

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549
FORM 10-K

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2007

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 000-30205

CABOT MICROELECTRONICS CORPORATION

(Exact name of registrant as specified in its charter)

DELAWARE

(State of Incorporation)

36-4324765

(I.R.S. Employer Identification No.)

870 NORTH COMMONS DRIVE

AURORA, ILLINOIS

(Address of principal executive offices)

60504

(Zip Code)

Registrant's telephone number, including area code: **(630) 375-6631**

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

Title of each class

Name of each exchange on which registered

Common Stock, \$0.001 par value

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 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

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 No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K 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.

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

Large accelerated filer Accelerated filer Non-accelerated filer

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

The aggregate market value of the registrant's Common Stock held beneficially or of record by stockholders who are not affiliates of the registrant, based upon the closing price of the Common Stock on March 31, 2007, as reported by the NASDAQ Global Select Market, was approximately \$790,248,600. For the purposes hereof, "affiliates" include all executive officers and directors of the registrant.

As of October 31, 2007, the Company had 24,009,958 shares of Common Stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for the Annual Meeting of Stockholders to be held on March 4, 2008, are incorporated by reference in Part III of this Form 10-K to the extent stated herein.

This Form 10-K includes statements that constitute "forward-looking statements" within the meaning of federal securities regulations. For more detail regarding "forward-looking statements" see Item 7 of Part II of this Form 10-K.

CABOT MICROELECTRONICS CORPORATION
FORM 10-K
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2007

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PART I

ITEM 1. BUSINESS

OUR COMPANY

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we", or "our"), which was incorporated in the state of Delaware in 2000, is the leading supplier of high-performance polishing slurries used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are built upon silicon wafers in the production of advanced ICs.

We operate predominantly in one industry segment – the development, manufacture and sale of CMP consumables. We develop, produce and sell CMP slurries for polishing materials such as copper, tungsten and dielectric in IC devices, and also for polishing the materials coated on disks during the manufacture of hard disk drives and magnetic heads. In addition, we develop, produce and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process.

In addition to strengthening and growing our core CMP business, through our Engineered Surface Finishes (ESF) business we are exploring a variety of surface modification applications where we believe our technical ability to shape, enable and enhance the performance of surfaces at an atomic level may provide previously unseen surface performance or improved productivity. By supplementing our internal development efforts with externally acquired technologies and businesses, we seek to leverage our expertise in CMP formulation, materials and polishing techniques for the semiconductor industry to address other demanding market applications requiring nanoscale control of surface shape and finish, and gain access to a variety of markets that we do not currently serve.

CMP PROCESS WITHIN IC DEVICE MANUFACTURING

The percentage of IC devices that utilize CMP in the manufacturing process has increased steadily over time as semiconductor technology has advanced and performance requirements of IC devices have increased. We believe that CMP is used in the majority of all IC devices made today, and we expect that the use of CMP will continue to increase in the future.

The multi-step manufacturing process for IC devices typically begins with a circular wafer of pure silicon. A large number of identical IC devices, or dies, are manufactured on each wafer at the same time. The first steps in the manufacturing process build transistors and other electronic components on the silicon wafer. These are isolated from each other using a layer of insulating material, most often silicon dioxide, to prevent electrical signals from bridging from one transistor to another. These components are then wired together using either aluminum or copper wire in a particular sequence to produce a functional IC device with specific characteristics. When the wiring on one layer of the IC device is completed, another layer of insulating material is added. The process of alternating insulating and wiring layers is repeated until the desired wiring within the IC device is finished. At the end of the process, the wafer is cut into the individual dies, which are then packaged to form individual chips. To enhance performance, IC device manufacturers have progressively increased the number and density of transistors and other electronic components in each IC device. As a result, the number of wires and the number of discrete wiring layers have also increased.

IC devices can generally be categorized as either logic or memory devices. Logic devices include chips such as microprocessors, digital signal processors, microcomponents and microcontrollers. These are normally computing-intensive devices that need to perform large numbers of processing steps every second. Advanced logic chips use copper wiring to provide increased processing speed because copper wiring has lower electrical resistance than aluminum wiring. Aluminum wiring is generally used in chips that do not require this speed, such as logic devices using mature technology, because it is generally more cost-effective than using copper wiring. Memory devices, which include flash, DRAM and SRAM chips, function by reading, writing and storing data. Traditionally this sector has been highly cost sensitive and processing speed is not as critical as in logic devices. Therefore, memory devices tend to use aluminum wiring, although copper wiring is beginning to be introduced for some devices.

In the CMP polishing process, CMP consumables are used to level, smooth and remove excess material from the surfaces of the layers of IC devices via a combination of chemical reactions and mechanical abrasion, leaving minimal residue or defects on the surface and leaving only the material necessary for circuit integrity. CMP slurries are liquid solutions generally composed of high-purity deionized water, proprietary chemical additives and engineered abrasives that chemically and mechanically interact with the surface material of the IC device at an atomic level. CMP pads are engineered polymeric materials designed to distribute and transport the slurry to the surface of the wafer and distribute it evenly across the wafer. During the CMP process the wafer is typically held on a rotating carrier, which is pressed down against a rotating polishing table and spun in a circular motion. The portion of the table that comes in contact with the wafer is covered by a textured polishing pad. A CMP slurry is continuously applied to the polishing pad to facilitate and enhance the polishing process. Hard disk drive manufacturers use similar processes to smooth the surface of substrate disks before depositing magnetic media onto the disk.

The characteristics that are important for an effective CMP process include:

- High polishing removal rates, which increase productivity and throughput;
- Selectivity, which is the ability to enhance the polishing of specific materials while at the same time inhibiting the polishing of other materials;
- Uniform planarity across a wafer, which minimizes unevenness as different layers are built on the wafer;
- Uniformity of polishing, which means that different surface materials can be polished to the same degree at the same time across the wafer, leading to uniformity of all dies on the wafer;
- Low defectivity, which means that the devices have few imperfections resulting in a high yield for the IC device manufacturer; and
- Cost, because it is important for users to minimize their cost of manufacturing.

These attributes are achieved through technical optimization of the CMP consumables in conjunction with an appropriately designed CMP process. Prior to introducing new or different CMP slurries or pads into its manufacturing process, an IC device manufacturer generally requires the product to be qualified in its processes through an extensive series of tests and evaluations. These qualifications are intended to ensure that the product will function properly within the overall manufacturing process. These tests may require minor changes to the CMP process or the CMP slurry or pad. While this qualification process varies depending on numerous factors, it is generally quite costly and may take six or more months to complete. IC device manufacturers usually take into account the cost, time delay and impact on production when they consider implementing or switching to a new CMP slurry or pad.

CMP enables IC device manufacturers to produce smaller, faster and more complex IC devices with a greater density of transistors and other electronic components than was previously possible. By enabling IC device manufacturers to make smaller IC devices, CMP also allows them to increase the number of IC devices that fit on a wafer. This increase in the number of IC devices per wafer in turn increases the throughput, or the number of IC devices that can be manufactured in a given time period, and reduces the cost per device. CMP also helps reduce the number of defective or substandard IC devices produced, which increases the device yield. Improvements in throughput and yield reduce an IC device manufacturer's unit production costs, and reducing costs is one of the highest priorities of a semiconductor manufacturer as the return on its significant investment in manufacturing capacity can be enhanced by lower unit costs. More broadly, sustained growth in the semiconductor industry traditionally has been fueled by lower unit costs, making IC devices more affordable in an expanding range of applications.

PRECISION POLISHING

Through our ESF business, we are applying our technical expertise in CMP consumables and polishing techniques developed for the semiconductor industry to demanding applications in other industries where shaping, enabling and enhancing the performance of surfaces is critical to success. We believe we can deliver improvements in production efficiencies, figure precision and surface finish for a variety of difficult-to-polish materials, potentially enabling the use of these materials in higher-value applications.

In addition, many of the production processes currently used in precision machining and polishing have been based on traditional, labor-intensive techniques, which are being replaced by computer-controlled, deterministic processes. Our CMP technology may help to accelerate this transition to automated processes in several areas by providing high-quality consumable products that deliver consistent performance required for deterministic finishing. Our fiscal 2006 acquisition of QED Technologies, Inc. (QED) provided us with a strong position as a provider of deterministic finishing technology for the precision optics industry. We believe precision optics are pervasive, serving several existing large and growing markets such as semiconductor equipment, aerospace, defense, security and telecommunications, and also offer growth potential in new applications.

STRATEGY

We believe our core competencies lie in our abilities to shape, enable and enhance the performance of surfaces at an atomic level, as well as to consistently and reliably deliver and support products around the world that meet our customers' demanding specifications. We have two strategic goals intended to utilize these capabilities: 1) strengthen and grow our core CMP business within the semiconductor and hard disk drive industries, and 2) leverage our expertise in CMP process and slurry formulation to expand our ESF business into new markets.

STRENGTHEN AND GROW OUR CORE CMP BUSINESS

As the leader in the CMP slurry industry, we intend to grow our core CMP consumables business through implementation of our three strategic initiatives – maintaining our technological leadership, achieving operations excellence and connecting with our customers.

Technology Leadership: We believe that technology is vital to success in our CMP consumables business and we devote significant resources to research and development. In fiscal 2007, we announced major improvements in our copper barrier and tungsten slurries, offering products that we believe provide our customers greater flexibility in use, and result in fewer defects. We also commercialized our new polishing pad product that incorporates technology that we believe offers performance advantages compared to competing products. We need to stay ahead of the rapid technological advances in the semiconductor industry in order to deliver a broad line of CMP consumable products that meet or exceed our customers' evolving needs. We have established research and development facilities in the United States, Japan, Taiwan and Singapore in order to meet our customers' technology needs on a global basis.

