service interruptions by: (1) selecting and qualifying alternate suppliers for key parts; (2) monitoring the financial condition of key suppliers; (3) maintaining appropriate inventories of key parts; (4) qualifying new parts on a timely basis; and (5) locating certain manufacturing operations in close proximity to suppliers and customers.

Table of Contents

Research, Development and Engineering

Applied s long-term growth strategy requires continued development of new products. Applied s significant investment in research, development and engineering (RD&E) has generally enabled it to deliver new products and technologies before the emergence of strong demand, thus allowing customers to incorporate these products into their manufacturing plans at an early stage in the technology selection cycle. Applied works closely with its global customers to design systems and processes that meet their planned technical and production requirements. Product development and engineering organizations are located primarily in the United States, as well as in Europe, Israel, Taiwan and China. In addition, Applied outsources certain RD&E activities, some of which are performed outside the United States, primarily in India. Process support and customer demonstration laboratories are located in the United States, China, Taiwan, Europe and Israel.

Applied s investments in RD&E for product development and engineering programs to create or improve products and technologies over the last three years were as follows: $1.1 billion (11 percent of net sales) in fiscal 2011, $1.1 billion (12 percent of net sales) in fiscal 2010 and $934 million (19 percent of net sales) in fiscal 2009. Applied has spent an average of 13 percent of net sales in RD&E over the last five years. In addition to RD&E for specific product technologies, Applied maintains ongoing programs for automation control systems, materials research and environmental control that are applicable to its products.

In fiscal 2011, Applied developed logic and memory chip technologies to meet the requirements of manufacturing below the 22nm node. These technologies include low k dielectrics and curing for interconnect structures and high-k dielectric materials and ALD processes for fabricating transistor gates. Applied also focused on processes to help customers build new 3D gate structures. In addition, Applied continued to focus on optimizing the cost-effectiveness of TSV technologies to enable their widespread implementation. TSV is an emerging solution for interconnecting three dimensional chip stacks to provide better device performance, lower power consumption and the integration of heterogeneous devices. Applied is also investing in other new product development areas such as 450mm wafer systems. In the Display sector, Applied developed deposition systems to enable larger OLED, LCD and touch-enabled displays. In solar, Applied focused on screen printing technology to keep pace with cell manufacturers new higher-efficiency cell designs. A key development area was smart capability, which bring a new level of precision and control to the production process. RD&E also continued the development of products that enable lower-cost production of solar energy, production of LED devices for display backlighting and general lighting, and other products to enable energy conservation.

In fiscal 2010, Applied developed new technology to enable next-generation 22nm and below chip designs. These systems were designed to help customers continue their drive to pack more transistors in the same space using high-k/metal gate technologies and double patterning processes. Applied also developed technology for TSVs. In the solar PV area, Applied continued the development of its precision wafering and cell manufacturing products for lowering the cost of producing solar-generated electricity through advanced crystalline silicon technology. RD&E also included activities to develop products that enable lower-cost production of solar energy, production of LED devices for display backlighting and general lighting, and other products to enable energy conservation.

In fiscal 2009, Applied focused on developing systems for semiconductor customers new chip designs with 32nm and below geometries, including systems to enable faster transistors using strain engineering and high-k/metal gate technologies, as well as double patterning processes that enable customers to extend their existing 193nm lithography tools through additional technology generations. Applied also focused on developing technology for manufacturing next-generation displays. RD&E also included activities to develop products that enable lower-cost production of solar energy and other products to enable energy conservation.

Table of Contents

Marketing and Sales

Net sales by geographic region, which are attributed according to the location of customers facilities, were as follows:

	2011		2010		2009	
	($)	(%)	($)	(%)	($)	(%)
	(In millions, except percentages)					
China	2,574	24	1,557	16	635	13
Taiwan	2,093	20	2,750	29	1,026	21
Korea	1,263	12	1,768	19	664	13
Japan	912	9	768	8	718	14
Southeast Asia	592	5	578	6	252	5
Asia Pacific	7,434	70	7,421	78	3,295	66
North America(*)	1,963	19	1,147	12	966	19
Europe	1,120	11	981	10	753	15
Total	10,517	100	9,549	100	5,014	100

(*) Primarily the United States.

Because of the highly technical nature of its products, Applied markets and sells products worldwide almost entirely through a direct sales force. Approximately 81 percent of Applied s fiscal 2011 net sales were to regions outside of the United States.

General economic conditions impact Applied s business and financial results. From time to time, the markets in which products are sold experience weak economic conditions that may negatively impact sales. Applied s business is usually not seasonal in nature, but it is highly cyclical, based on capital equipment investment by major semiconductor, flat panel display, solar PV and other manufacturers. Customers expenditures depend on many factors, including: anticipated market demand and pricing for semiconductors, LCDs, solar cells and modules, and other substrates; the development of new technologies; customers factory utilization; capital resources and financing; government policies and incentives; and global and regional economic conditions.

Information on net sales to unaffiliated customers and long-lived assets attributable to Applied s geographic regions is included in Note 16 of Notes to Consolidated Financial Statements. The following companies accounted for at least 10 percent of Applied s net sales in 2011, 2010, and/or 2009, which were for products in multiple reportable segments.

	2011	2010	2009
Samsung Electronics Co., Ltd.	12%	14%	10%
Taiwan Semiconductor Manufacturing Company Limited	10%	11%	*
Intel Corporation	10%	*	12%

* Less than 10%.

Competition

The industries in which Applied operates are highly competitive and characterized by rapid technological change. Applied s ability to compete generally depends on its ability to timely commercialize its technology, continually improve its products and develop new products that meet constantly evolving customer requirements. Significant competitive factors include technical capability and differentiation, productivity and cost-effectiveness. The importance of these factors varies according to customers needs, including product mix and respective product requirements, applications, and the timing and circumstances of purchasing decisions. Substantial competition exists in all areas of Applied s business. Competitors range from small companies that compete with a single product and/or in a single region, to global, diversified companies with a range of

Table of Contents

products. Applied s ability to compete requires a high level of investment in RD&E, marketing and sales and global customer support activities. Management believes that many of Applied s products have strong competitive positions.

The competitive environment for each segment is described below:

The semiconductor industry has been increasingly driven by consumer demand for lower-cost electronic products with increased capability. As a result, products within the Silicon Systems Group segment are subject to significant changes in customer requirements, including transitions to smaller dimensions, new materials and an increasing number of applications. While certain existing technologies may be adapted to new requirements, some applications create the need for an entirely different technological approach. The rapid pace of technological change can quickly diminish the value of current technologies and products and create opportunities for existing and new competitors. Applied offers a broad portfolio of technologically differentiated products that must continuously evolve to satisfy customers requirements in order to compete effectively. Applied allocates resources among its numerous product offerings and therefore may decide not to invest in an individual product to the same degree as competitors who specialize in fewer products. There are a number of competitors serving the semiconductor manufacturing equipment industry, with some offering a single product line and others offering multiple product lines. These competitors range from suppliers serving a single region to global, diversified companies. Factors that influenced the competitive environment for the Silicon Systems Group in fiscal 2011 included a softening in semiconductor industry, despite higher demand for tablet computers, laptop computers and cellular phones. Device supply and demand dynamics led manufacturers to reduce their annual wafer fab equipment (WFE) capital spending, which is the major driver for Silicon Systems Group net sales.

Products and services within the Applied Global Services segment complement the Silicon Systems Group, Display, and Energy and Environmental Solutions segments products, in markets that are characterized by demanding worldwide service requirements and a diverse group of numerous competitors. To compete effectively, Applied offers products and services to reduce costs, improve tool performance, and increase the productivity and energy efficiency of customers fab operations. Significant competitive factors include productivity, cost-effectiveness, and the level of technical service and support. The importance of these factors varies according to customers needs and the type of products or services offered. Customers with more significant operations and/or expertise may require fewer service products than customers who place greater reliance on an outsourcing model. Industry conditions that affected Applied Global Services sales of spares and services in fiscal 2011 were principally manufacturing capacity and utilization rates of fabs.

Products in the Display segment are generally subject to strong competition from a number of major competitors. Applied holds established market positions with its technically-differentiated TFT-LCD manufacturing solutions for PECVD, color filter PVD, PVD array, PVD touch panel, and TFT array testing, although its market position could change quickly due to customers evolving requirements. The competitive environment for Applied s Display segment in fiscal 2011 was characterized by increased demand and capacity requirements for mobile devices, such as smartphones and tablets PCs, which drove demand for high-performance displays and touch screen devices. LCD TV demand and capacity also grew, but not as rapidly as in recent years. Important factors affecting the competitive position of Applied s Display products include (i) industry trends, Applied s ability to innovate and develop new products, and the extent to which Applied s products are technically-differentiated, (ii) which customers within a highly concentrated customer base are making capital equipment investments, and (iii) Applied s existing position at these customers.

Applied s products within the Energy and Environmental Solutions segment compete in several diverse market areas, including primarily the c-Si solar equipment market. All of these markets are characterized by extreme pressure to reduce customers overall production costs and improve performance. With respect to its c-Si equipment products, Applied competes with a number of other companies, some of which have significant experience with solar applications and some of which are new entrants to the solar equipment business.

Table of Contents

Patents and Licenses

Management believes that Applied s competitive position significantly depends upon the Company s research, development, engineering, manufacturing and marketing capabilities, and not just on its patent position. However, protection of Applied s technological assets through enforcement of its intellectual property rights, including patents, is important. Therefore, Applied s practice is to file patent applications in the United States and other countries for inventions that Applied considers significant. Applied has a substantial number of patents in the United States and other countries, and additional applications are pending for new inventions. Although Applied does not consider its business materially dependent upon any one patent, the rights of Applied and the products made and sold under its patents, taken as a whole, are a significant element of Applied s business. In addition to patents, Applied also possesses other intellectual property, including trademarks, know-how, trade secrets and copyrights.

Applied enters into patent and technology licensing agreements with other companies when management determines that it is in Applied s best interest to do so. Applied pays royalties under existing patent license agreements for the use, in several of its products, of certain patented technologies that are licensed to Applied. Applied also receives royalties from licenses granted to third parties. Royalties received from or paid to third parties have not been, and are not expected to be, material to Applied s consolidated results of operations.

In the normal course of business, Applied periodically receives and makes inquiries regarding possible patent infringement. In responding to such inquiries, it may become necessary or useful for Applied to obtain or grant licenses or other rights. However, there can be no assurance that such licenses or rights will be available to Applied on commercially reasonable terms, or at all. If Applied is not able to resolve or settle claims, obtain necessary licenses on commercially reasonable terms, and/or successfully prosecute or defend its position, Applied s business, financial condition and results of operations could be materially and adversely affected.

Environmental Matters

Applied maintains a number of environmental, health and safety programs that are primarily preventive in nature. As part of these programs, Applied regularly monitors ongoing compliance with applicable laws and regulations. In addition, Applied has trained personnel to conduct investigations of any environmental, health or safety incidents, including, without limitation, spills, releases or possible contamination.

Compliance with federal, state and local environmental, health and safety provisions, including, without limitation, those regulating the discharge of materials into the environment, remedial agreements and other actions relating to the environment have not had, and are not expected to have, a material effect on Applied s capital expenditures, competitive position, financial condition or results of operations.