Operations Excellence: Our customers demand increasing performance of our products in terms of product quality and consistency. We intend to continue to advance our strict quality systems in order to improve the uniformity and consistency of performance of our CMP products. To support our operations excellence initiative, we have adopted the concepts of Six Sigma across our Company. Six Sigma is a systematic, data-driven approach and methodology for improving quality by reducing variability in processes. We have made productivity and efficiency gains through this program since its introduction in fiscal 2005. We also have extended our Six Sigma initiative to include joint projects with customers and vendors. We continue to make improvements to our supply chain that improve the quality and consistency of our products, processes and raw materials, as well as to expand our production capacity. For example, during fiscal 2007 we installed new pad manufacturing capabilities in the U.S. and Taiwan.

Connecting With Our Customers: We believe that building close relationships with our customers is another cornerstone for long-term success in our business. We work closely with our customers to identify and develop new and better CMP consumables, to integrate our products into their manufacturing processes, and to assist them with supply, warehousing and inventory management. Our customers demand a highly reliable supply source, and we believe we have a competitive advantage because of our ability to timely deliver high-quality products and service from the early stages of product development through the commercialized use of our products. We have devoted significant resources to enhancing our close customer relationships and we are committed to continuing this effort. We strategically locate our research facilities, manufacturing operations and the related technical and customer support teams to be responsive to our customers' needs. Since a majority of our business is in the Asia Pacific region, we have increased our presence there over recent years by building an Asia Pacific technology center in Geino, Japan, and a technical service center in Taiwan for slurry formulation capabilities. In fiscal 2006, we moved the portion of our business that serves the hard disk drive market to Singapore, because Southeast Asia is an important manufacturing region for a number of participants in this industry. In addition, in fiscal 2007, we began manufacturing polishing pads in Taiwan. Further, in fiscal 2008 we intend to upgrade our polishing and metrology capability in the Asia Pacific region with the planned addition of a 300mm polishing tool at our Asia Pacific technology center in Japan. All of these initiatives represent our belief that by working closely with customers at a local level we can leverage our global knowledge to meet and exceed our customers' expectations.

LEVERAGE OUR EXPERTISE INTO NEW MARKETS – ENGINEERED SURFACE FINISHES

In addition to strengthening and growing our core CMP business, we are expanding our Company through our ESF business. We believe we can leverage our expertise in CMP consumables for the semiconductor industry to develop a wide array of polishing applications for other demanding industries that are synergistic to our CMP consumables business. We expect to supplement our internal development efforts with externally acquired technologies and businesses. We believe our ESF product offerings are unique and we are targeting new opportunities in optics, optoelectronics, flat panel display, metal finishing and other market areas.

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Similar to our core CMP business, our ESF business is technology driven. For example, we believe our QED subsidiary is the technology leader in deterministic finishing for the precision optics industry and, in fiscal 2007, we developed and sold new polishing and metrology equipment that enables the production of more advanced optics, as well as improved accuracy in their measurement.

We are expanding our ESF sales and marketing resources to better serve our current and future customers. We plan to equip our Asia Pacific technology center with QED capabilities to offer product demonstrations to our customers in this region. These initiatives demonstrate our intent to serve our ESF customers on a global scale, much like we do in the CMP consumables business.

We believe our strong financial position offers many opportunities for growth in both our core CMP consumables business and for our ESF business. As of September 30, 2007, we had \$212.5 million in cash and short-term investments and no outstanding debt. Our financial position allows us to fund growth through either internally developed technologies or potential acquisitions of technologies or businesses.

OUR PRODUCTS

CMP CONSUMABLES FOR IC DEVICES

We develop, produce and sell CMP slurries for a wide range of polishing applications including tungsten and dielectric materials, which currently represent the most common use of CMP in IC device manufacturing. Slurries for polishing tungsten and dielectrics are the primary slurries used in the production of memory devices and older generation logic devices such as for MP3 players, cellphones, gaming devices and digital video recorders.

We also develop, manufacture and sell slurry products for copper polishing applications; copper is used primarily in the wiring of advanced IC logic devices such as microprocessors for computers, and devices for graphic systems, gaming systems and communication devices. These slurries enable the IC device to provide increased processing speed since copper wiring has lower electrical resistance than aluminum wiring. These products include different slurries for polishing the copper film, as well as the thin barrier metal layer used to separate copper from the adjacent insulating material. On a lesser scale, we develop and manufacture slurry products for polishing copper in IC memory devices, which represents an emerging application. We offer multiple products for each technology node to enable different integration schemes depending on specific customer needs.

We develop, produce and sell CMP polishing pads, which are consumable materials that work in conjunction with CMP slurries in the CMP polishing process. We believe that CMP polishing pads represent a natural adjacency to our CMP slurry business, since the technology is closely related and we can utilize the same technical and sales infrastructure. We believe our continuous pad manufacturing process enables a high level of product consistency from pad-to-pad, and we also believe our pad materials offer enhanced performance and a longer pad life, resulting in lower cost of ownership for our customers.

CMP CONSUMABLES FOR THE DATA STORAGE INDUSTRY

We develop and produce CMP slurries for polishing the materials coated onto rigid disks and magnetic heads used in hard disk drives for computer and other data storage applications, representing an extension of our core CMP slurry technology and manufacturing capabilities established for the semiconductor industry. We believe CMP significantly improves the surface finish of these coatings, resulting in greater storage capacity of the substrates, and also improves the production efficiency of manufacturers of hard disk drives by helping them increase their throughput and yield.

PRECISION OPTICS PRODUCTS

Through our QED subsidiary, we design and produce precision polishing and metrology systems for advanced optic applications that allow customers to attain near-perfect shape and surface finish on a range of optics such as mirrors, lenses and prisms. Historically, advanced optics have been produced using labor-intensive processes, so variability has been common. QED has created an automated polishing system that enables rapid, deterministic and repeatable surface correction to the most demanding levels of precision in dramatically less time than with traditional means. QED's polishing systems use Magneto-Rheological Finishing (MRF), a proprietary surface figuring and finishing technology, which employs magnetic fluids and sophisticated computer technology to polish a variety of shapes.

Fabrication of high quality, advanced optics is often hampered by the lack of accurate and affordable metrology. For example, interferometers, metrology tools that measure the surface of an optic, traditionally are limited by the size and precision of the reference optic used. QED's Subaperture Stitching Interferometry (SSI) workstation enables the automatic capture of precise metrology data for large and/or strongly curved optical parts and gives the user a complete map of the optical surface. The SSI workstation measures portions of large optical parts, and digitally "stitches" these portions together into a single complete surface map. This map is needed to produce high precision optics to exacting tolerances.

INDUSTRY TRENDS

SEMICONDUCTOR INDUSTRY

The semiconductor industry has experienced rapid growth over the past three decades, but this growth has been cyclical. Our financial results for fiscal 2007 demonstrated the cyclical nature of this industry. During the first half of the fiscal year, our revenue was adversely impacted as a number of customers reduced production in response to excess inventories of semiconductor devices, thus reducing demand for our products. The semiconductor industry experienced improved conditions in the third and fourth quarters of our fiscal year, which contributed to our stronger financial results in the second half of the year.

In recent years, the semiconductor industry has seen increased demand for memory devices and the incorporation of advanced logic and memory products into digital consumer devices. This represents a departure from the industry's traditional emphasis on microprocessors for computing applications. We believe growth in demand for consumer devices as well as continued growth in computing applications will be key growth drivers in the industry over the long term.

As the growth in consumer electronic devices continues, there is increased pressure on IC device manufacturers to reduce their costs since end users of consumer electronic devices are very price sensitive. At the same time, rapid advancement in technology increases the development and production costs of IC devices. These trends appear to be driving our customers to partner with each other in next generation research and development to pool their resources in an effort to reduce their overall costs. This cost pressure has also led to an increase in the use of foundries where semiconductor companies can outsource portions of their manufacturing and reduce their fixed costs. Semiconductor manufacturers also attempt to reduce their costs in a number of ways, including putting pressure on their suppliers to reduce prices. We believe these trends will continue, so it is critical that we continue to innovate to achieve lower costs in our products as well as to increase our production efficiencies.

On a geographic basis, the Asia Pacific region continues to be the fastest growing region for IC manufacturing, as well as for our business, and we expect this trend to continue.

CMP CONSUMABLES INDUSTRY

Demand for our CMP products for IC devices is primarily based on the number of wafers produced by semiconductor manufacturers, or "wafer starts". Although wafer starts may fluctuate in the short-term, we anticipate the worldwide market for CMP consumables used by IC device manufacturers will grow in the future as a result of expected long term growth in wafer starts, growth in the percentage of IC devices produced that require CMP, an increase in the number of CMP polishing steps required to produce these devices and the introduction of new materials in the manufacture of semiconductor devices. We expect the anticipated volume growth will be somewhat mitigated by increased efficiencies in CMP consumable usage as customers seek to reduce their costs, such as through the transition to larger wafers, slurry dilution and decreased slurry flow rates.

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As semiconductor technology continues to advance, we believe that CMP technical solutions are becoming more complex, and leading-edge technologies now often require some customization by customer, tool set and process integration approach. Leading-edge device designs are introducing more materials and processes into next generation chips, and these new materials and processes must be considered in developing CMP solutions. As a result, customers are selecting suppliers early in their development processes and are maintaining preferred supplier relationships through production. We believe that the partnership between customers and suppliers offers the best opportunity for a successful outcome for both our customers and our company.

COMPETITION

We compete in the CMP consumables industry, which is characterized by rapid advances in technology and demanding product quality and consistency requirements. We face competition from other CMP consumables suppliers, and we also may face competition in the future from significant changes in technology or emerging technologies.

Our CMP slurry competitors range from small companies that compete with a single product and/or in a single geographic region to divisions of global companies with multiple lines of IC manufacturing products. However, we believe we have more CMP slurry business than any other competitor. In our view, we are the only CMP slurry supplier today that serves a broad range of customers by offering and supporting a full line of CMP slurry products for all major applications over a range of technologies, and that has a proven track record of supplying these products globally in high volumes with the attendant required high level of technical support services.