The most recent report on Applied s environmental, health and safety activities can be found in the Company s latest Citizenship Report on its website at http://www.appliedmaterials.com/about/cr/sustainability. The Citizenship Report is updated periodically. This website address is intended to be an inactive textual reference only. None of the information on, or accessible through, Applied s website is part of this Form 10-K or is incorporated by reference herein.

Employees

At October 30, 2011, Applied employed approximately 13,000 regular employees and 900 temporary employees. In the high-technology industry, competition for highly-skilled employees is intense. Applied believes that its future success is highly dependent upon its continued ability to attract, retain and motivate qualified employees. There can be no assurance that Applied will be able to attract, hire, assimilate, motivate and retain a sufficient number of qualified employees.

Table of Contents

Executive Officers of the Registrant

The following table and notes set forth information about Applied s executive officers as of October 30, 2011:

Name of Individual	Position
Michael R. Splinter(1)	Chairman of Board of Directors, President and Chief Executive Officer
George S. Davis(2)	Executive Vice President, Chief Financial Officer
Mark R. Pinto(3)	Executive Vice President, General Manager Energy and Environmental Solutions
Randhir Thakur(4)	Executive Vice President, General Manager Silicon Systems
Joseph Flanagan(5)	Senior Vice President, Worldwide Operations and Supply Chain
Mary Humiston(6)	Senior Vice President, Global Human Resources
Manfred Kerschbaum(7)	Senior Vice President, Chief of Staff
Joseph J. Sweeney(8)	Senior Vice President, General Counsel and Corporate Secretary
Chris Bowers(9)	Group Vice President, Corporate Initiatives
Thomas T. Edman(10)	Group Vice President, General Manager Display Business Group
Ron Kifer(11)	Group Vice President, Chief Information Officer
Charlie Pappis(12)	Group Vice President, General Manager Applied Global Services
Omkaram Nalamasu(13)	Corporate Vice President, Chief Technology Officer
Thomas S. Timko(14)	Corporate Vice President, Corporate Controller and Chief Accounting Officer

(1) Mr. Splinter, age 61, has been President and Chief Executive Officer of Applied since April 2003 and Chairman of the Board of Directors since March 2009. Prior to joining Applied, Mr. Splinter was an executive at Intel Corporation (Intel), a manufacturer of chips and computer, networking and communications products, where Mr. Splinter held a number of positions in his 20 years at Intel, including Executive Vice President and Director of Sales and Marketing and Executive Vice President and General Manager of the Technology and Manufacturing Group.

(2) Mr. Davis, age 54, was promoted to Executive Vice President, Chief Financial Officer in December 2009, after serving as Senior Vice President, Chief Financial Officer, since December 2006, and appointed Group Vice President, Chief Financial Officer in November 2006. Previously, he had been Group Vice President, General Manager, Corporate Business Development since March 2005. From November 1999 to February 2005, Mr. Davis served as Vice President and Corporate Treasurer, where he managed Applied s worldwide treasury operations and was responsible for investments, tax, financial risk management, and trade and export matters. Mr. Davis joined Applied in 1999.

(3) Dr. Pinto, age 52, has held the position of Executive Vice President, General Manager Energy and Environmental Solutions since January 2011. Dr. Pinto was promoted to Executive Vice President in December 2009 and was previously Senior Vice President, General Manager, Energy and Environmental Solutions and Display as well as corporate Chief Technology Officer. Prior to joining Applied in January 2004, Dr. Pinto spent 19 years with Bell Laboratories (Bell Labs), a communications research and development company, and the Lucent Microelectronics Group, which later became Agere Systems Inc., an IC components company, most recently as Vice President of the Analog Products Division. Dr. Pinto holds a Ph.D. in Electrical Engineering from Stanford University.

(4) Dr. Thakur, age 49, was promoted to Executive Vice President, General Manager Silicon Systems in December 2009, after serving as Senior Vice President, General Manager Silicon Systems since October 2009. Previously, he was Senior Vice President, General Manager, Thin Film Solar and Display. He was appointed Senior Vice President, General Manager, Strategic Operations when he rejoined Applied in May 2008. He previously was with Applied from 2000 to 2005 in a variety of executive roles including Group Vice President, General Manager for Front End Products. From September 2005 to May 2008, Dr. Thakur served as Executive Vice President of Technology and Fab Operations at SanDisk Corporation, a data storage solutions manufacturer, and as head of SanDisk s worldwide operations. Prior to joining Applied in 2000, Dr. Thakur served in leadership roles at Steag Electronic Systems AG, an electronics company, and Micron

Technology, Inc., a semiconductor manufacturer.

Table of Contents

(5) Mr. Flanagan, age 40, joined Applied as Senior Vice President, Worldwide Operations and Supply Chain in February 2010. Prior to joining Applied, Mr. Flanagan held executive positions in global operations for Nortel Networks Corporation, a telecommunications equipment manufacturer, since 2006, including President of Nortel Business Services from August 2009 to February 2010, and Senior Vice President of Global Operations from August 2007 until August 2009. Previously, Mr. Flanagan held a number of positions from 1993 to 2006 at General Electric Company (GE), a global infrastructure, finance and media company.

(6) Ms. Humiston, age 46, was named Senior Vice President, Global Human Resources in July 2011. She was Corporate Vice President, Global Human Resources from July 2009 to June 2010 and then promoted to Group Vice President in July 2010. Prior to July 2009, she served as the Corporate Vice President of Human Resources for both the Energy and Environmental Solutions and Display groups. Prior to joining Applied, Ms. Humiston was Vice President of Human Resources at Honeywell International Inc., which provides technologies to address safety, security and energy, from October 2002 to June 2008, with responsibility for various corporate and international organizations. She previously held executive positions with PeoplePC, an internet service provider; Gap, Inc., an apparel retailer; and GE.

(7) Mr. Kerschbaum, age 57, was named Senior Vice President, Chief of Staff in September 2009. Prior to that he served as Senior Vice President, General Manager, Applied Global Services from January 2005 to September 2009. Mr. Kerschbaum was Senior Vice President, Global Operations from July 2004 to January 2005 and from October 2002 to May 2003. From May 2003 to July 2004, he was Group Vice President, Foundation Engineering and Operations. From January 1996 to October 2002, he held various positions in Applied Materials North America, most recently as Group Vice President, General Manager, Applied Materials North America. Mr. Kerschbaum has served in various other operations, customer service and engineering positions since joining Applied in 1983.

(8) Mr. Sweeney, age 63, has held the position of Senior Vice President, General Counsel and Corporate Secretary of Applied since July 2005, with responsibility for global legal affairs, intellectual property and security. From April 2002 to July 2005, Mr. Sweeney was Group Vice President, Legal Affairs and Intellectual Property, and Corporate Secretary. Mr. Sweeney joined Applied in 1993.

(9) Mr. Bowers, age 51, has been Group Vice President, Corporate Initiatives since October 2009, working on enterprise wide transformation projects. From March 2008 to September 2009, he was Group Vice President and General Manager of Corporate Services and Chief of Staff, working closely with executives on effective business strategy execution. Prior to joining Applied, Mr. Bowers was a partner at the Hay Group, a global consulting firm, where he held various business leadership and consulting positions from 1992 to 2008. Most recently, he was Director of Client Services in Europe, the Middle East and Africa, and a member of the Hay Group Global R&D Council. Prior to the Hay Group, Mr. Bowers was a member of the U.K. Special Forces.

(10) Mr. Edman, age 49, was appointed Group Vice President and General Manager of the Display Business Group in February 2011. Previously, he served as Group Vice President and General Manager of Corporate Business Development and Global Corporate Affairs and Marketing from June 2006 to June 2011. Prior to joining Applied, Mr. Edman served as President and Chief Executive Officer of Applied Films Corporation until the company was acquired by Applied in June 2006, and he held various executive positions at Marubeni Specialty Chemicals, Inc., a distributor of specialty chemicals. Mr. Edman also serves on the governing board of the FlexTech Alliance and on the Board of Directors of TTM Technologies, Inc. as Chairman of its compensation committee.

(11) Mr. Kifer, age 60, joined Applied in May 2006 as Group Vice President and Chief Information Officer, Global Information Services. Prior to his appointment, Mr. Kifer spent five years with DHL, a global logistics company, in various executive management roles, most recently as the Senior Vice President and Chief Information Officer for North America, Asia Pacific and Emerging Markets.

(12) Mr. Pappis, age 50, has been Group Vice President and General Manager of Applied Global Services since September 2009. He previously held positions in Applied Global Services as Corporate Vice President and General Manager for the Semiconductor Service Solutions group and as general manager for Equipment Productivity Services. He has held various other management positions since joining Applied in 1986.

18

Table of Contents

(13) Dr. Nalamasu, age 53, was promoted to Corporate Vice President and Chief Technology Officer for Applied in January 2011. Upon joining Applied in June 2006 to January 2011, Dr. Nalamasu was Corporate Vice President and Deputy Chief Technology Officer and served as General Manager for Applied s Advanced Technologies Group Dr. Nalamasu was Vice President of Research and a NYSTAR Distinguished Professor of Materials Science and Engineering at Rensselaer Polytechnic Institute from 2002 to 2006. Prior to that he held various R&D leadership positions at Bell Labs and later Lucent Technologies, Inc., a telecommunications company, for 17 years.

(14) Mr. Timko, age 43, joined Applied in March 2010 as Corporate Vice President, Corporate Controller and Chief Accounting Officer. From June 2006 until March 2010, Mr. Timko was with Delphi Automotive LLP, a supplier to the automotive, computing, communications, energy and consumer accessories markets, where he was most recently Chief Accounting Officer and Controller. He served as Assistant Controller for The Interpublic Group of Companies, Inc., a global provider of advertising and marketing services, from December 2004 to June 2006, and previously at Dover Corporation, a manufacturer of industrial products. Mr. Timko began his career in 1991 with PricewaterhouseCoopers LLC, a provider of audit and assurance, tax and advisory services, and is a certified public accountant.

Available Information

Applied s website is *http://www.appliedmaterials.com.* Applied makes available free of charge, on or through its website, its annual, quarterly and current reports, and any amendments to those reports, as soon as reasonably practicable after electronically filing such reports with, or furnishing them to, the SEC. This website address is intended to be an inactive textual reference only. None of the information on, or accessible through, Applied s website is part of this Form 10-K or is incorporated by reference herein.

Item 1A: ***Risk Factors***

The following factors could materially affect Applied s business, financial condition or results of operations and should be carefully considered in evaluating the Company and its business, in addition to other information presented elsewhere in this report.

The industries that Applied serves are volatile and difficult to predict.

As a supplier to the global semiconductor, flat panel display, solar and related industries, Applied is subject to business cycles, the timing, length and volatility of which can be difficult to predict and which vary by reportable segment. These industries historically have been cyclical due to sudden changes in customers manufacturing capacity and advanced technology requirements and spending, which depend in part on customers capacity utilization, production volumes, access to affordable capital, end-use demand, and inventory levels relative to demand, as well as the rate of technology transitions. These changes have affected the timing and amounts of customers purchases and investments in technology, and continue to affect Applied s orders, net sales, operating expenses and net income.

To meet rapidly changing demand in the industries it serves, Applied must accurately forecast demand and effectively manage its resources and production capacity for each of its segments as well as across multiple segments. During periods of decreasing demand, Applied must reduce costs and align its cost structure with prevailing market conditions; effectively manage its supply chain; and motivate and retain key employees. During periods of increasing demand for its products, Applied must have sufficient manufacturing capacity and inventory to meet customer demand; effectively manage its supply chain; attract, retain and motivate a sufficient number of qualified employees; and continue to control costs. If Applied does not accurately forecast and timely and appropriately adapt to changes in its business environment, Applied s business, financial condition and results of operations may be materially and adversely affected.

Table of Contents

Applied is exposed to risks as a result of ongoing changes in the various industries in which it operates.

The global semiconductor, flat panel display, solar and related industries in which Applied operates are characterized by ongoing changes affecting some or all of these industries, including:

- increasing capital requirements for building and operating new fabrication plants and customers ability to raise the necessary capital, particularly when financial market conditions are difficult;
- differences in growth rates among the semiconductor, display and solar industries;
- the increasing importance of establishing, improving and maintaining strong relationships with customers;
- changes in end demand for electronic products over time and the effect of these changes on customers businesses and, in turn, on demand for Applied s products;
- abrupt and unforeseen shifts in the nature and amount of customer and end-user demand;
- the increasing cost and complexity for customers to move from product design to volume manufacturing, which may slow the adoption rate of new manufacturing technology;
- the need to continually reduce the total cost of manufacturing system ownership, due in part to greater demand for lower-cost consumer electronics compared to business information technology spending;
- the heightened importance to customers of system reliability and productivity and the effect on demand for fabrication systems as a result of their increasing productivity, device yield and reliability;
- the increasing importance of, and difficulties in, developing products with sufficient differentiation to influence customers purchasing decisions;
- requirements for shorter cycle times for the development, manufacture and installation of manufacturing equipment;
- price and performance trends for semiconductor devices, LCDs and solar PVs, and the corresponding effect on demand for such products;
- the increasing importance of the availability of spare parts to maximize the time that customers systems are available for production;
- the increasing role for and complexity of software in Applied products; and

- the increasing focus on reducing energy usage and improving the environmental impact and sustainability associated with manufacturing operations.

If Applied does not successfully manage the risks resulting from the ongoing changes in the semiconductor, flat panel display, solar and related industries, its business, financial condition and results of operations could be materially and adversely affected.

Applied is exposed to risks as a result of ongoing changes specific to the semiconductor industry.

The greatest portion of Applied s consolidated net sales and profitability historically has been derived from sales of manufacturing equipment by the Silicon Systems Group to the global semiconductor industry. In addition, a majority of the revenues of Applied Global Services is from sales of service products to semiconductor manufacturers. The semiconductor industry is characterized by ongoing changes particular to that industry in addition to the general industry changes described in the preceding risk factor, including:

- the increasing cost of research and development due to many factors, including: decreasing linewidths on a chip; the use of new materials such as cobalt and yttrium; new and more complex device structures; more applications and process steps; increasing chip design costs; and the increasing cost and complexity of integrated manufacturing processes;

Table of Contents

the cost, technical complexity and timing of a proposed industry transition from 300mm to 450mm wafers, and the resulting effect on demand for manufacturing equipment and services;

the need to reduce product development time, despite the increasing difficulty of technical challenges;

the growing number of types and varieties of semiconductors and number of applications across multiple substrate sizes;

changes in demand and differing market growth rates for (i) different electronic products, such as tablets, smartphones, and personal computers, and in turn (ii) different applications/devices, such as NAND Flash, DRAM, logic, foundry and MRAM, and the resulting effect on customers capital spending patterns and on Applied s ability to compete in these market segments;

the increasing cost and complexity for semiconductor manufacturers to move more technically advanced capability and smaller linewidths to volume manufacturing, and the resulting impact on the rates of technology transition and investment in capital equipment;

challenges associated with generating organic growth in light of semiconductor manufacturers decreasing rate of capital expenditures as a percentage of revenue, and manufacturers increasing allocation of capital investment to markets that Applied does not serve, such as lithography;

the increasing frequency and complexity of technology transitions and inflections, such as ALD, 3-D transistors, advanced interconnect, wafer-level packaging, and extreme ultraviolet lithography (EUV);

shorter cycle times between customers order placement and product shipment, which may lead to inventory write-offs and manufacturing inefficiencies that decrease gross margin;

technology developments in related markets, such as lithography, to which Applied may need to adapt;

competitive factors that make it difficult to enhance market position;

the importance of increasing market positions in larger market segments, such as etch and inspection;

the increasing concentration of wafer starts in one country, Korea, where Applied s service penetration and service-revenue-per-wafer-start have been lower than in other regions; and

the increasing fragmentation of semiconductor markets, leading certain markets to become too small to support the cost of a new fabrication plant, while others require less technologically advanced products.

If Applied does not successfully manage the risks resulting from the ongoing changes occurring in the semiconductor industry, its business, financial condition and results of operations could be materially and adversely affected.

Applied is exposed to risks as a result of ongoing changes specific to the flat panel display industry.

The global flat panel display industry historically has experienced considerable volatility in capital equipment investment levels, due in part to the limited number of LCD manufacturers and the concentrated nature of LCD end-use applications. Recently, industry growth has depended to a considerable extent on consumer demand for increasingly larger and more advanced TVs, as well as smartphones and other mobile devices, which demand is highly sensitive to cost and improvements in technologies and features. In addition to the general industry changes described above in the second risk factor, the display industry is characterized by ongoing changes particular to that industry, including:

- the planned expansion of manufacturing facilities in China by Chinese display manufacturers and manufacturers from other countries, and the ability of non-Chinese manufacturers to obtain government approvals on a timely basis;

- the slowing rate of transition to larger substrate sizes for LCDs and the resulting effect on capital intensity in the industry and on Applied s product differentiation, gross margin and return on investment;

Table of Contents

the increasing importance of new types of displays, such as low temperature polysilicon (LTPS) and OLEDs, and new touch panel films, such as anti-reflective and anti-fingerprint;

the likelihood and timing of a transition to a new CVD backplane technology, metal oxide; and

uncertainty with respect to future LCD technology end-use applications and growth drivers.

If Applied does not successfully manage the risks resulting from the ongoing changes occurring in the display industry, its business, financial condition and results of operations could be materially and adversely affected.

Applied is exposed to risks as a result of ongoing changes specific to the solar industry.

An increasing portion of Applied s business is in the emerging solar market, which, in addition to the general industry changes described above in the second risk factor, is characterized by ongoing changes specific to the solar industry, including:

the need to continually decrease the cost-per-watt of electricity produced by solar PV products to at or below grid parity by, among other things, reducing operating costs and increasing throughputs for solar PV manufacturing, and improving the conversion efficiency of solar PVs;

the impact on demand for solar PV products arising from the cost of electricity generated by solar PVs compared to the cost of electricity from the existing grid or other energy sources;

the varying energy policies of governments around the world and their effect in influencing the rate of growth of the solar PV market, including the availability and amount of government incentives for solar power such as tax credits, feed-in tariffs, rebates, renewable portfolio standards that require electricity providers to sell a targeted amount of energy from renewable sources, and goals for solar installations on government facilities;

the growing number of solar PV manufacturers and increasing global production capacity for solar PVs, primarily in China;

the filing by U.S. solar manufacturers of a regulatory unfair trade action against solar PVs from China, where most of Applied s solar equipment sales are concentrated, which could result in the U.S. government s assessment of duties on solar cells and modules imported from China or other outcomes and, in turn, adversely impact demand for Applied s products;

the varying levels of operating and industry experience among solar PV manufacturers and the resulting differences in the nature and extent of customer support services requested from Applied;

challenges associated with marketing and selling manufacturing equipment and services to a diverse and diffuse customer base;

the growth of market segments in which Applied does not participate, such as passivation and furnaces;

the increasing number of government-affiliated entities in China that are becoming customers;

the cost of polysilicon and other materials; and

access to affordable financing and capital by customers and end-users.

In addition, current projections for global solar PV production exceed anticipated near-term, end-use demand, which is heavily dependent on installed cost-per-watt, government policies and incentives, and the availability of affordable capital. An oversupply of solar PVs that leads customers to delay or reduce investments in manufacturing capacity and new technology adversely impacts the sales growth rates and/or profitability of Applied s products. If Applied does not successfully manage the risks resulting from the ongoing changes occurring in the solar industry, its business, financial condition and results of operations could be materially and adversely affected.

Table of Contents

Applied is exposed to risks associated with the difficult financial markets and uncertain global economy.

Continuing difficulties in the financial markets, national debt concerns in various regions, and uncertainty regarding the global economy are posing challenges, and some governments may implement policies to control economic growth. The markets for semiconductors and flat panel displays in particular depend largely on consumer spending, while the solar market depends in part on government incentives and the availability of financing for PV installations. Economic uncertainty and related factors, including unemployment, inflation and fuel prices, exacerbate negative trends in business and consumer spending and may cause certain Applied customers to push out, cancel, or refrain from placing orders for equipment or services, which may reduce net sales, reduce backlog, and affect Applied s ability to convert backlog to sales. Difficulties in obtaining capital, uncertain market conditions, or reduced profitability may also cause some customers to scale back operations, exit businesses, merge with other manufacturers, or file for bankruptcy protection and potentially cease operations, leading to customers reducing research and development funding and/or capital expenditures and, in turn, lower sales and/or additional inventory or bad debt expense for Applied. These conditions may also similarly affect key suppliers, which could impair their ability to deliver parts and result in delays for Applied s products or added costs. In addition, these conditions may lead to strategic alliances by, or consolidation of, other equipment manufacturers, which could adversely affect Applied s ability to compete effectively.

Uncertainty about future economic and industry conditions also makes it more challenging for Applied to forecast its operating results, make business decisions, and identify and prioritize the risks that may affect its business, sources and uses of cash, financial condition and results of operations. Applied may be required to implement additional cost reduction efforts, including restructuring activities, and/or modify its business model, which may adversely affect Applied s ability to capitalize on opportunities in a market recovery.

In addition, Applied maintains an investment portfolio that is subject to general credit, liquidity, foreign exchange, market and interest rate risks. The risks to Applied s investment portfolio may be exacerbated if financial market conditions deteriorate and, as a result, the value and liquidity of the investment portfolio, as well as returns on pension assets, could be negatively impacted and lead to impairment charges. Applied also maintains cash balances in various bank accounts globally in order to fund normal operations. If one or more of these financial institutions become insolvent or are taken over by a government, it could limit Applied s ability to access cash in the affected accounts.

If Applied does not timely and appropriately adapt to changes resulting from the uncertain macroeconomic environment and industry conditions, or to difficulties in the financial markets. Applied s business, financial condition or results of operations may be materially and adversely affected.

Applied must continually innovate and adapt its business and product offerings to respond to competition and rapid technological changes.