The CMP polishing pad market has been dominated by a single entity that has held this position for a number of years. A number of other companies are attempting to enter this market, providing potentially viable product options. We believe our pad materials and our continuous pad manufacturing process enables us to produce a more consistent pad for our customers with a longer pad life, thus reducing the total pad cost.

Our QED subsidiary operates in the precision optics industry. There are few direct competitors for QED's technologies because they are relatively new and unique. We believe the main alternative to QED's technology is non-adoption and continued reliance on traditional artisan-based methods of precision optics fabrication.

CUSTOMERS, SALES AND MARKETING

Within the semiconductor industry, our customers are primarily producers of logic IC devices, producers of memory IC devices and IC foundries. Often, logic and memory companies outsource some or all of the production of physical devices to foundries, which provide contract manufacturing services, in order to avoid the high cost of constructing and operating a fab or in cases where they need additional capacity.

Based upon our own observations and customer satisfaction survey results, we believe the following factors influence our customers' CMP buying decisions: overall cost of ownership, which represents the cost to purchase, use and maintain a product; product quality and consistency; product performance; and delivery/supply assurance. We believe that greater customer sophistication in the CMP process, more demanding integration schemes, additional and unique polishing materials and cost pressures will add further demands on CMP consumable suppliers. When these factors are combined with our customers' desires to gain purchasing leverage and lower their cost of ownership, we believe that only the most innovative, cost effective, service driven CMP suppliers will thrive.

We use an interactive approach to build close relationships with our customers in a variety of areas. Our sales process begins long before the actual sale of our products and occurs on a number of levels. Due to the long lead times from research and development to product commercialization and sales, we have fundamental research teams that collaborate with customers on emerging applications years before the products are required by the market. We also have development teams that coordinate with our customers, using our research and development facilities and capabilities to design CMP products tailored to their precise needs. Next, our applications engineers work with customers to integrate our products into their manufacturing processes. Finally, as part of our sales process, our logistics and sales personnel provide supply, warehousing and inventory management to our customers. In response to significant growth in the IC device manufacturing industry in Asia, we continue to increase the number of sales and marketing, technical and customer support personnel in the Asia Pacific region.

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We market our products primarily through direct sales to our customers, although we use distributors in certain countries. We believe this strategy is one way we can achieve our goal of staying connected with our customers.

Our QED subsidiary supports customers in the semiconductor equipment, aerospace, defense, security and telecommunications markets. QED counts among its worldwide customers leading precision optics manufacturers, major semiconductor original equipment manufacturers, the U.S. government and contractors to the U.S. government.

In fiscal 2007, our five largest customers accounted for approximately 43% of our revenue, with Taiwan Semiconductor Manufacturing Company (TSMC) accounting for approximately 17% of our revenue. For additional information on concentration of customers, refer to Note 2 of "Notes to the Consolidated Financial Statements" included in Item 8 of Part II of this Form 10-K.

RESEARCH, DEVELOPMENT AND TECHNICAL SUPPORT

We believe that technology is vital to success in the CMP business as well as in our ESF business, and we plan to continue to devote significant resources to research and development, and balance our efforts between the shorter-term market needs and the longer-term investments required of us as the technology leader.

Our technology efforts are currently focused on five main areas that span the very early conceptual stage of product development involving new materials, processes and designs several years in advance of commercialization, through to continuous improvement of already commercialized products in daily use in manufacturing facilities:

- Research related to fundamental CMP technology;
- Development and formulation of new and enhanced CMP consumable products;
- Process development to support rapid and effective commercialization of new products;
- Technical support of CMP products in our customers' manufacturing facilities; and
- Evaluation of new polishing applications outside of the semiconductor industry.

We invest in fundamental CMP technology and materials research in order to be prepared to meet the dynamic needs of advanced technology, investing well in advance of the market need because there are long lead times from research and development to commercialization and sales. We focus on such areas as: engineered polymers and particles, polishing processes, wafer/chip design, advanced metrology, mechanistic understanding and emerging applications. As a result of our investment in research and development, we have a fundamental understanding of the CMP process, chemistry, and mechanics that we believe allows us to quickly and efficiently tailor our applications to meet the needs of our leading-edge customers.

We also develop and formulate new and enhanced CMP consumables and new CMP processes. We believe our leadership in these areas depends in part on our ability to develop CMP solutions tailored to our customers' needs. We have assembled development teams that work closely with customers to identify their specific technology and manufacturing challenges and to translate these challenges into viable CMP process solutions. We also remain focused on supporting our customers in the use of our products in their processes, so we have application engineers dedicated to working with our customers daily at their facilities.

Our research in CMP slurries and pads addresses a breadth of complex and interrelated performance criteria that relate to the functional performance of the chip, our customers' manufacturing yield, and their overall cost of ownership. We design slurries and pads that are capable of polishing one or more materials, sometimes at the same time, that make up the semiconductor circuitry. Our unique chemistries, particles, and processes are designed to polish each material with a single slurry at independently tunable rates such that the final surface will be flat and free of defects. At the same time, our products must achieve the desired surface at high polishing rates and low consumable costs in order to earn acceptable system economics for our customers. As dimensions become smaller and as materials and designs increase in complexity, these challenges require significant investments in research and development.

Beyond CMP for the semiconductor and data storage industries, we also commit internal research and development resources to our ESF business. We believe that a number of application areas we are currently developing represent natural adjacencies to our core CMP business and technology, and include uses in fields such as optics, optoelectronics, flat panel displays, metal finishing and other market areas.

We believe that competitive advantage lies in technology leadership, and that our investments in research and development provide us with leading-edge polishing and metrology capabilities to support the most advanced and challenging customer technology requirements on a global basis. In fiscal 2007, 2006 and 2005, we incurred approximately \$50.0 million, \$48.1 million and \$43.0 million, respectively, in research and development expenses. Investments in property, plant and equipment to support our research and development efforts are capitalized and depreciated over their useful lives. We operate a research and development facility in Aurora, Illinois, that is staffed by a team that includes experts from the semiconductor industry and scientists from key disciplines required for the development of high-performance CMP products. This facility features a Class 1 clean room and advanced equipment for product development, including 300 mm polishing and metrology capabilities, the experimental results from which we believe correlate closely with what our customers experience when using our products in their factories. In addition, we operate a technology center in Japan that we believe enhances our ability to provide optimized CMP solutions to our customers in the Asia Pacific region. We plan to add new 300 mm polishing, metrology and slurry development capability to our Asia Pacific technology center in fiscal 2008. These facilities underscore our commitment both to continuing to invest in our technology infrastructure to maintain our technology leadership, and to becoming even more responsive to the needs of our customers. Other examples of this commitment include our technical service center in Taiwan where we house a slurry, pad and ESF development center, as well as our laboratory in Singapore that provides additional slurry formulation capability to support the data storage industry.

RAW MATERIALS SUPPLY

Fumed metal oxides, such as fumed silica and fumed alumina, are significant raw materials we use in many of our CMP slurries. In the interest of supply assurance, our strategy is to secure multiple sources of raw materials and qualify those sources as necessary to ensure our supply of raw materials remains uninterrupted. Also, we have entered into multi-year supply agreements with a number of suppliers for the purchase of raw materials, including agreements with Cabot Corporation for the purchase of certain amounts and types of fumed silica and fumed alumina. For additional information regarding these agreements, refer to “Tabular Disclosure of Contractual Obligations”, included in “Management’s Discussion and Analysis of Financial Condition and Results of Operations”, in Item 7 of Part II of this Form 10-K.

INTELLECTUAL PROPERTY

Our intellectual property is important to our success and ability to compete. As of October 31, 2007, we had 156 active U.S. patents and 100 pending U.S. patent applications. In most cases we file counterpart foreign patent applications. Many of these patents are important to our continued development of new and innovative products for CMP and related processes, as well as for new businesses. Our patents have a range of duration and we do not expect to lose any material patent through expiration in the next five years. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third party nondisclosure and assignment agreements. We vigorously and proactively pursue any parties that attempt to compromise our investments in research and development by infringing our intellectual property. For example, in January 2007, we filed a legal action against DuPont Air Products NanoMaterials LLC (DA Nano), a competitor of ours, charging that DA Nano’s manufacture and marketing of certain CMP slurries infringe five CMP slurry patents that we own, and that litigation is ongoing. In addition, in the third quarter of fiscal 2006, we were successful in an action we brought before the United States International Trade Commission (ITC) concerning Cheil Industries, Inc. which resulted in the prohibition of the importation and sale within the United States of certain CMP slurries that infringe certain of our patents.

We also may acquire intellectual property from others to enhance our intellectual property portfolio. For example, in December 2006, we acquired a license for the non-exclusive use of a broad portfolio of CMP consumable technology and processes from a third party. In addition, in June 2006, we entered into a patent assignment agreement with the International Business Machine Corporation (IBM) to acquire a number of patents and associated rights relating to CMP slurry technology from IBM, including various applications such as copper, copper barrier, tungsten, and dielectrics, among others. We also acquired certain proprietary technology and intellectual property as part of our fiscal 2006 acquisitions of QED and Surface Finishes Co. We believe these technology rights continue to enhance our competitive advantage by providing us with future product development opportunities and expanding our already substantial intellectual property portfolio.

ENVIRONMENTAL MATTERS

Our facilities are subject to various environmental laws and regulations, including those relating to air emissions, wastewater discharges, the handling and disposal of solid and hazardous wastes, and occupational safety and health. We believe that our facilities are in substantial compliance with applicable environmental laws and regulations. By utilizing Six Sigma in our environmental management system process, we have improved operating efficiencies while protecting the environment. Our operations in the United States, Japan and Wales are ISO 14001 Certified, which requires that we implement and operate according to various procedures that demonstrate our dedication to waste reduction, energy conservation and other environmental concerns. We are committed to maintain these certifications and obtain additional certifications in the areas in which we do business. We have incurred, and will continue to incur, capital and operating expenditures and other costs in complying with these laws and regulations in both the United States and abroad. However, we currently do not anticipate that the future costs of environmental compliance will have a material adverse effect on our business, financial condition or results of operations.

EMPLOYEES

We believe we have a world-class team of scientists, technologists, engineers and other human resources who make our Company successful. As of October 31, 2007, we employed 742 individuals, including 359 in operations, 195 in research and development and technical, 95 in sales and marketing and 93 in administration. None of our employees are covered by collective bargaining agreements. We have not experienced any work stoppages and in general consider our relations with our employees to be good.

FINANCIAL INFORMATION ABOUT GEOGRAPHIC AREAS

We sell our products worldwide. Our geographic coverage allows us to utilize our business and technical expertise from a worldwide workforce, provides stability to our operations and revenue streams to offset geography-specific economic trends, and offers us an opportunity to take advantage of new markets for products.

For more financial information about geographic areas, see Note 17 of “Notes to the Consolidated Financial Statements” included in Item 8 of Part II of this Form 10-K.

AVAILABLE INFORMATION

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, definitive proxy statements on Form 14a, current reports on Form 8-K, and any amendments to those reports are made available free of charge on our Company website, www.cabotcmp.com, as soon as reasonably practicable after such reports are filed with the Securities and Exchange Commission (SEC). Statements of changes in beneficial ownership of our securities on Form 4 by our executive officers and directors are made available on our Company website by the end of the business day following the submission to the SEC of such filings. In addition, the SEC’s website, www.sec.gov, contains reports, proxy statements, and other information regarding reports that we file electronically with the SEC.

ITEM 1A. RISK FACTORS

We do not believe there have been any material changes in our risk factors since the filing of our Annual Report on Form 10-K for the fiscal year ended September 30, 2006. However, we may update our risk factors in our SEC filings from time to time for clarification purposes or to include additional information, at management's discretion, even when there have been no material changes.

RISKS RELATING TO OUR BUSINESS

WE HAVE A NARROW PRODUCT RANGE AND OUR PRODUCTS MAY BECOME OBSOLETE, OR TECHNOLOGICAL CHANGES MAY REDUCE OR LIMIT INCREASES IN CMP CONSUMPTION

Our business is substantially dependent on a single class of products, CMP slurries, which historically has accounted for almost all of our revenue. We are also developing our business in CMP pads. Our business would suffer if these products became obsolete or if consumption of these products decreased. Our success depends on our ability to keep pace with technological changes and advances in the semiconductor industry and to adapt, improve and customize our products for advanced IC applications in response to evolving customer needs and industry trends. Since its inception, the semiconductor industry has experienced rapid technological changes and advances in the design, manufacture, performance and application of IC devices, and our customers continually pursue lower cost of ownership of materials consumed in their manufacturing processes, including CMP slurries and pads. We expect these technological changes and advances, and this drive toward lower costs, to continue in the future. Potential technology developments in the semiconductor industry, as well as our customers' efforts to reduce consumption of CMP slurries and pads, could render our products less important to the IC device manufacturing process.

A SIGNIFICANT AMOUNT OF OUR BUSINESS COMES FROM A LIMITED NUMBER OF LARGE CUSTOMERS AND OUR REVENUE AND PROFITS COULD DECREASE SIGNIFICANTLY IF WE LOST ONE OR MORE OF THESE CUSTOMERS

Our customer base is concentrated among a limited number of large customers. One or more of these principal customers could stop buying CMP slurries from us or could substantially reduce the quantity of CMP slurries they purchase from us. Our principal customers also hold considerable purchasing power, which can impact the pricing and terms of sale of our products. Any deferral or significant reduction in CMP slurries sold to these principal customers, or a significant number of smaller customers, could seriously harm our business, financial condition and results of operations.

In fiscal 2007, our five largest customers accounted for approximately 43% of our revenue, with TSMC accounting for approximately 17% of our revenue. In fiscal 2006, our five largest customers accounted for approximately 44% of our revenue; Marketech, a distributor, was our largest customer at that time. Effective April 2006, with our transition to direct sales in Taiwan, we began selling directly to TSMC and other customers in Taiwan rather than through Marketech. Due to the timing of this transition, TSMC accounted for approximately 10% of our revenue for the full fiscal year 2006.

OUR BUSINESS COULD BE SERIOUSLY HARMED IF OUR EXISTING OR FUTURE COMPETITORS DEVELOP SUPERIOR SLURRY PRODUCTS, OFFER BETTER PRICING TERMS OR SERVICE, OR OBTAIN CERTAIN INTELLECTUAL PROPERTY RIGHTS

Competition from current CMP slurry manufacturers or new entrants to the CMP slurry market could seriously harm our business and results of operations. Competition from other existing providers of CMP slurries could continue to increase, and opportunities exist for other companies with sufficient financial or technological resources to emerge as potential competitors by developing their own CMP slurry products. Increased competition has and may continue to impact the prices we are able to charge for our slurry products as well as our overall business. In addition, our competitors could have or obtain intellectual property rights which could restrict our ability to market our existing products and/or to innovate and develop new products.

ANY PROBLEM OR DISRUPTION IN OUR SUPPLY CHAIN, INCLUDING SUPPLY OF OUR MOST IMPORTANT RAW MATERIALS, OR IN OUR ABILITY TO MANUFACTURE AND DELIVER OUR PRODUCTS TO OUR CUSTOMERS, COULD ADVERSELY AFFECT OUR RESULTS OF OPERATIONS

We depend on our supply chain to enable us to meet the demands of our customers. Our supply chain includes the raw materials we use to manufacture our products, our production operations, and the means by which we deliver our products to our customers. Our business could be adversely affected by any problem or interruption in our supply of the key raw materials we use in our CMP slurries, including fumed metal oxides such as fumed alumina and fumed silica, or any problem or interruption that may occur during production or delivery of our products, such as weather-related problems or natural disasters.

For example, Cabot Corporation continues to be our primary supplier of particular amounts and types of fumed alumina and fumed silica. We believe it would be difficult to promptly secure alternative sources of key raw materials, including fumed metal oxides, in the event one of our suppliers becomes unable to supply us with sufficient quantities of raw materials that meet the quality and technical specifications required by our customers. In addition, contractual amendments to the existing agreements with, or non-performance by, our suppliers could adversely affect us. Also, if we change the supplier or type of key raw materials we use to make our CMP slurries, or are required to purchase them from a different manufacturer or manufacturing facility or otherwise modify our products, in certain circumstances our customers might have to requalify our CMP slurries for their manufacturing processes and products. The requalification process could take a significant amount of time and expense to complete and could motivate our customers to consider purchasing products from our competitors, possibly interrupting or reducing our sales of CMP slurries to these customers.

WE ARE SUBJECT TO RISKS ASSOCIATED WITH OUR FOREIGN OPERATIONS

We currently have operations and a large customer base outside of the United States. Approximately 79%, 79% and 78% of our revenue was generated by sales to customers outside of the United States for fiscal 2007, 2006 and 2005, respectively. We encounter risks in doing business in certain foreign countries, including, but not limited to, adverse changes in economic and political conditions, fluctuation in exchange rates, compliance with a variety of foreign laws and regulations, as well as difficulty in enforcing business and customer contracts and agreements, including protection of intellectual property rights.

BECAUSE WE HAVE LIMITED EXPERIENCE IN BUSINESS AREAS OUTSIDE OF CMP SLURRIES, EXPANSION OF OUR BUSINESS INTO NEW PRODUCTS AND APPLICATIONS MAY NOT BE SUCCESSFUL

An element of our strategy has been to leverage our current customer relationships and technological expertise to expand our CMP business from CMP slurries into other areas, such as CMP polishing pads. Additionally, pursuant to our engineered surface finishes business, we are actively pursuing a variety of surface modification applications, such as high precision optics. Expanding our business into new product areas could involve technologies, production processes and business models in which we have limited experience, and we may not be able to develop and produce products or provide services that satisfy customers' needs or we may be unable to keep pace with technological or other developments. Also, our competitors may have or obtain intellectual property rights which could restrict our ability to market our existing products and/or to innovate and develop new products.

BECAUSE WE RELY HEAVILY ON OUR INTELLECTUAL PROPERTY, OUR FAILURE TO ADEQUATELY OBTAIN OR PROTECT IT COULD SERIOUSLY HARM OUR BUSINESS

Protection of intellectual property is particularly important in our industry because we develop complex technical formulas for CMP products that are proprietary in nature and differentiate our products from those of our competitors. Our intellectual property is important to our success and ability to compete. We attempt to protect our intellectual property rights through a combination of patent, trademark, copyright and trade secret laws, as well as employee and third-party nondisclosure and assignment agreements. Due to our international operations, we pursue protection in different jurisdictions, which may require varying degrees of protection, and we cannot provide assurance that we can obtain adequate protection in each such jurisdiction. Our failure to obtain or maintain adequate protection of our intellectual property rights for any reason, including through the patent prosecution process or in the event of litigation related to such intellectual property, such as the current litigation between us and DA Nano described above in Item 1 under the heading “Intellectual Property”, could seriously harm our business. In addition, the costs of obtaining or protecting our intellectual property could negatively affect our operating results.

WE MAY PURSUE ACQUISITIONS OF, INVESTMENTS IN, AND STRATEGIC ALLIANCES WITH OTHER ENTITIES, WHICH COULD DISRUPT OUR OPERATIONS AND HARM OUR OPERATING RESULTS IF THEY ARE UNSUCCESSFUL

We expect to continue to make investments in companies, either through acquisitions, investments or alliances, in order to supplement our internal growth and development efforts. Acquisitions and investments involve numerous risks, including the following: difficulties in integrating the operations, technologies, products and personnel of acquired companies; diversion of management’s attention from normal daily operations of the business; potential difficulties in entering markets in which we have limited or no direct prior experience and where competitors in such markets have stronger market positions; potential difficulties in operating new businesses with different business models; potential difficulties with regulatory or contract compliance in areas in which we have limited experience; initial dependence on unfamiliar supply chains or relatively small supply partners; insufficient revenues to offset increased expenses associated with acquisitions; potential loss of key employees of the acquired companies; or inability to effectively cooperate and collaborate with our alliance partners.