As Applied operates in a highly competitive environment in which innovation is critical, its future success depends on many factors, including the effective commercialization and customer acceptance of its equipment, services and related products. In addition, Applied must successfully execute its growth strategy, including enhancing market share in existing markets, expanding into related markets, cultivating new markets and exceeding industry growth rates, while constantly improving its operational performance. The development, introduction and support of a broadening set of products in more collaborative, geographically diverse, open and varied competitive environments have grown increasingly complex and expensive over time. Furthermore, new or improved products may entail higher costs and reduced profits. Applied s performance may be adversely affected if it does not timely, cost-effectively and successfully:

- identify and address technology inflections, market changes, new applications, customer requirements and end-use demand;
- develop new products (including disruptive technologies), improve and/or develop new applications for existing products, and adapt similar products for use by customers in different applications and/or markets with varying technical requirements;
- appropriately price and achieve market acceptance of its products;

Table of Contents

differentiate its products from those of competitors and any disruptive technologies, and meet customers performance specifications;

maintain operating flexibility to enable different responses to different markets, customers and applications;

enhance its worldwide operations across all business segments to reduce cycle time, enable continuous quality improvement, reduce costs, and enhance design for manufacturability and design for serviceability;

focus on sales and marketing strategies that foster strong customer relationships;

allocate resources, including people and R&D funding, among Applied s products and between the development of new products and the enhancement of existing products, as most appropriate and effective for future growth;

reduce the cost, and improve the productivity of capital invested in R&D activities;

accurately forecast demand, work with suppliers and meet production schedules for its products;

improve its manufacturing processes and achieve cost efficiencies across product offerings;

adapt to changes in value offered by companies in different parts of the supply chain;

qualify products for evaluation and, in turn, volume manufacturing with its customers; and

implement changes in its design engineering methodology, including those that enable reduction of material costs and cycle time, greater commonality of platforms and types of parts used in different systems, greater effectiveness of product life cycle management, and reduced energy usage and environmental impact.

If Applied does not successfully manage these challenges, its business, financial condition and results of operations could be materially and adversely affected.

Operating in multiple industries, and the entry into new markets and industries, entail additional challenges and obligations.

As part of its growth strategy, Applied must successfully expand into related or new markets and industries, either with its existing products or with new products developed internally or obtained through acquisitions. The entry into different markets involves additional challenges, including those arising from:

the need to devote additional resources to develop new products for, and operate in, new markets;

the need to develop new sales and marketing strategies and cultivate relationships with new customers;

differing rates of profitability and growth among multiple businesses;

Applied s ability to anticipate demand, capitalize on opportunities, and avoid or minimize risks;

the complexity of managing multiple businesses with variations in production planning, execution, supply chain management and logistics;

the adoption of new business models;

the need to undertake activities to grow demand for end-products;

the need to develop and successfully implement adequate new business processes and systems;

Applied s ability to rapidly expand its operations to meet increased demand and the associated effect on working capital;

new materials, processes and technologies;

the need to attract, motivate and retain employees with skills and expertise in these new areas;

Table of Contents

new and more diverse customers and suppliers, including some with limited operating histories, uncertain and/or limited funding, evolving business models and/or locations in regions where Applied does not have, or has limited, operations;

different customer service requirements;

new or different competitors with potentially more financial or other resources, industry experience and/or established customer relationships;

entry into new industries and countries, with differing levels of government involvement, laws and regulations, and business, employment and safety practices;

third parties intellectual property rights; and

the need to comply with, or work to establish, industry standards and practices.

In addition, Applied has begun applying for and receiving funding from United States and other government agencies for certain strategic development programs to increase its R&D resources and address new market opportunities. As a condition to this government funding, Applied may be subject to certain record-keeping, audit, intellectual property rights-sharing and/or other obligations.

If Applied does not successfully manage the risks resulting from its diversification and entry into new markets and industries, its business, financial condition and results of operations could be materially and adversely affected.

Applied is exposed to the risks of operating a global business.

In fiscal 2011, approximately 81 percent of Applied s net sales were to customers in regions outside the United States. Certain of Applied s R&D and manufacturing facilities, as well as suppliers to Applied, are also located outside the United States, including in Singapore, Taiwan, China, Korea, Israel, Germany, Italy and Switzerland. Applied is also expanding its business and operations in new countries. The global nature of Applied s business and operations presents challenges, including but not limited to those arising from:

varying regional and geopolitical business conditions and demands;

political and social attitudes, laws, rules, regulations and policies within countries that favor domestic companies over non-domestic companies, including customer- or government-supported efforts to promote the development and growth of local competitors;

customer- or government-supported efforts to influence Applied to conduct more of its operations in a particular country, such as Korea and China;

variations among, and changes in, local, regional, national or international laws and regulations (including intellectual property, labor, tax, and import /export laws), as well as the interpretation and application of such laws and regulations;

global trade issues, including those related to the interpretation and application of import and export licenses, as well as international trade disputes;

positions taken by governmental agencies regarding possible national commercial and/or security issues posed by international business operations;

fluctuating raw material, commodity and energy costs;

challenges associated with managing more geographically diverse operations and projects, which requires an effective organizational structure and appropriate business processes, procedures and controls;

a more diverse workforce with different cultures, customs, business practices and worker expectations;

variations in the ability to develop relationships with local customers, suppliers and governments;

fluctuations in interest rates and currency exchange rates, including the relative strength or weakness of the U.S. dollar against the Japanese yen, euro, Taiwanese dollar, Israeli shekel or Chinese yuan;

Table of Contents

- the need to provide sufficient levels of technical support in different locations around the world;
- political instability, natural disasters (such as earthquakes, floods or storms), pandemics, social unrest, terrorism or acts of war in locations where Applied has operations, suppliers or sales, or that may influence the value chain of the industries that Applied serves;
- reliance on various information systems, data centers and software applications to conduct many aspects of the Company s business, which may be vulnerable to cyberattacks by third parties or breached due to employee error, misuse or other causes that could result in business disruptions, loss of confidential information, or other adverse consequences in the event that Applied s firewalls and security processes and practices are ineffective;
- the need for an effective business continuity plan if a disaster or other event occurs that could disrupt business operations;
- the need to regularly reassess the size, capability and location of the Company s global infrastructure and make appropriate changes;
- cultural and language differences;
- shipping costs and/or delays;
- the need to continually improve the Company s operating cost structure;
- difficulties and uncertainties associated with the entry into new countries;
- hiring and integration of an increasing percentage of new workers, including in countries such as India and China;
- the increasing need for the workforce to be more mobile and work in or travel to different regions;
- uncertainties with respect to economic growth rates in various countries; and
- uncertainties with respect to growth rates for the manufacture and sales of semiconductors, LCDs and solar PVs in the developing economies of certain countries.

Many of these challenges are present in China and Korea, which are experiencing significant growth of customers, suppliers and competitors to Applied. Applied further believes that China and Korea present large potential markets for its products and opportunity for growth over the long term, although at lower projected levels of profitability and margins for certain products than historically have been achieved in other regions. These challenges may materially and adversely affect Applied s business, financial condition and results of operations.

In addition, in March 2011, Japan experienced a significant earthquake, aftershocks, and tsunami that resulted in widespread damage and business interruptions throughout the country, including those associated with radiation concerns arising from damage to a nuclear power plant. Certain of Applied s customers and suppliers are located in Japan and Applied also has sales and service centers in the country. While Applied has not experienced any material impact on its business or operations to date and has taken actions to enhance its ability to meet customers requirements, Applied cannot predict the extent of the impact the situation in Japan may have, if any, on its future business and operations.

Applied is exposed to risks associated with a highly concentrated customer base.

Applied s semiconductor and flat panel display customer bases historically have been, and are becoming even more, highly concentrated as a result of economic and industry conditions. For example, in fiscal 2011, three semiconductor manufacturers accounted for 52 percent of Silicon Systems Group net sales, and three LCD manufacturers accounted for 54 percent of Display net sales. Further, three customers accounted for 32 percent of Applied s consolidated net sales in fiscal 2011. Certain customers have experienced significant ownership or management changes, consolidated with other manufacturers, outsourced manufacturing activities, or engaged in

Table of Contents

collaboration or cooperation arrangements with other manufacturers. In addition, customers have entered into strategic alliances or industry consortia that have increased the influence of key industry participants in technology decisions made by their partners. Also, certain semiconductor and display customers are making an increasingly greater percentage of their respective industry s capital equipment investments. Customer concentration within Applied s solar customer base varies depending on the product line. For precision wafering systems, five solar manufacturers accounted for 57 percent of net sales in fiscal 2011, while the Baccini cell systems business has a more diffuse customer base. Applied s customer base in each of the Display and Energy and Environmental Solutions segments is also geographically-concentrated. In fiscal 2011, customers in China and Taiwan accounted for a total of 78 percent of net sales for the Display segment, while customers in China accounted for 80 percent of net sales for the Energy and Environmental Solutions segment.

In this environment, contracts or orders from a relatively limited number of manufacturers have accounted for, and are expected to continue to account for, a substantial portion of Applied s business, which may result in added complexities in managing customer relationships and transactions and make it more challenging for Applied s business units to generate organic growth. In addition, the mix and type of customers, and sales to any single customer, may vary significantly from quarter to quarter and from year to year. If customers do not place orders, or they substantially reduce, delay or cancel orders, Applied may not be able to replace the business. As Applied s products are configured to customer specifications, changing, rescheduling or canceling orders may result in significant, non-recoverable costs. Major customers may also seek, and on occasion receive, pricing, payment, intellectual property-related, or other commercial terms that are less favorable to Applied. These factors could have a material adverse effect on Applied s business, financial condition and results of operations.

Manufacturing interruptions or delays could affect Applied s ability to meet customer demand and lead to higher costs, while the failure to estimate customer demand accurately could result in excess or obsolete inventory.

Applied s business depends on its timely supply of equipment, services and related products that meet the rapidly changing technical and volume requirements of its customers, which depends in part on the timely delivery of parts, components and subassemblies (collectively, parts) from suppliers, including contract manufacturers. Some key parts are subject to long lead-times and/or obtainable only from a single supplier or limited group of suppliers, and some sourcing or subassembly is provided by suppliers located in countries other than the countries where Applied conducts its manufacturing, including China and Korea. Cyclical industry conditions and the volatility of demand for manufacturing equipment increase capital, technical, operational and other risks for companies throughout Applied s supply chain. Further, the adverse conditions in the credit and financial markets and industry slowdowns in recent periods have caused, and may continue to cause, some suppliers to scale back operations, exit businesses, merge with other companies, or file for bankruptcy protection and possibly cease operations, potentially affecting Applied s ability to obtain quality parts on a timely basis. Applied may also experience significant interruptions of its manufacturing operations, delays in its ability to deliver products or services, increased costs or customer order cancellations as a result of:

- the failure or inability of suppliers to timely deliver sufficient quantities of quality parts on a cost-effective basis;
- volatility in the availability and cost of materials, including rare earth elements;
- difficulties or delays in obtaining required import or export approvals;
- information technology or infrastructure failures;
- natural disasters or other events (such as earthquakes, floods or storms, regional economic downturns, pandemics, social unrest, political instability, terrorism, or acts of war).

If a supplier fails to meet Applied s requirements concerning quality, cost or other performance factors, Applied may transfer its business to alternative sources, which could entail manufacturing delays, additional costs, or other difficulties. In addition, if Applied needs to rapidly increase its business and manufacturing capacity to meet increases in demand or expedited shipment schedules, this may exacerbate any interruptions in

27

Table of Contents

Applied s manufacturing operations and supply chain and the associated effect on Applied s working capital. Moreover, if actual demand for Applied s products is different than expected, Applied may purchase more/fewer parts than necessary or incur costs for canceling, postponing or expediting delivery of parts. If Applied purchases inventory in anticipation of customer demand that does not materialize, or if customers reduce or delay orders, Applied may incur excess inventory charges. Any or all of these factors could materially and adversely affect Applied s business, financial condition and results of operations.