Further, we may never realize the perceived or anticipated benefits of a business combination or investments in other entities. Acquisitions by us could have negative effects on our results of operations, in areas such as contingent liabilities, gross profit margins, amortization charges related to intangible assets and other effects of accounting for the purchases of other business entities. Investments and acquisitions of technology and development stage companies are inherently risky because these businesses may never develop, and we may incur losses related to these investments. In addition, we may be required to write down the carrying value of these investments to reflect other than temporary declines in their value, which could harm our business and results of operations.

DEMAND FOR OUR PRODUCTS AND OUR BUSINESS MAY BE ADVERSELY AFFECTED BY WORLDWIDE ECONOMIC AND INDUSTRY CONDITIONS

Our business is affected by economic and industry conditions and our revenue is dependent on semiconductor demand. Semiconductor demand, in turn, is impacted by semiconductor industry cycles, and these cycles can dramatically affect our business. During the first half of fiscal 2007, for example, the apparent softening of demand for our products due to excess inventory of semiconductor devices caused our CMP slurry revenue to decrease during the inventory correction. Some additional factors that affect demand for our products include customers’ production of logic versus memory devices, their transition from 200 mm to 300 mm wafers, customers’ specific integration schemes, share gains and losses and pricing changes by us and our competitors.

OUR INABILITY TO ATTRACT AND RETAIN KEY PERSONNEL COULD CAUSE OUR BUSINESS TO SUFFER

If we fail to attract and retain the necessary managerial, technical and customer support personnel, our business and our ability to maintain existing and obtain new customers, develop new products and provide acceptable levels of customer service could suffer. Competition for qualified personnel, particularly those with significant experience in the semiconductor industry, is intense. The loss of services of key employees could harm our business and results of operations.

RISKS RELATING TO THE MARKET FOR OUR COMMON STOCK

THE MARKET PRICE MAY FLUCTUATE SIGNIFICANTLY AND RAPIDLY

The market price of our common stock has fluctuated and could continue to fluctuate significantly as a result of factors such as: economic and stock market conditions generally and specifically as they may impact participants in the semiconductor and related industries; changes in financial estimates and recommendations by securities analysts who follow our stock; earnings and other announcements by, and changes in market evaluations of, us or participants in the semiconductor and related industries; changes in business or regulatory conditions affecting us or participants in the semiconductor and related industries; announcements or implementation by us, our competitors, or our customers of technological innovations, new products or different business strategies; and trading volume of our common stock.

ANTI-TAKEOVER PROVISIONS UNDER OUR CERTIFICATE OF INCORPORATION AND BYLAWS AND OUR RIGHTS PLAN MAY DISCOURAGE THIRD PARTIES FROM MAKING AN UNSOLICITED BID FOR OUR COMPANY

Our certificate of incorporation, our bylaws, our rights plan and various provisions of the Delaware General Corporation Law may make it more difficult to effect a change in control of our Company. For example, our amended and restated certificate of incorporation authorizes our Board of Directors to issue up to 20 million shares of blank check preferred stock and to attach special rights and preferences to this preferred stock, which may make it more difficult or expensive for another person or entity to acquire control of us without the consent of our Board of Directors. Also our amended and restated certificate of incorporation provides for the division of our Board of Directors into three classes as nearly equal in size as possible with staggered three-year terms.

We have adopted change in control arrangements covering our executive officers and other key employees. These arrangements provide for a cash severance payment, continued medical benefits and other ancillary payments and benefits upon termination of service of a covered employee's employment following a change in control, which may make it more expensive to acquire our Company.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

Our principal U.S. facilities that we own consist of:

- a global headquarters and research and development facility in Aurora, Illinois, comprising approximately 200,000 square feet;
- a commercial dispersion plant and distribution center in Aurora, Illinois, comprising approximately 175,000 square feet;
- a commercial polishing pad manufacturing plant and offices in Aurora, Illinois, comprising approximately 48,000 square feet;
- an additional 13.2 acres of vacant land in Aurora, Illinois; and
- a facility in Addison, Illinois, comprising approximately 15,000 square feet.

In addition, we lease a facility in Rochester, New York, comprising approximately 21,000 square feet.

Our principal foreign facilities that we own consist of:

- a commercial dispersion plant and distribution center in Geino, Japan, comprising approximately 113,000 square feet;
- a research and development facility in Geino, Japan, comprising approximately 20,000 square feet.

Our principal foreign facilities that we lease consist of:

- an office, research and development laboratory, polishing pad manufacturing and pilot plant in Hsin-Chu, Taiwan, comprising approximately 31,000 square feet;
- a commercial manufacturing plant, research and development facility and business office in Singapore, comprising approximately 24,000 square feet; and
- a commercial dispersion plant in Barry, Wales, comprising approximately 22,000 square feet.

We believe that our facilities are suitable and adequate for their intended purpose and provide us with sufficient capacity and capacity expansion opportunities and technological capability to meet our current and expected demand in the foreseeable future. In our ongoing efforts to optimize our manufacturing capacity, we have decided to close our manufacturing facility in Barry, Wales, our smallest manufacturing plant, in fiscal 2008 as it has been underutilized in the past several years.

ITEM 3. LEGAL PROCEEDINGS

While we are not involved in any legal proceedings that we currently believe will have a material impact on our consolidated financial position, results of operations or cash flows, we periodically become a party to legal proceedings in the ordinary course of business. For example, in January 2007, we filed a legal action against DuPont Air Products NanoMaterials LLC (DA Nano), a competitor of ours, in the United States District Court for the District of Arizona, charging that DA Nano's manufacturing and marketing of certain CMP slurries infringe five CMP slurry patents that we own. The affected DA Nano products include those used for tungsten CMP. We filed our infringement complaint as a counterclaim in response to an action filed by DA Nano in the same court in December 2006 that seeks declaratory relief and alleges non-infringement, invalidity and unenforceability regarding some of the patents at issue in our complaint against DA Nano. DA Nano filed its complaint following our refusal of its request that we license to it our patents raised in its complaint. DA Nano's complaint does not allege any infringement by our products of intellectual property owned by DA Nano. While the outcome of this and any legal matter cannot be predicted with certainty, we believe that our claims and defenses in the pending action are meritorious, and we intend to pursue and defend them vigorously.

ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

None.

EXECUTIVE OFFICERS OF THE REGISTRANT

Set forth below is information concerning our executive officers and their ages as of October 31, 2007.

NAME	AGE	POSITION
William P. Noglows	49	Chairman of the Board, President and Chief Executive Officer
H. Carol Bernstein	47	Vice President, Secretary and General Counsel
Jean Pol Delrue	60	Vice President of Global Sales
William S. Johnson	50	Vice President and Chief Financial Officer
Daniel J. Pike	44	Vice President of Corporate Development
Stephen R. Smith	48	Vice President of Marketing
Clifford L. Spiro	53	Vice President of Research and Development
Adam F. Weisman	45	Vice President of Business Operations
Daniel S. Wobby	44	Vice President, Asia Pacific Region
Thomas S. Roman	46	Principal Accounting Officer and Corporate Controller

WILLIAM P. NOGLOWS has served as our Chairman, President and Chief Executive Officer since November 2003. Mr. Noglows had previously served as a director of our Company from January 2000 until April 2002. Prior to joining us, Mr. Noglows served as an Executive Vice President of Cabot Corporation from 1998 to June 2003. Prior to that, Mr. Noglows held various management positions at Cabot Corporation including General Manager of Cabot Corporation's Cab-O-Sil Division, where he was one of the primary founders of our Company when our business was a division of Cabot Corporation, and was responsible for identifying and encouraging the development of the CMP application. Mr. Noglows received his B.S. in Chemical Engineering from the Georgia Institute of Technology.

H. CAROL BERNSTEIN has served as our Vice President, Secretary and General Counsel since August 2000. From January 1998 until joining us, Ms. Bernstein served as the General Counsel and Director of Industrial Technology Development of Argonne National Laboratory, which is operated by the University of Chicago for the United States Department of Energy. From May 1985 until December 1997, she served in various positions with the IBM Corporation, culminating in serving as an Associate General Counsel, and was the Vice President, Secretary and General Counsel of Advantis Corporation, an IBM joint venture. Ms. Bernstein received her B.A. from Colgate University and her J.D. from Northwestern University; she is a member of the Bar of the states of Illinois and New York.

JEAN POL DELRUE has served as our Vice President of Global Sales since April 2005. Previously, he was our Vice President of European Business Region since July 2004. He also served as our European Business Manager from June 2001 to July 2004. Prior to joining us, Dr. Delrue worked for Ebara Precision Machinery Europe from January 1995 to June 2001, culminating in serving as the Vice President of CMP Europe. Prior to that, he served as the Business and Technical Development Director and Member of the Management Board at Riber Instruments SA. Dr. Delrue holds an Executive M.B.A. from the Centre de Perfectionnement des Affaires in Paris, France, a Ph.D. in Physical Chemistry from Belgium's University of Mons, and has performed post doctorate work in chemical engineering at Stanford University.

WILLIAM S. JOHNSON has served as our Vice President and Chief Financial Officer since April 2003. Prior to joining us, Mr. Johnson served as Executive Vice President and Chief Financial Officer for Budget Group, Inc. from August 2000 to March 2003. Before that, Mr. Johnson spent 16 years at BP Amoco in various senior finance and management positions, the most recent of which was President of Amoco Fabrics and Fibers Company. Mr. Johnson received his B.S. in Mechanical Engineering from the University of Oklahoma and his M.B.A. from the Harvard Business School.

DANIEL J. PIKE has served as our Vice President of Corporate Development since January 2004 and prior to that was our Vice President of Operations from December 1999. Mr. Pike served as Cabot Corporation's Director of Global Operations from 1996 to 1999. Prior to that, Mr. Pike worked for FMC Corporation in various marketing and finance positions. Mr. Pike received his B.S. in Chemical Engineering from the University of Buffalo and his M.B.A. from the Wharton School of Business of the University of Pennsylvania.