Applied is exposed to risks associated with acquisitions and strategic investments.

Applied has made, and in the future intends to make, acquisitions of or investments in, companies, technologies or products in existing, related or new markets for Applied. Most recently, in November 2011, Applied completed its acquisition of Varian Semiconductor Associates, Inc. (Varian), which was the Company s largest acquisition to date. Acquisitions involve numerous risks, including but not limited to:

- diversion of management s attention from other operational matters;
- inability to complete acquisitions as anticipated or at all, which in certain circumstances may require Applied to pay a termination fee to the target company;
- requirements imposed by government regulators in connection with their review of a transaction, which may include, among other things, divestitures and/or restrictions on the conduct of Applied s existing business or the acquired business;
- ineffective integration of operations, systems, technologies, products or employees of an acquired business;
- inability to realize anticipated synergies or other benefits;
- failure to commercialize purchased technologies;
- initial dependence on unfamiliar supply chains or relatively small supply partners;
- inability to capitalize on characteristics of new markets that may be significantly different from Applied s existing markets and where competitors may have stronger market positions and customer relationships;
- failure to attract, retain and motivate key employees from the acquired business;
- exposure to new operational risks, rules, regulations, worker expectations, customs and practices to the extent acquired businesses are located in regions where Applied has not historically conducted business;
- challenges associated with managing new, more diverse and more widespread operations, projects and people;
- inability to obtain and protect intellectual property rights in key technologies;

inadequacy or ineffectiveness of an acquired company s internal financial controls, disclosure controls and procedures, and/or environmental, health and safety, anti-corruption, human resource, or other policies or practices;

impairment of acquired intangible assets and goodwill as a result of changing business conditions, technological advancements or worse-than-expected performance of the segment;

the risk of litigation or claims associated with a proposed or completed transaction;

unknown, underestimated and/or undisclosed commitments or liabilities; and

the inappropriate scale of acquired entities critical resources or facilities for business needs.

Applied also makes strategic investments in other companies, including companies formed as joint ventures, which may decline in value and/or not meet desired objectives. The success of these investments depends on various factors over which Applied may have limited or no control and, particularly with respect to joint ven-

Table of Contents

tures, requires ongoing and effective cooperation with strategic partners. The risks to Applied s strategic investment portfolio may be exacerbated by unfavorable financial market and macroeconomic conditions and, as a result, the value of the investment portfolio could be negatively impacted and lead to impairment charges. Mergers and acquisitions and strategic investments are inherently subject to significant risks. If Applied does not successfully manage the risks associated with acquisitions and strategic investments, its business, financial condition and results of operations could be materially and adversely affected.

Applied used existing cash and incurred debt obligations to acquire Varian that could affect its ability to respond to changes in business conditions or otherwise adversely affect its business.

Applied financed the acquisition of Varian through a combination of existing cash balances and the net proceeds of senior unsecured notes in the aggregate principal amount of $1.75 billion issued on June 8, 2011. The reduction in cash balances, assumed lower interest income, and payments on the debt obligations will reduce the availability of cash flow for general corporate or other purposes, such as further mergers and acquisitions. This in turn may reduce Applied s flexibility in responding to changes in its businesses and in the industries in which it operates.

The ability to attract, retain and motivate key employees is vital to Applied s success.

Applied s success, competitiveness and ability to execute on its global strategies and maintain a culture of innovation depend in large part on its ability to attract, retain and motivate key employees, especially in critical positions and in growing markets. Achieving this objective may be difficult due to many factors, including fluctuations in global economic and industry conditions, Applied s organizational structure, competitors hiring practices, cost reduction activities (including workforce reductions and unpaid shutdowns), availability of career development opportunities, and the effectiveness of Applied s compensation and benefit programs, including its share-based programs. If Applied does not successfully attract, retain and motivate key employees, Applied may be unable to capitalize on its opportunities and its business, financial condition and operating results may be materially and adversely affected.

The failure to successfully implement and conduct outsourcing activities and other operational initiatives could adversely affect results of operations.

To better align its costs with market conditions, locate closer to customers, enhance productivity, and improve efficiencies, Applied conducts certain engineering, software development, manufacturing, sourcing and other operations in regions outside the United States, including India, Taiwan, China, and Korea. Applied has implemented a distributed manufacturing model, under which certain manufacturing and supply chain activities are conducted in various countries, including the United States, Europe, Israel, Singapore, Taiwan and other countries in Asia, and assembly of some systems is completed at customer sites. In addition, Applied outsources certain functions to third parties, including companies in the United States, India, China, Korea, Malaysia and other countries. Outsourced functions include contract manufacturing, engineering, customer support, software development, information technology support, finance and administrative activities. The expanding role of third party providers has required changes to Applied s existing operations and the adoption of new procedures and processes for retaining and managing these providers, as well as redistributing responsibilities as warranted, in order to realize the potential productivity and operational efficiencies, assure quality and continuity of supply, and protect the intellectual property of Applied and its customers, suppliers and other partners. If Applied does not accurately forecast the amount, timing and mix of demand for products, or if contract manufacturers or other outsource providers fail to perform in a timely manner or at satisfactory quality levels, Applied s ability to meet customer requirements could suffer, particularly during a market upturn.

In addition, Applied is implementing a comprehensive program to better align its global organizations and processes, including initiatives to enhance the Asia supply chain and improve back office and information technology infrastructure for more efficient transaction processing. Applied also is implementing a multi-year, company-wide program to transform certain business processes, including the transition to a single enterprise resource planning (ERP) software system to perform various functions. The implementation of additional func-

Table of Contents

tionality to the ERP system entails certain risks, including difficulties with changes in business processes that could disrupt Applied s operations, such as its ability to track orders and timely ship products, project inventory requirements, manage its supply chain and aggregate financial and operational data. The implementation of new initiatives may not achieve the anticipated benefits and may divert management s attention from other operational activities, negatively affect employee morale, or have other unintended consequences.

If Applied does not effectively develop and implement its outsourcing and relocation strategies, if required export and other governmental approvals are not timely obtained, if Applied s third party providers do not perform as anticipated, or if there are delays or difficulties in enhancing business processes, Applied may not realize anticipated productivity improvements or cost efficiencies, and may experience operational difficulties, increased costs (including energy and transportation), manufacturing interruptions or delays, inefficiencies in the structure and/or operation of its supply chain, loss of its intellectual property rights, quality issues, increased product time-to-market, and/or inefficient allocation of human resources, any or all of which could materially and adversely affect Applied s business, financial condition and results of operations.

Applied may incur impairment charges to goodwill or long-lived assets.

Applied has a significant amount of goodwill and other acquired intangible assets related to acquisitions. Goodwill and purchased intangible assets with indefinite useful lives are not amortized, but are reviewed for impairment annually during the fourth quarter of each fiscal year, and more frequently when events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. The review compares the fair value for each of Applied s reporting units to its associated carrying value, including goodwill. Factors that could lead to impairment of goodwill and intangible assets include adverse industry or economic trends, reduced estimates of future cash flows, declines in the market price of Applied common stock, changes in Applied s strategies or product portfolio, and restructuring activities. Applied s valuation methodology for assessing impairment requires management to make judgments and assumptions based on historical experience and projections of future operating performance. Applied may be required to record a charge to earnings during the period in which an impairment of goodwill or amortizable intangible assets is determined to exist, which could materially and adversely affect Applied s results of operations.

Applied is exposed to various risks related to legal proceedings or claims and protection of intellectual property rights.

Applied from time to time is, and in the future may be, involved in legal proceedings or claims regarding patent infringement, intellectual property rights, antitrust, environmental regulations, securities, contracts, product performance, product liability, unfair competition, misappropriation of trade secrets, employment, workplace safety, and other matters. Applied also on occasion receives notification from customers who believe that Applied owes them indemnification or other obligations related to claims made against such customers by third parties.

In February 2010, the Seoul Prosecutor s Office for the Eastern District in Korea indicted certain employees of Applied Materials Korea (AMK), including the former head of AMK who at the time of indictment was a vice president of Applied Materials, Inc., along with employees of several other companies, alleging the improper receipt and use of confidential information of Samsung Electronics Co., Ltd. (Samsung), a major customer. Hearings on these matters are ongoing in the Seoul Eastern District Court. Applied and Samsung entered into a settlement agreement effective as of November 1, 2010, which resolves potential civil claims related to this matter and which is separate from and does not affect the criminal proceedings.

Legal proceedings and claims, whether with or without merit, and associated internal investigations, may (1) be time-consuming and expensive to prosecute, defend or conduct; (2) divert management s attention and other Applied resources; (3) inhibit Applied s ability to sell its products; (4) result in adverse judgments for damages, injunctive relief, penalties and fines; and/or (5) negatively affect Applied s business. There can be no assurance regarding the outcome of current or future legal proceedings, claims or investigations. If Applied is not able to favorably resolve or settle legal proceedings or claims, or in the event of any adverse findings against Applied or any of its employees, Applied s business, financial condition and results of operations could be materially and adversely affected and Applied may suffer harm to its reputation.

Table of Contents

Applied s success depends in significant part on the protection of its intellectual property and other rights. Infringement of Applied s rights by a third party, such as the unauthorized manufacture or sale of equipment or spare parts, could result in uncompensated lost market and revenue opportunities for Applied. Applied s intellectual property rights may not provide significant competitive advantages if they are circumvented, invalidated, rendered obsolete by the rapid pace of technological change, or if Applied does not adequately protect or assert these rights. Furthermore, the laws and practices of other countries, including China, India, Taiwan and Korea, permit the protection and enforcement of Applied s rights to varying extents, which may not be sufficient to adequately protect Applied s rights. Applied previously entered into an arrangement with one of its competitors to decrease the risk of patent infringement lawsuits in the future. There can be no assurance that the intended results of this arrangement will be achieved or that Applied will be able to adequately protect its intellectual property rights with the restrictions associated with the arrangement. If Applied is not able to favorably resolve or settle claims, obtain or enforce intellectual property rights, obtain necessary licenses on commercially reasonable terms, and/or successfully prosecute or defend its intellectual property position, Applied s business, financial condition and results of operations could be materially and adversely affected and Applied may suffer harm to its reputation.

Changes in tax rates or tax assets and liabilities could affect results of operations.

As a global company, Applied is subject to taxation in the United States and various other countries. Significant judgment is required to determine and estimate worldwide tax liabilities. Applied s future annual and quarterly tax rates could be affected by numerous factors, including changes in the: (1) applicable tax laws; (2) amount and composition of pre-tax income in countries with differing tax rates; (3) plans of the Company to permanently reinvest certain funds held outside of the U.S.; or (4) valuation of Applied s deferred tax assets and liabilities.

To better align with the increasingly international nature of its business, Applied is transitioning certain manufacturing, supply chain, and other operations into Asia, bringing these activities closer to customers. These changes are expected to result in a reduction of future operating costs. In Singapore, Applied has received authorization to use tax incentives that provide that certain income earned in Singapore will be subject to tax holidays or reduced income tax rates. To obtain the benefit of these tax provisions, Applied must meet requirements relating to various activities. Applied s ability to realize benefits from these provisions could be materially affected if, among other things, applicable requirements are not met, or if Applied incurs net losses for which it cannot claim a deduction.