STEPHEN R. SMITH has served as our Vice President of Marketing since September 2006, and previously was our Vice President of Marketing and Business Management since April 2005 and our Vice President of Sales and Marketing from October 2001. Prior to joining us, Mr. Smith served as Vice President, Sales & Business Development for Buildpoint Corporation from 2000 to October 2001. Prior to that, Mr. Smith spent 17 years at Tyco Electronics Group, formerly known as AMP Incorporated, in various management positions. Mr. Smith earned a B.S. in Industrial Engineering from Grove City College and an M.B.A. from Wake Forest University.

CLIFFORD L. SPIRO has served as Vice President of Research and Development since December 2003. Prior to joining us, Dr. Spiro served as Vice President of Research and Development at Onco-Nalco from 2001 through November 2003. Prior to that, Dr. Spiro held research and development management and senior technology positions at the General Electric Company from 1980 through 2001, the most recent of which was Global Manager – Technology for Business Development. Dr. Spiro received his B.S. in Chemistry from Stanford University and his Ph.D. in Chemistry from the California Institute of Technology.

ADAM F. WEISMAN has served as our Vice President of Business Operations since September 2006, and prior to that was our Vice President of Operations. Before joining us, Mr. Weisman held various engineering and senior operations management positions with the General Electric Company from 1988 through 2004, including having served as the General Manager of Manufacturing for GE Plastics - Superabrasives, and culminating in serving as the Executive Vice President of Operations for GE Railcar Services. Prior to joining GE, he worked as an engineering team leader and pilot plant manager for E.I. Du Pont de Nemours & Company. Mr. Weisman holds a B.S. in Ceramic Engineering from Alfred University.

DANIEL S. WOBBY has served as our Vice President, Asia Pacific Region since September 2005. Prior to that, Mr. Wobby served as Vice President of Greater China and Southeast Asia starting in February 2004. Mr. Wobby previously was our Corporate Controller and Principal Accounting Officer from 2000 to 2004. From 1989 to 2000, Mr. Wobby held various accounting and operations positions with Cabot Corporation culminating in serving as Director of Finance. Mr. Wobby earned a B.S. in Accounting from St. Michael's College and an M.B.A. from the University of Chicago's Graduate School of Business.

THOMAS S. ROMAN has served as our Corporate Controller and Principal Accounting Officer since February 2004 and previously served as our North American Controller. Prior to joining us in April 2000, Mr. Roman was employed by FMC Corporation in various financial reporting, tax and audit positions. Before that, Mr. Roman worked for Gould Electronics and Arthur Andersen LLP. Mr. Roman is a C.P.A. and earned a B.S. in Accounting from the University of Illinois and an M.B.A. from DePaul University's Kellstadt Graduate School of Business.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Our common stock has traded publicly under the symbol "CCMP" since our initial public offering in April 2000, currently on the NASDAQ Global Select Market, and formerly the NASDAQ National Market. The following table sets forth the range of quarterly high and low closing sales prices for our common stock.

		HIGH	LOW
Fiscal 2006			
	First Quarter	32.33	28.26
	Second Quarter	37.14	28.82
	Third Quarter	38.25	25.84
	Fourth Quarter	32.34	26.21
Fiscal 2007			
	First Quarter	34.47	28.24
	Second Quarter	34.37	30.11
	Third Quarter	37.19	32.01
	Fourth Quarter	44.56	35.53
Fiscal 2008 First Quarter (through October 31, 2007)		46.44	38.62

As of October 31, 2007, there were approximately 984 holders of record of our common stock. No dividends were declared or paid in either fiscal 2007 or fiscal 2006 and we have no current plans to pay cash dividends in the future.

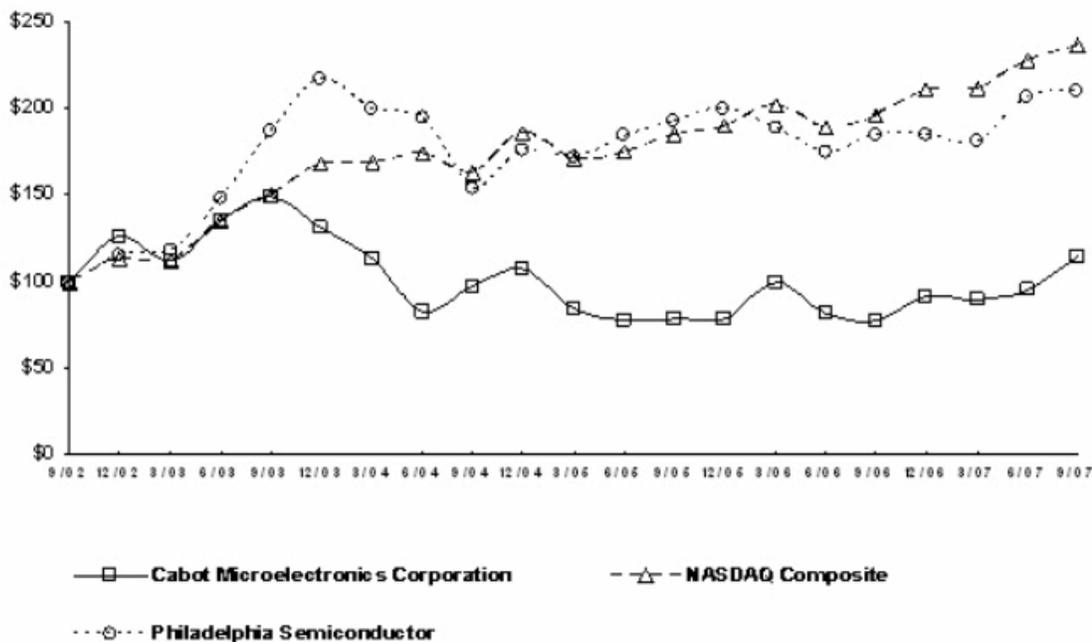
ISSUER PURCHASES OF EQUITY SECURITIES

On October 27, 2005, we announced that our Board of Directors had authorized a share repurchase program for up to \$40.0 million of our outstanding common stock. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. The program, which became effective on the authorization date, may be suspended or terminated at any time, at the Company's discretion. We view the program as a flexible and effective means to return cash to shareholders. There were no shares repurchased during the fourth quarter of fiscal 2007.

STOCK PERFORMANCE GRAPH

The following graph illustrates the cumulative total stockholder return on our common stock during the period from September 30, 2002 through September 30, 2007 and compares it with the cumulative total return on the NASDAQ Composite Index and the Philadelphia Semiconductor Index. The comparison assumes \$100 was invested on September 30, 2002 in our common stock and in each of the foregoing indices and assumes reinvestment of dividends, if any. The performance shown is not necessarily indicative of future performance.

COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN*
Among Cabot Microelectronics Corporation, The NASDAQ Composite Index
And The Philadelphia Semiconductor Index



* \$100 invested on 9/30/02 in stock or index including reinvestment of dividends.
Fiscal year ending September 30.

	9/02	12/02	3/03	6/03	9/03	12/03	3/04	6/04	9/04	12/04	3/05
Cabot Microelectronics Corporation	100.00	126.75	112.62	135.42	149.38	131.58	113.13	82.20	97.34	107.60	84.26
NASDAQ Composite	100.00	113.67	112.10	135.43	150.59	168.82	169.79	174.35	162.89	185.99	171.39
Philadelphia Semiconductor	100.00	115.31	118.60	148.73	186.79	217.01	200.48	195.01	153.97	175.82	172.40

	6/05	9/05	12/05	3/06	6/06	9/06	12/06	3/07	6/07	9/07
Cabot Microelectronics Corporation	77.85	78.89	78.65	99.62	81.39	77.39	91.14	89.98	95.30	114.80
NASDAQ Composite	175.64	185.48	190.07	202.68	188.78	196.37	211.06	212.14	227.62	236.60
Philadelphia Semiconductor	184.02	193.70	199.88	188.81	175.48	185.07	185.37	181.66	207.17	210.02

ITEM 6. SELECTED FINANCIAL DATA

The following selected financial data for each year of the five-year period ended September 30, 2007, has been derived from the audited consolidated financial statements.

The information set forth below is not necessarily indicative of results of future operations and should be read in conjunction with Management's Discussion and Analysis of Financial Condition and Results of Operations and the consolidated financial statements and notes to those statements included in Items 7 and 8 of Part II of this Form 10-K, as well as Risk Factors included in Item 1A of Part I of this Form 10-K.