In addition, Applied is subject to regular examination by the Internal Revenue Service and other tax authorities, and from time to time initiates amendments to previously filed tax returns. Applied regularly assesses the likelihood of favorable or unfavorable outcomes resulting from these examinations and amendments to determine the adequacy of its provision for income taxes, which requires estimates and judgments. Although Applied believes its tax estimates are reasonable, there can be no assurance that the tax authorities will agree with such estimates. Applied may have to engage in litigation to achieve the results reflected in the estimates, which may be time-consuming and expensive. There can be no assurance that Applied will be successful or that any final determination will not be materially different from the treatment reflected in Applied s historical income tax provisions and accruals, which could materially and adversely affect Applied s financial condition and results of operations.

Applied is subject to risks of non-compliance with environmental and safety regulations.

Applied is subject to environmental and safety regulations in connection with its global business operations, including but not limited to: regulations related to the development, manufacture and use of its products; recycling and disposal of materials used in its products or in producing its products; the operation of its facilities; and the use of its real property. The failure or inability to comply with existing or future environmental and safety regulations, such as those related to climate change, could result in: (1) significant remediation liabilities; (2) the imposition of fines; (3) the suspension or termination of the development, manufacture, sale or use of certain of its products; (4) limitations on the operation of its facilities or ability to use its real property; and/or (5) a decrease in the value of its real property, each of which could have a material adverse effect on Applied s business, financial condition and results of operations.

Table of Contents

Applied is exposed to various risks related to the regulatory environment.

Applied is subject to various risks related to: (1) new, different, inconsistent or even conflicting laws, rules and regulations that may be enacted by executive order, legislative bodies and/or regulatory agencies in the countries in which Applied operates; (2) disagreements or disputes between national or regional regulatory agencies related to international trade; and (3) the interpretation and application of laws, rules and regulations. For example, as a public company with global operations, Applied is subject to the laws of multiple jurisdictions and the rules and regulations of various governing bodies, including those related to financial and other disclosures, corporate governance, privacy, and anti-corruption. Changes in laws, regulations and standards may create uncertainty regarding compliance matters. Efforts to comply with new and changing regulations have resulted in, and are likely to continue to result in, increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities. If Applied is found by a court or regulatory agency not to be in compliance with applicable laws, rules or regulations, Applied could be subject to legal or regulatory sanctions, the public s and customers perception of Applied could decline, and Applied s business, financial condition and results of operations could be materially and adversely affected.

Item 1B: ***Unresolved Staff Comments***

None.

Table of Contents

Item 2: ***Properties***

Information concerning Applied s principal properties at October 30, 2011 is set forth below:

Location	Type	Principal Use	Square Footage	Ownership
Santa Clara, CA	Office, Plant & Warehouse	Headquarters; Marketing; Manufacturing; Distribution; Research, Development and Engineering	1,512,000	Owned
			250,000	Leased
Austin, TX	Office, Plant & Warehouse	Manufacturing	1,719,000	Owned
			145,000	Leased
Rehovot, Israel	Office, Plant & Warehouse	Manufacturing; Research, Development and Engineering	442,000	Owned
Alzenau, Germany	Office, Plant & Warehouse	Manufacturing; Research, Development and Engineering	281,000	Leased
Kalispell, MT	Office, Plant & Warehouse	Manufacturing; Research, Development and Engineering	252,000	Owned
Cheseaux, Switzerland	Office, Plant & Warehouse	Manufacturing; Research, Development, Engineering; Customer Support	171,000	Leased
Treviso, Italy	Office, Plant & Warehouse	Manufacturing; Research, Development, Engineering; Customer Support	124,000	Leased
Singapore	Office, Plant & Warehouse	Manufacturing and Customer Support	392,000	Owned
			5,000	Leased
Tainan, Taiwan	Office, Plant & Warehouse	Manufacturing and Customer Support	320,000	Owned
Xi an, China	Office, Plant & Warehouse	Research, Development and Engineering	567,000	Owned
Hsinchu, Taiwan	Office & Warehouse	Customer Support	90,000	Owned
			28,000	Leased
Shanghai, China	Office & Warehouse	Customer Support	95,000	Leased

Because of the interrelation of Applied s operations, properties within a country may be shared by the segments operating within that country. Products in the Silicon Systems Group are manufactured in Austin, Texas; Rehovot, Israel; and Singapore. Remanufactured products in the Applied Global Services segment are produced primarily in Austin, Texas. Products in the Display segment are manufactured in Santa Clara, California; Alzenau, Germany; and Tainan, Taiwan. Products in the Energy and Environmental Solutions segment are primarily manufactured in Alzenau, Germany; Cheseaux, Switzerland; Treviso, Italy; and Santa Clara, California.

In addition to the above properties, Applied leases office space for marketing, sales, engineering and customer support offices in 75 locations throughout the world: 17 in Europe, 19 in Japan, 14 in North America (principally the United States), 10 in China, 7 in Korea, 6 in Southeast Asia, and 2 in Taiwan. Applied has a manufacturing facility of 261,000 square feet in Austin, Texas available for sale.

Applied also owns 112 acres of buildable land in Texas that could accommodate approximately 1,708,000 square feet of additional building space, 12.5 acres in California that could accommodate approximately 400,000 square feet of additional building space, and 10 acres in Israel that could accommodate approximately 111,000 square feet of additional building space. Applied also leases 4 acres in Italy that could accommodate approximately 180,000 square feet of additional building space.

33

Table of Contents

In connection with the acquisition of Varian in November 2011, Applied added owned and leased facilities aggregating 715,000 square feet. These facilities consist of a manufacturing facility located in Gloucester, Massachusetts and multiple international sales and service offices.

Applied considers the properties that it owns or leases as adequate to meet its current and future requirements. Applied regularly assesses the size, capability and location of its global infrastructure and periodically makes adjustments based on these assessments.

Item 3: ***Legal Proceedings***

The information set forth under Legal Matters in Note 15 of Notes to Consolidated Financial Statements is incorporated herein by reference.

Item 4: ***(Removed and Reserved)***

Table of Contents

PART II

Item 5: ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities***

Market Information

The following table sets forth the high and low closing sale prices for the periods presented as reported on the NASDAQ Global Select Market.

	Price Range	
	High	**Low**
Fiscal 2010		
First quarter	$ 14.87	$ 11.89
Second quarter	$ 14.47	$ 11.80
Third quarter	$ 14.00	$ 11.78
Fourth quarter	$ 12.35	$ 10.37
Fiscal 2011		
First quarter	$ 16.10	$ 12.37
Second quarter	$ 16.85	$ 14.46
Third quarter	$ 15.24	$ 12.27
Fourth quarter	$ 12.62	$ 9.85

Applied s common stock is traded on the NASDAQ Global Select Market under the symbol AMAT. As of November 20, 2011, there were 4,192 registered holders of Applied common stock.

Table of Contents

Performance Graph

The performance graph below shows the five-year cumulative total stockholder return on Applied common stock during the period from October 29, 2006 through October 30, 2011. This is compared with the cumulative total return of the Standard & Poor s 500 Stock Index and the RDG Semiconductor Composite Index over the same period. The comparison assumes $100 was invested on October 29, 2006 in Applied common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. Dollar amounts in the graph are rounded to the nearest whole dollar. The performance shown in the graph represents past performance and should not be considered an indication of future performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*

Among Applied Materials, Inc., the S&P 500 Index

and the RDG Semiconductor Composite Index

* $100 invested on 10/29/06 in stock or 10/31/06 in index, including reinvestment of dividends.
Indexes calculated on month-end basis.

	10/29/06	10/28/07	10/26/08	10/25/09	10/31/10	10/30/11
Applied Materials	100.00	110.51	67.66	78.53	76.51	79.98
S&P 500 Index	100.00	114.56	73.21	80.38	93.66	101.24
RDG Semiconductor Composite Index	100.00	116.74	64.72	79.94	98.31	107.61

Dividends

The following table summarizes the dividends declared by Applied s Board of Directors during fiscal 2011:

Date declared	Record date	Payable date	Amount per share
December 7, 2010	March 2, 2011	March 23, 2011	$ 0.07
March 8, 2011	June 1, 2011	June 22, 2011	$ 0.08
June 6, 2011	August 31, 2011	September 21, 2011	$ 0.08
September 13, 2011	November 23, 2011	December 14, 2011	$ 0.08

During fiscal 2010, Applied s Board of Directors declared three quarterly cash dividends in the amount of $0.07 per share each and one quarterly cash dividend in the amount of $0.06 per share. During fiscal 2009, Applied s Board of Directors declared four quarterly cash dividends in the amount of $0.06 per share each. Dividends declared during fiscal 2011, 2010 and 2009 amounted to $408 million, $361 million and $320 million,

Table of Contents

respectively. Applied currently anticipates that it will continue to pay cash dividends on a quarterly basis in the future, although the declaration and amount of any future cash dividend are at the discretion of the Board of Directors and will depend on Applied s financial condition, results of operations, capital requirements, business conditions and other factors, as well as a determination that cash dividends are in the best interests of Applied s stockholders.

Repurchases of Applied Common Stock

The following table provides information as of October 30, 2011 with respect to the shares of common stock repurchased by Applied during the fourth quarter of fiscal 2011.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Program*	Maximum Dollar Value of Shares That May Yet be Purchased Under the Program*
		(In millions, except per share amounts)		
Month #1				
(August 1, 2011 to August 28, 2011)	0.9	$ 11.44	0.9	$ 1,347
Month #2				
(August 29, 2011 to September 25, 2011)	10.5	$ 11.08	10.5	$ 1,231
Month #3				
(September 26, 2011 to October 30, 2011)	4.5	$ 10.86	4.5	$ 1,182
Total	15.9	$ 11.04	15.9	

* On March 8, 2010, the Board of Directors approved a stock repurchase program for up to $2.0 billion in repurchases over the next three years, ending March 2013.

Table of Contents

Item 6: ***Selected Financial Data***

The following selected financial information has been derived from Applied s historical audited consolidated financial statements and should be read in conjunction with the consolidated financial statements and the accompanying notes for the corresponding fiscal years:

Fiscal Year(1)	2011	2010	2009	2008	2007
	(In millions, except percentages, per share amounts and number of employees)				
Net sales	$ 10,517	$ 9,549	$ 5,014	$ 8,129	$ 9,735
Gross margin	$ 4,360	$ 3,715	$ 1,431	$ 3,443	$ 4,492
(% of net sales)	41	39	29	42	46
Research, development and engineering	$ 1,118	$ 1,143	$ 934	$ 1,104	$ 1,142
(% of net sales)	11	12	19	14	12
Marketing, selling, general and administrative	$ 901	$ 942	$ 735	$ 965	$ 952
(% of net sales)	9	10	15	12	10
Operating income (loss)	$ 2,398	$ 1,384	$ (394)	$ 1,355	$ 2,372
(% of net sales)	23	14	(8)	17	24
Income (loss) before income taxes	$ 2,378	$ 1,387	$ (486)	$ 1,409	$ 2,440
Effective tax rate (%)	19	32	(37)	32	30
Net income (loss)	$ 1,926	$ 938	$ (305)	$ 961	$ 1,710
(% of net sales)	18	10	(6)	12	18
Earnings (loss) per diluted share	$ 1.45	$ 0.70	$ (0.23)	$ 0.70	$ 1.20
Weighted average common shares, diluted	1,330	1,349	1,333	1,375	1,427
New orders	$ 10,142	$ 10,249	$ 4,097	$ 9,155	$ 9,677
Order backlog	$ 2,392	$ 3,244	$ 2,735	$ 4,848	$ 3,655
Working capital	$ 7,561	$ 3,877	$ 3,749	$ 3,719	$ 4,226
Long-term debt	$ 1,947	$ 204	$ 201	$ 202	$ 202
Cash dividends declared per common share	$ 0.31	$ 0.27	$ 0.24	$ 0.24	$ 0.23
Stockholders equity	$ 8,800	$ 7,536	$ 7,095	$ 7,549	$ 7,821
Total assets	$ 13,861	$ 10,943	$ 9,574	$ 11,006	$ 10,662
Capital expenditures	$ 209	$ 169	$ 249	$ 288	$ 265
Regular employees	12,973	13,045	12,619	14,824	14,550

(1) Each fiscal year ended on the last Sunday in October.