CABOT MICROELECTRONICS CORPORATION
SELECTED FINANCIAL DATA - FIVE YEAR SUMMARY
(Amounts in thousands, except per share amounts)

	Year Ended September 30,				
	2007	2006	2005	2004	2003
Consolidated Statement of Income Data:					
Revenue	\$ 338,205	\$ 320,795	\$ 270,484	\$ 309,433	\$ 251,665
Cost of goods sold	178,224	171,758	141,282	156,805	124,269
Gross profit	159,981	149,037	129,202	152,628	127,396
Operating expenses:					
Research, development and technical	49,970	48,070	43,010	44,003	41,516
Selling and marketing	24,310	21,115	16,989	16,225	11,221
General and administrative	39,933	34,319	25,427	22,691	18,565
Purchased in-process research and development	-	1,120	-	-	-
Total operating expenses	114,213	104,624	85,426	82,919	71,302
Operating income	45,768	44,413	43,776	69,709	56,094
Other income (expense), net	3,606	4,111	2,747	139	(27)
Income before income taxes	49,374	48,524	46,523	69,848	56,067
Provision for income taxes	15,538	15,576	14,050	23,120	18,334
Net income	\$ 33,836	\$ 32,948	\$ 32,473	\$ 46,728	\$ 37,733
Basic earnings per share	\$ 1.42	\$ 1.36	\$ 1.32	\$ 1.89	\$ 1.55
Weighted average basic shares outstanding	23,748	24,228	24,563	24,750	24,401
Diluted earnings per share	\$ 1.42	\$ 1.36	\$ 1.32	\$ 1.88	\$ 1.53
Weighted average diluted shares outstanding	23,754	24,228	24,612	24,882	24,665
Cash dividends per share	\$ -	\$ -	\$ -	\$ -	\$ -

	As of September 30,				
	2007	2006	2005	2004	2003
Consolidated Balance Sheet Data:					
Current assets	\$ 310,754	\$ 261,505	\$ 245,807	\$ 229,681	\$ 179,112
Property, plant and equipment, net	118,454	130,176	135,784	127,794	133,695
Other assets	25,921	20,452	5,172	5,816	2,810
Total assets	\$ 455,129	\$ 412,133	\$ 386,763	\$ 363,291	\$ 315,617
Current liabilities	\$ 36,563	\$ 38,833	\$ 35,622	\$ 32,375	\$ 28,916
Other long-term liabilities	5,362	5,529	12,057	15,294	14,928
Total liabilities	41,925	44,362	47,679	47,669	43,844
Stockholders' equity	413,204	367,771	339,084	315,622	271,773
Total liabilities and stockholders' equity	\$ 455,129	\$ 412,133	\$ 386,763	\$ 363,291	\$ 315,617

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following "Management's Discussion and Analysis of Financial Condition and Results of Operations", as well as disclosures included elsewhere in this Form 10-K, include "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. This Act provides a safe harbor for forward-looking statements to encourage companies to provide prospective information about themselves so long as they identify these statements as forward-looking and provide meaningful cautionary statements identifying important factors that could cause actual results to differ from the projected results. All statements other than statements of historical fact we make in this Form 10-K are forward-looking. In particular, the statements herein regarding future sales and operating results; Company and industry growth and trends; growth of the markets in which the Company participates; international events; product performance; the generation, protection and acquisition of intellectual property, and litigation related to such intellectual property; new product introductions; development of new products, technologies and markets; the acquisition of or investment in other entities; the construction of new or refurbishment of existing facilities by the Company; and statements preceded by, followed by or that include the words "intends", "estimates", "plans", "believes", "expects", "anticipates", "should", "could" or similar expressions, are forward-looking statements. Forward-looking statements reflect our current expectations and are inherently uncertain. Our actual results may differ significantly from our expectations. We assume no obligation to update this forward-looking information. The section entitled "Risk Factors" describes some, but not all, of the factors that could cause these differences.

The following discussion and analysis should be read in conjunction with our historical financial statements and the notes to those financial statements which are included in Item 8 of Part II of this Form 10-K.

OVERVIEW

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we", or "our") is the leading supplier of high-performance polishing slurries used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP is a polishing process used by IC device manufacturers to planarize or flatten many of the multiple layers of material that are built upon silicon wafers in the production of advanced ICs. Demand for our CMP products is primarily based on the number of wafers produced by semiconductor manufacturers, or "wafer starts".

We operate predominantly in one industry segment – the development, manufacture and sale of CMP consumables. We develop, produce and sell CMP slurries for polishing materials such as copper, tungsten and dielectric in IC devices, and also for polishing the coatings on disks in hard disk drives and magnetic heads. In addition, we develop, produce and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process.

We continue to focus on our three strategic initiatives within our core CMP business: maintaining our technological leadership, achieving operations excellence and connecting with our customers. In fiscal 2007, we introduced major improvements in several slurry products and we commercialized our new polishing pad product. We continued to make productivity and efficiency gains through our Six Sigma program and we advanced our quality systems to improve the uniformity and consistency of performance of our CMP products. We further expanded our presence in Asia with the introduction of pad manufacturing in Taiwan, as well as additions to our research and development facilities in order to improve our responsiveness to customers.

We believe that the semiconductor industry and the CMP consumables industry will continue to grow over the long term. We expect this growth to be fueled by increased demand for IC devices, including microprocessors and memory for computing applications and the incorporation of advanced logic and memory products into digital consumer devices. We also believe there is increased pressure on IC device manufacturers to reduce their costs, particularly the cost of developing and producing IC devices for consumer electronic products. In turn, this puts pressure on suppliers to the IC device manufacturers to offer lower cost solutions. As demand grows, we see numerous opportunities for our existing slurry products as well as demand for new slurry product development. We also see numerous opportunities for our polishing pads in all major CMP application areas, and across a wide range of technology nodes. There are many factors, however, that make it difficult for us to predict future revenue trends for our CMP business, including the cyclical nature of the semiconductor industry; timing of potential future acquisitions; short order to delivery time for our products and the associated lack of visibility to future customer orders; and quarter to quarter changes in our revenue regardless of industry strength.

In addition to strengthening and growing our core CMP business, through our Engineered Surface Finishes (ESF) business we are exploring a variety of surface modification applications where we believe our technical ability to shape, enable and enhance the performance of surfaces at an atomic level may provide previously unseen surface performance or improved productivity. In pursuit of our ESF business, in fiscal 2006, we acquired substantially all of the assets and assumed certain current liabilities of QED Technologies, Inc. (QED), which was a privately-held company specializing in unique, patented polishing and metrology systems for shaping and polishing high precision optics. We successfully integrated QED into our company in fiscal 2007.

Revenue for fiscal 2007 was \$338.2 million, which was an increase of 5.4% from the \$320.8 million reported for fiscal 2006. This increase was largely due to a full year of revenue from QED. Our fiscal 2007 financial results also reflected the cyclical nature of the semiconductor industry. We believe our revenue in the first half of the fiscal year was adversely impacted as a number of our customers reduced production in response to excess inventories of certain semiconductor devices. The industry experienced improved conditions in the second half of the fiscal year when there was an uptum in business for the major foundries in Asia, from which a significant part of our revenue is derived, which contributed to our stronger financial performance.

Gross profit expressed as a percentage of revenue for fiscal 2007 was 47.3%, which represents an increase from the 46.5% reported for fiscal 2006. The increase was primarily driven by a higher-valued product mix and improvements in productivity and quality. This was partially offset by lower utilization of our manufacturing capacity due to lower volume of sales, primarily in the first half of the fiscal year. We expect to maintain our gross profit as a percentage of revenue in the range of 46% to 48% for fiscal 2008. This guidance applies to our full fiscal year results rather than specific quarterly results; we may experience quarterly gross profit above or below this range due to fluctuations in our product mix or other factors.

Operating expenses of \$114.2 million, which include research, development, technical, selling, marketing, general and administrative expenses, increased 9.2%, or \$9.6 million, from the \$104.6 million reported for fiscal 2006. The increase was primarily due to higher staffing costs associated with the acquisition of the QED business and increased share-based compensation expenses, as well as higher professional and legal fees. The increase in operating expenses was partially offset by the absence of \$1.8 million of one-time write-offs in research and development incurred in the fourth quarter of fiscal 2006. In fiscal 2008, we expect our operating expenses to be in the range of approximately \$27 million to \$30 million per quarter, unchanged from the guidance we provided for fiscal 2007.

Diluted earnings per share of \$1.42 in fiscal 2007 increased 4.7%, or \$0.06, from fiscal 2006. Diluted earnings per share in fiscal 2007 was adversely impacted by approximately \$0.06 due to a write-down of our minority equity investment in NanoProducts Corporation (NPC), due to our decision to not renew our collaboration arrangement with NPC and NPC's entering into funding arrangements that we believe significantly reduced the likelihood that we would recover the value of our investment.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

This "Management's Discussion and Analysis of Financial Condition and Results of Operations", as well as disclosures included elsewhere in this Form 10-K, are based upon our audited consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingencies. On an ongoing basis, we evaluate the estimates used, including those related to bad debt expense, warranty obligations, inventory valuation, impairment of long-lived assets and investments, business combinations, goodwill, other intangible assets, share-based compensation, income taxes and contingencies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources, as well as for identifying and assessing our accounting treatment with respect to commitments and contingencies. Actual results may differ from these estimates under different assumptions or conditions. We believe the following critical accounting policies involve significant judgments and estimates used in the preparation of our consolidated financial statements.

ALLOWANCE FOR DOUBTFUL ACCOUNTS

We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make required payments. Our allowance for doubtful accounts is based on historical collection experience, adjusted for any specific known conditions or circumstances. While historical experience may provide a reasonable estimate of uncollectible accounts, actual results may differ from what was recorded. As of September 30, 2007, our allowance for doubtful accounts represented 1.2% of gross accounts receivable. If we had increased our estimate of bad debts to 2.2% of gross accounts receivable, our general and administrative expense would have increased by \$0.5 million.

WARRANTY RESERVE

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Should actual warranty costs differ substantially from our estimates, revisions to the estimated warranty liability may be required. As of September 30, 2007, our warranty reserve represented 0.6% of the current quarter revenue. If we had increased our warranty reserve estimate to 1.6% of the current quarter revenue, our cost of goods sold would have increased by \$0.9 million.

INVENTORY VALUATION

We value inventory at the lower of cost or market and write down the value of inventory for estimated obsolescence or if inventory is deemed unmarketable. An inventory reserve is maintained based upon a historical percentage of actual inventories written off applied against the inventory value at the end of the period, adjusted for known conditions and circumstances. We exercise judgment in estimating the amount of inventory that is obsolete. Should actual product marketability and fitness for use be affected by conditions that are different from those projected by management, revisions to the estimated inventory reserve may be required.