Table of Contents

Item 7: ***Management s Discussion and Analysis of Financial Condition and Results of Operations***

Introduction

Management s Discussion and Analysis of Financial Condition and Results of Operations (MD&A) is intended to facilitate an understanding of Applied s business and results of operations. This MD&A should be read in conjunction with Applied s Consolidated Financial Statements and the accompanying Notes to Consolidated Financial Statements included elsewhere in this Form 10-K. The following discussion contains forward-looking statements and should also be read in conjunction with the cautionary statement set forth at the beginning of this Form 10-K. MD&A consists of the following sections:

Overview: a summary of Applied s business and measurements

Results of Operations: a discussion of operating results.

Segment Information: a discussion of segment operating results.

Financial Condition, Liquidity and Capital Resources: an analysis of cash flows, sources and uses of cash, contractual obligations and financial position.

Critical Accounting Policies: a discussion of critical accounting policies that require the exercise of judgments and estimates.

Overview

Applied provides manufacturing equipment, services and software to the global semiconductor, flat panel display, solar photovoltaic (PV) and related industries. Applied s customers include manufacturers of semiconductor wafers and chips, flat panel liquid crystal displays (LCDs), solar PV cells and modules, and other electronic devices. These customers may use what they manufacture in their own end products or sell the items to other companies for use in advanced electronic components. Applied operates in four reportable segments: Silicon Systems Group, Applied Global Services, Display, and Energy and Environmental Solutions. A summary of financial information for each reportable segment is found in Note 16 of Notes to Consolidated Financial Statements. A discussion of factors that could affect Applied s operations is set forth under Risk Factors in Item 1A, which is incorporated herein by reference. Product development and manufacturing activities occur primarily in North America, Europe, Israel and Asia. Applied s broad range of equipment and service products are highly technical and are sold primarily through a direct sales force.

Applied s results historically have been driven primarily by worldwide demand for semiconductors, which in turn depends on end-user demand for electronic products. Each of Applied s businesses is subject to highly cyclical industry conditions, as demand for manufacturing equipment and services can change depending on supply and demand for chips, LCDs, solar PVs and other electronic devices, as well as other factors, such as global economic and market conditions, and technological advances in fabrication processes.

The following table presents certain significant measurements for the past three fiscal years:

				Change	
Fiscal Year	**2011**	**2010**	**2009**	**2011 over 2010**	**2010 over 2009**
	(In millions, except per share amounts and percentages)				
New orders	$ 10,142	$ 10,249	$ 4,097	$ (107)	$ 6,152
Net sales	$ 10,517	$ 9,549	$ 5,014	$ 968	$ 4,535
Gross margin	$ 4,360	$ 3,715	$ 1,431	$ 645	$ 2,284
Gross margin percent	41%	39%	29%	2 points	10 points
Operating income (loss)	$ 2,398	$ 1,384	$ (394)	$ 1,014	$ 1,778
Operating margin percent	23%	14%	(8)%	9 points	22 points

Net income (loss)	$ 1,926	$ 938	$ (305)	$ 988	$ 1,243
Earnings (loss) per diluted share	$ 1.45	$ 0.70	$ (0.23)	$ 0.75	$ 0.93

Table of Contents

Fiscal 2011 and 2009 contained 52 weeks each, while fiscal 2010 contained 53 weeks.

Financial results for fiscal 2011 over fiscal 2010 reflected a decrease in total new orders, while net sales increased to a record level and net income also increased. The decline in new orders reflected softening demand for semiconductor, LCD and solar equipment in the second half of the year. The semiconductor industry was negatively impacted by uncertainty in the macroeconomic environment whereas the LCD and solar equipment industries were negatively impacted by overcapacity. In the fourth quarter of fiscal 2011, new orders were $1.6 billion, down 33 percent from the prior quarter. For fiscal 2011, net sales increased year-over-year primarily due to increased industry investment in crystalline-silicon (c-Si) solar equipment and higher sales of spares and refurbished semiconductor equipment. Operating income for fiscal 2011 included favorable adjustments to restructuring reserves of $60 million, offset in part by asset impairment charges of $30 million, and a net gain on sale of facilities of $27 million. In fiscal 2010, Applied incurred charges totaling $486 million that included a plan to restructure its Energy and Environmental Solutions segment.

Financial results for fiscal 2010 over fiscal 2009 reflected significantly increased demand for manufacturing equipment and services due to more favorable global economic and industry conditions. The increase in total orders from fiscal 2009 was primarily due to increased demand for semiconductor, display and c-Si solar PV products, partially offset by decreased demand for SunFab thin film solar lines. Net sales increased during fiscal 2010 compared to fiscal 2009, due primarily to higher sales of semiconductor and display equipment. In fiscal 2010, Applied incurred charges totaling $486 million that included a plan to restructure its Energy and Environmental Solutions segment, consisting of inventory-related charges of $330 million related to SunFab thin film solar equipment, asset impairment charges of $108 million, employee severance charges of $45 million, and other costs of $3 million. This action was in response to adverse market conditions for thin film solar, including delays in utility-scale solar adoption, solar panel manufacturers challenges in obtaining affordable capital, changes and uncertainty in government renewable energy policies, and competitive pressure from c-Si solar technologies. As part of the restructuring, Applied discontinued sales to new customers of its fully-integrated SunFab lines but continued to offer individual tools for thin film solar manufacturing. Applied is supporting existing SunFab customers with services, upgrades and capacity increases through its Applied Global Services segment and is continuing RD&E efforts to improve thin film panel efficiency and high-productivity deposition. Also in fiscal 2010, Applied incurred charges totaling $84 million associated with a restructuring program to reduce its global workforce as of October 25, 2009 by approximately 1,000 positions over a period of 18 months.

Fiscal 2009 financial results reflected significantly reduced demand for manufacturing equipment and services due to extremely unfavorable global economic and industry conditions, particularly in the first half of fiscal 2009. Negative trends in consumer spending and pervasive economic uncertainty led some customers to dramatically reduce factory operations and to reduce their spending. In the second half of fiscal 2009, demand for semiconductor and display equipment increased, but was still down significantly from fiscal 2008 levels. Fiscal 2009 financial results included charges associated with restructuring programs.

In November 2011, Applied completed its acquisition of Varian Semiconductor Equipment Associates, Inc. (Varian) for an aggregate purchase price of approximately $4.2 billion, net of cash acquired. The acquisition enhances Applied s product portfolio with market-leading ion implantation technology and is expected to enable Applied to become the semiconductor industry leader in transistor technologies.

Table of Contents

Results of Operations

The following table presents certain quarterly and full fiscal year financial information:

	Fiscal Quarter				Fiscal Year
	First	Second	Third	Fourth	
	(In millions, except per share amounts)				
2011:					
New orders	$ 2,971	$ 3,185	$ 2,390	$ 1,596	$ 10,142
Net sales	$ 2,686	$ 2,862	$ 2,787	$ 2,182	$ 10,517
Gross margin	$ 1,136	$ 1,189	$ 1,184	$ 852	$ 4,360
Operating income	$ 674	$ 677	$ 687	$ 361	$ 2,398
Net income	$ 506	$ 489	$ 476	$ 456	$ 1,926
Earnings per diluted share	$ 0.38	$ 0.37	$ 0.36	$ 0.34	$ 1.45
2010:					
New orders	$ 1,965	$ 2,533	$ 2,725	$ 3,026	$ 10,249
Net sales	$ 1,849	$ 2,296	$ 2,518	$ 2,886	$ 9,549
Gross margin	$ 711	$ 927	$ 860	$ 1,217	$ 3,715
Operating income	$ 116	$ 386	$ 183	$ 699	$ 1,384
Net income	$ 83	$ 264	$ 123	$ 468	$ 938
Earnings per diluted share	$ 0.06	$ 0.20	$ 0.09	$ 0.35	$ 0.70
2009:					
New orders	$ 903	$ 649	$ 1,072	$ 1,473	$ 4,097
Net sales	$ 1,333	$ 1,020	$ 1,134	$ 1,526	$ 5,014
Gross margin	$ 392	$ 156	$ 325	$ 559	$ 1,431
Operating income (loss)	$ (196)	$ (293)	$ (77)	$ 173	$ (394)
Net income (loss)	$ (133)	$ (255)	$ (55)	$ 138	$ (305)
Earnings (loss) per diluted share	$ (0.10)	$ (0.19)	$ (0.04)	$ 0.10	$ (0.23)

Demand for manufacturing equipment historically has been volatile as a result of sudden changes in chip, LCD, and solar PV supply and demand and other factors, including global economic and market conditions and rapid technological advances in fabrication processes. Applied s business was subject to cyclical industry conditions in fiscal 2011, 2010 and 2009. As a result of these conditions and the changing global economic environment, there were significant fluctuations in Applied s quarterly new orders and net sales, both within and across the three fiscal years. As of the end of fiscal 2011, the semiconductor, display and solar equipment industries were each in a capacity-driven downturn. The nature and timing of a recovery in capital equipment investment are expected to depend largely on the macroeconomic environment.

Table of Contents

New Orders

New orders by geographic region, which are attributed according to the location of customers facilities, were as follows:

	2011		Change 2011 over 2010	2010		Change 2010 over 2009	2009	
	($)	(%)	(%)	($)	(%)	(%)	($)	(%)
	(In millions, except percentages)							
Taiwan	2,235	22	(19)	2,760	27	342	625	15
China	2,066	20	(4)	2,155	21	188	749	18
Korea	1,286	13	(25)	1,703	17	205	559	14
Japan	1,001	10	35	741	7	40	531	13
Southeast Asia	463	5	(31)	675	7	173	247	6
Asia Pacific	7,051	70	(12)	8,034	79	34%	41%	34%	40%
Gross profit								
Selling, general and administrative expenses	17%	16%	17%	18%				
Research and development expenses	5%	4%	4%	4%				
Operating income	13%	21%	12%	18%				
Interest expense - net	(4%)	(4%)	(4%)	(4%)				
Other	0%	0%	0%	0%				
Discontinued operations	(1%)	3%	(1%)	3%				
Net income	7%	13%	7%	11%				

The Company’s sales, from continuing operations, by product line for the periods ended June 30, 2006 and 2005 are as follows:

	Six Months Ended June 30, $(000)			
	2006		2005	
Line connection/protection equipment	$ 13,468	84%	$ 12,281	79%
Signal Processing	2,407	15%	3,255	21%
Other	146	1%	95	0%
	$ 16,021	100%	$ 15,631	100%

	Three Months Ended June 30, $(000)			
	2006		2005	
Line connection/protection equipment	$ 6,981	86%	$ 6,574	80%
Signal Processing	994	12%	1,598	19%
Other	109	2%	51	1%
	$ 8,084	100%	$ 8,223	100%

Overview

We operate in the telecommunications industry, and our customer base consists largely of government-owned and privately-owned telecommunications companies. Our line connection and protection equipment ("Line") interconnects copper telephone lines to switching equipment and provides fuse elements that protect telephone equipment and personnel from electrical surges. Our signal processing ("Signal") equipment is used in data communication devices that employ high frequency transformer technology.

We currently limit our OSS activities to the performance of contractual maintenance and warranty services which are anticipated to cease in June, 2007 (see Note 8 to the unaudited consolidated financial statements). Accordingly, as of June 30, 2006, the Company's Consolidated Results of Operations present the OSS division as discontinued operations.

Our Line equipment is designed to connect copper-wired telecommunications networks and to protect telecommunications equipment from voltage surges. We market this equipment primarily to telephone operating companies outside the United States and through distribution to designers, engineers and installers in the United States. Our Line division operated at a profit for the three and six months ended June 30, 2006 and June 30, 2005. We market Signal equipment principally for use in defense and aerospace applications. The Signal division generated operating profit for the three and six months ended June 30, 2006 and the comparable periods of 2005. We recognize revenue from Line and Signal products when the product is shipped.

On June 30, 2006, our liability to the holder of our senior debt was $24,124,000. The most recent extension, which extended the maturity date, subject to our attaining certain milestones, from May 1, 2006 to September 30, 2006, requires us to continue to make monthly payments of $112,500. The most recent extension also includes a number of milestones to the continuation of efforts towards a restructure in a manner which would enable the holder of the senior debt to receive significant payments on account of the senior debt. The loan becomes due and payable on September 30, 2006, or earlier, if we fail to achieve any of the milestones and the holder of the senior debt declares a default. If the holder of the senior debt demands payment of all or a significant portion of the loan when due, we will not be able to continue in business and it is likely that we will seek protection under the Bankruptcy Code.

Results of Continuing Operations

The below narratives discuss the activities of our continuing operations.

Line equipment sales for the six months ended June 30, 2006, compared to the six months ended June 30, 2005, increased by $1,187,000 (10%) from $12,281,000 to $13,468,000. Sales for the three months ended June 30, 2006 increased by $407,000 (6%) from $6,574,000 in 2005 to $6,981,000 in 2006. The increase in sales for the six and the three months is the result of increased sales volume to British Telecommunications as a result of British Telecommunications' continuing rollout of DSL lines, and its implementation of the local loop unbundling program, demanded by regulators in the United Kingdom to enable third party providers of the telephone service to gain access

to British Telecommunications' systems.

Signal sales for the six months ended June 30, 2006 were $2,407,000, compared to $3,255,000 in the same period of 2005, a decrease of $848,000 (26%). Sales for the three months ended June 30, 2006 compared to 2005, decreased by $604,000 (38%) from $1,598,000 to $994,000. The decline in Signal revenue from the first half of 2006 resulted primarily from sluggish order rates from the military sector in the first six months of 2006. In addition, the revenue for the six months ended June 30, 2005 was positively impacted by shipments to customers from 2004 backlog that were not shipped in 2004 due to cash constraints which existed back then. Sales for the second quarter and six months of 2006 represent shipments of current orders and backlog.

Gross margin, for the six months ended June 30, 2006, was 34% compared to 41% for the six months ended June 30, 2005. Gross margin for the quarter ended June 30, 2006 was 34% compared to 40% for the quarter ended June 30, 2005. This decrease for the six months was attributable to a change in products sold to British Telecommunications during the first quarter of the year (from the higher gross margin DSL products to the lower margin local loop unbundling products) and additional freight costs associated with on time deliveries to customers. The quarter ended June 30, 2006 was negatively impacted primarily by short-term manufacturing inefficiencies at our assembly facility in Mexico, additional freight costs and, to a lesser extent, the continuation of sales to British Telecommunications of lower margin products. Also, our Signal segment gross margin decreased during the quarter and six months due to sales of lower margin products.

Selling, general and administrative expenses increased by $216,000 (9%) from $2,488,000 to $2,704,000 for the six months ended June 30, 2006 compared to 2005. For the quarter ended June 30, 2006 selling, general and administrative expenses decreased by $51,000 (4%) from $1,457,000 in 2005 to $1,406,000 in 2006. The increase for the six months ended June 30, 2006 relates primarily to increased expenses in our Signal segment for salaries, commissions and advertising as our marketing activities for Signal were increased during the first quarter of 2006. Additionally, selling and marketing salaries increased in our Line segment as well as increased administrative salaries which were partially offset by a decrease in general and administrative expenses relating to the OSS division as we were winding down that operation in the first quarter

For the six months ended June 30, 2006 compared to 2005, research and development expenses increased by $105,000 (16%) to $756,000 from $651,000. For the quarter ended June 30, 2006 compared to 2005, research and development expenses increased by $6,000 (2%) to $346,000 from $340,000. The increase for the six months resulted primarily from increased spending by our line connection/protection division of approximately $100,000 to enhance our existing line products and develop new products.

As a result of the above, for the six months ended June 30, 2006, we had an operating income from continuing operations of $2,005,000 compared with $3,295,000 in the same period of 2005. We had an operating income of $999,000 for the quarter ended June 30, 2006 as compared with $1,478,000 in the same period of 2005.

We continue to accrue interest on obligations to the holder of $1,514,000 of our senior debt, which represents interest on senior debt that we incurred subsequent to March 2002. In addition, there is outstanding an old term loan, in the principal amount of $22,610,000, that accrues no interest commencing March 1, 2002, until such time as the holder of the debt, in its sole discretion, notifies us that interest, at a rate of 12%, or a default rate of 14%, shall be payable. The holder of the senior debt has not required us to pay interest on this amount.

Income tax expense for the six months ended June 30, 2006 relates to federal, state and foreign taxes.

As a result of the foregoing, we generated net income, from continuing operations, of $1,350,000, $.13 per share (basic and diluted), for the six months ended June 30, 2006, compared with $2,627,000, $0.26 per share (basic and diluted), in 2005. The net income for the three months ended June 30, 2006, from continuing operations, was $663,000, $.07 per share (basic and diluted), compared with $1,151,000, $0.12 per share (basic and diluted) in 2005.

DISCONTINUED OPERATIONS

Operating Support Systems ("OSS")

In December, 2003, the Company decided to wind down its OSS business. This decision was made because of continuing losses combined with difficulties in marketing OSS products in view of our financial condition. The Company anticipates the discontinuation of this business by June 30, 2007. Accordingly, as of June 30, 2006, the OSS operating segment is reported in the Consolidated Financial Statements as a discontinued operation. Currently, its operating activities are limited to the performance of contractual maintenance and warranty services. (See Note 8 to the unaudited consolidated financial statements.)

Liquidity and Capital Resources

At June 30, 2006, we had cash and cash equivalents of $1,539,000 compared with $1,254,000 at December 31, 2005. Our working capital deficit at June 30, 2006 was $32,536,000 compared to a working capital deficit of $33,719,000 at December 31, 2005, a reduction of $1,183,000 in our working capital deficit since December 31, 2005. This decrease in the working capital deficiency reflects our improved operating results for the six months ended June 30, 2006. During the six months of 2006, we made payments to the holder of our senior debt of $675,000, of which approximately $124,000 was applied to interest and the remaining $551,000 was applied to principal.

As of June 30, 2006, our debt includes $24,124,000 of senior debt, which matures on September 30, 2006, or earlier if we fail to meet required milestones and the holder of the senior debt calls a default, $6,144,000 of subordinated debt that became due on July 3, 2001, and $385,000 of 6% debentures that became due on July 2, 2002. We were unable to pay the interest payment on the subordinated notes of approximately $5,515,000 that represents interest from July 2000 through June 2006, or the interest on the subordinated debentures of approximately $139,000. We have been notified by the trustee of 6% debentures that the non-payment of the principal and interest caused an event of default. At June 30, 2006, we did not have sufficient resources to pay either the senior lender or the subordinated lenders; it is unlikely that we can generate such cash from our operations, and our senior lender has precluded us from making any payments on the subordinated debt.

We have sought to address our need for liquidity by exploring alternatives, including the possible sale of one or more of our divisions. During 2004 and 2005, we were engaged in discussions with respect to the possible sale of our divisions; however, those negotiations were terminated without an agreement having been reached, and we may not be able to sell those divisions on acceptable, if any, terms. Furthermore, if we sell a division, we anticipate that a substantial portion, if not all, of the net proceeds will be paid to the holder of our senior debt, and we will not receive any significant amount of working capital from such a sale. We continue our efforts to reduce costs while we seek additional business from new and existing customers, or seek to sell one or more of our divisions. As a result of the significant reduction in the operations of our OSS division, we do not believe that we will be able to sell that division on terms which would generate any significant cash. Further, the dependence of our copper business on several significant customers, principally British Telecommunications, are major factors which may impair our ability to sell the copper division or our business as a whole or may affect the terms on which we would be able to sell the business.

Forward Looking Statements

Statements contained in this Form 10-Q include forward-looking statements that are subject to risks and uncertainties. In particular, statements in this Form 10-Q that state the Company's intentions, beliefs, expectations, strategies, predictions or any other statements relating to our future activities or other future events or conditions are "forward-looking statements." Forward-looking statements are subject to risks, uncertainties and other factors, including, but not limited to, those identified under "Risk Factors," in our Form 10-K for the year ended December 31, 2005 and those described in "Management's Discussion and Analysis of Financial Conditions and Results of Operations" in our Form 10-K and this Form 10-Q, and those described in any other filings by us with the Securities and Exchange Commission, as well as general economic conditions and economic conditions affecting the telecommunications industry, any one or more of which could cause actual results to differ materially from those stated in such statements.

Item 3. Quantitative and Qualitative Disclosure About Market Risk.

We conduct certain operations outside the United States. A substantial portion of our revenue and expenses from our United Kingdom operations are denominated in Sterling. Any Sterling-denominated receipts are promptly converted into United States dollars. We do not engage in any hedging or other currency transactions.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

As of the end of the period covered by this report, our Chief Executive Officer and Chief Financial Officer evaluated the effectiveness of our disclosure controls and procedures. Based on his evaluation, the Chief Executive Officer and Chief Financial Officer has concluded that our disclosure controls and procedures are effective.

Changes in Internal Control over Financial Reporting

There has been no change in our internal control over financial reporting that occurred during the fiscal covered by this quarterly report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 3. Defaults Upon Senior Securities.

See Note 3 of Notes to Unaudited Consolidated Financial Statements and “Management’s Discussion and Analysis of Financial Condition and Results of Operations - Liquidity and Capital Resources” for information concerning defaults on our subordinated debt.

Item 6. Exhibits

Exhibits

31.1 Certificate of Chief Executive Officer and Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

32.1 Certificate of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

PORTA SYSTEMS CORP.

Dated: August 14, 2006

By: /s/ Edward B. Kornfeld

Edward B. Kornfeld
Chief Executive Officer
and Chief Financial Officer