IMPAIRMENT OF LONG-LIVED ASSETS AND INVESTMENTS

SFAS No. 144, "Accounting for the Impairment or Disposal of Long-Lived Assets" (SFAS 144), requires us to assess the recoverability of the carrying value of long-lived assets whenever events or changes in circumstances indicate that the assets may be impaired. We must exercise judgment in assessing whether an event of impairment has occurred. For purposes of recognition and measurement of an impairment loss, long-lived assets are grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We must exercise judgment in this grouping. SFAS 144 requires that when the sum of the undiscounted future cash flows expected to result from the identified asset group is less than the carrying value of the asset group, an impairment provision may be required. The amount of the impairment to be recognized is calculated by subtracting the fair value of the asset group from the net book value of the asset group. Determining future cash flows and estimating fair values requires significant judgment and is highly susceptible to change from period to period because it requires management to make assumptions about future sales and cost of sales generally over a long-term period.

We evaluate the estimated fair value of investments annually or more frequently if indicators of potential impairment exist, to determine if an other-than-temporary impairment in the value of the investment has taken place.

BUSINESS COMBINATIONS

In accordance with SFAS No. 141, "Business Combinations", we allocate the purchase price of acquired entities to the tangible and intangible assets acquired, liabilities assumed, as well as in-process research and development (IPR&D) based on their estimated fair values. We engage independent third-party appraisal firms to assist us in determining the fair values of assets and liabilities acquired. This valuation requires management to make significant estimates and assumptions, especially with respect to long-lived and intangible assets.

Critical estimates in valuing certain of the intangible assets include but are not limited to: future expected cash flows related to acquired developed technologies and patents and assumptions about the period of time the technologies will continue to be used in the combined Company's product portfolio; expected costs to develop the IPR&D into commercially viable products and estimated cash flows from the products when completed; and discount rates. Management's estimates of value are based upon assumptions believed to be reasonable, but which are inherently uncertain and unpredictable. Assumptions may be incomplete or inaccurate, and unanticipated events and circumstances may occur which may cause actual realized values to be different from management's estimates.

GOODWILL AND OTHER INTANGIBLE ASSETS

Purchased intangible assets with finite lives are amortized over their estimated useful lives. Goodwill and other intangible assets are tested annually in the fourth fiscal quarter or more frequently if indicators of potential impairment exist, using a fair-value-based approach. We determined that goodwill and other intangible assets were not impaired as of September 30, 2007.

SHARE-BASED COMPENSATION

Effective October 1, 2005, we adopted SFAS No. 123 (revised 2004), "Share-Based Payment" (SFAS 123R), which requires all share-based payments, including stock option grants, restricted stock and restricted stock unit awards and employee stock purchases, to be recognized in the income statement based on their fair values. Under SFAS 123R, we calculate share-based compensation expense using the straight-line approach based on awards ultimately expected to vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We continue to use the Black-Scholes option-pricing model ("Black-Scholes model") to estimate grant date fair value, which requires the input of highly subjective assumptions, including the option's expected term, the price volatility of the underlying stock and risk-free interest rate. A small change in the underlying assumptions can have a relatively large effect on the estimated valuation. Under SFAS 123R, we estimate expected volatility based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. We use the simplified method to calculate the expected term as defined under Staff Accounting Bulletin (SAB) No. 107, "Share-Based Payments" (SAB 107), due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who meet the definition of retirement pursuant to their grants during the contractual term. This method uses an average of the vesting and contractual terms. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

Prior to December 1, 2006, awards and grants made as part of our annual equity incentive award programs consisted solely of non-qualified stock option grants. In fiscal 2007, the compensation committee of our Board of Directors decided to award a blend of non-qualified stock options and shares of restricted stock to employees and non-employee directors. This decision was made to address the financial impact of expensing equity-based compensation under the rules of SFAS 123R, as well as to provide a more competitive balance of equity incentives for employees and non-employee directors.

ACCOUNTING FOR INCOME TAXES

We account for income taxes in accordance with SFAS No. 109, "Accounting for Income Taxes" (SFAS 109), which requires that deferred tax assets and liabilities be recognized using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. SFAS 109 also requires that deferred tax assets be reduced by a valuation allowance if it is more likely than not that a portion of the deferred tax asset will not be realized. We have determined that it is more likely than not that our future taxable income will be sufficient to realize our deferred tax assets.

COMMITMENTS AND CONTINGENCIES

We have entered into unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements on a quarterly basis and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability. In addition, we are subject to the possibility of various loss contingencies arising in the ordinary course of business such as a legal proceeding or claim. An estimated loss contingency is accrued when it is probable that an asset has been impaired or a liability has been incurred and the amount of the loss can be reasonably estimated. We regularly evaluate current information available to us to determine whether such accruals should be adjusted and whether new accruals are required.

EFFECTS OF RECENT ACCOUNTING PRONOUNCEMENTS

See Note 2 to the Consolidated Financial Statements for a description of recent accounting pronouncements including the expected dates of adoption and effects on our results of operations, financial position and cash flows.

RESULTS OF OPERATIONS

The following table sets forth, for the periods indicated, the percentage of revenue of certain line items included in our historical statements of income:

	Year Ended September 30,		
	2007	2006	2005
Revenue	100.0%	100.0%	100.0%
Cost of goods sold	52.7	53.5	52.2
Gross profit	47.3	46.5	47.8
Research, development and technical	14.8	15.0	15.9
Selling and marketing	7.2	6.6	6.3
General and administrative	11.8	10.7	9.4
Purchased in-process research and development	-	0.3	-
Operating income	13.5	13.8	16.2
Other income, net	1.1	1.3	1.0
Income before income taxes	14.6	15.1	17.2
Provision for income taxes	4.6	4.9	5.2
Net income	10.0%	10.3%	12.0%

YEAR ENDED SEPTEMBER 30, 2007, VERSUS YEAR ENDED SEPTEMBER 30, 2006**REVENUE**

Revenue was \$338.2 million in fiscal 2007, which represented an increase of 5.4%, or \$17.4 million, from fiscal 2006. Of this increase, \$12.6 million was contributed by QED and \$6.2 million was due to a higher average selling price for our slurry products. These increases were partially offset by a \$1.4 million decrease due to reduced sales volume in our core CMP business. The higher average selling price for our slurry products resulted primarily from a higher-priced product mix.

COST OF GOODS SOLD

Total cost of goods sold was \$178.2 million in fiscal 2007, which represented an increase of 3.8%, or \$6.5 million, from fiscal 2006. Of this increase, \$6.2 million was related to QED and \$1.0 was due to an increase in the average cost per unit of our slurry products. These increases were partially offset by a \$0.7 million decrease due to reduced sales volume in our core CMP business. The higher average unit cost resulted primarily from lower utilization of our manufacturing capacity due to the lower level of sales, primarily during the first half of the fiscal year, and higher fixed costs, partially offset by improvements in productivity and quality as well as benefits of a lower-cost product mix.

Fumed metal oxides, such as fumed silica and fumed alumina, are significant raw materials that we use in many of our CMP slurries. In an effort to mitigate our risk to rising raw material costs and to increase supply assurance and quality performance requirements, we have entered into multi-year supply agreements with a number of suppliers. For more financial information about our supply contracts, see "Tabular Disclosure of Contractual Obligations" included in Item 7 of Part II of this Form 10-K.

Our need for additional quantities or different kinds of key raw materials in the future has required, and will continue to require, that we enter into new supply arrangements with third parties. Future arrangements may result in costs which are different from those in the existing agreements. In addition, rising energy costs may also impact the cost of raw materials, packaging and freight costs. We also expect to continue to invest in our operations excellence initiative to improve product quality, reduce variability and improve product yields in our manufacturing process.

GROSS PROFIT

Our gross profit as a percentage of revenue was 47.3% in fiscal 2007 and improved 80 basis points from the level achieved in fiscal 2006. The increase in gross profit expressed as a percentage of revenue resulted primarily from a higher-valued product mix and improvements in productivity and quality. This was partially offset by lower utilization of our manufacturing capacity due to the lower level of sales of our core CMP products, primarily in the first half of the fiscal year, as well as higher fixed costs. We expect to maintain our gross profit as a percentage of revenue in the range of 46% to 48% for full fiscal year 2008. Quarterly gross profit may be above or below this range due to fluctuations in our product mix or other factors.

RESEARCH, DEVELOPMENT AND TECHNICAL

Total research, development and technical expenses were \$50.0 million in fiscal 2007, which represented an increase of 4.0%, or \$1.9 million, from fiscal 2006. The increase was primarily due to increased staffing related costs of \$1.8 million, largely resulting from the inclusion of QED for a full year in fiscal 2007, increased depreciation and amortization costs of \$0.6 million principally related to our data storage laboratory in Singapore and our Asia Pacific technology center in Japan and increased professional fees of \$0.3 million. These increases were partially offset by a decrease in spending on wafers and laboratory supplies of \$0.9 million.

Our research, development and technical efforts are focused on the following main areas:

- Research related to fundamental CMP technology;
- Development and formulation of new and enhanced CMP consumable products;
- Process development to support rapid and effective commercialization of new products;
- Technical support of CMP products in our customers' manufacturing facilities; and
- Evaluation of new polishing applications outside of the semiconductor industry.

SELLING AND MARKETING

Selling and marketing expenses were \$24.3 million in fiscal 2007, which represented an increase of 15.1%, or \$3.2 million, from fiscal 2006. The increase resulted primarily from higher staffing costs of \$2.4 million, largely resulting from the inclusion of QED as well as expanding our presence in Asia. There were also smaller increases in costs for travel, professional fees and depreciation and amortization.

GENERAL AND ADMINISTRATIVE

General and administrative expenses were \$39.9 million in fiscal 2007, which represented an increase of 16.4%, or \$5.6 million, from fiscal 2006. The increase resulted primarily from \$3.3 million in higher staffing costs, including \$1.8 million in share-based compensation expense, and a \$2.8 million increase in professional fees, including costs to enforce our intellectual property.

PURCHASED IN-PROCESS RESEARCH AND DEVELOPMENT

We incurred no IPR&D expenses in fiscal 2007 compared to \$1.1 million in fiscal 2006, since we did not make any acquisitions in fiscal 2007. We may make future acquisitions and may record additional expenses for IPR&D in connection with those acquisitions.

OTHER INCOME, NET

Other income was \$3.6 million in fiscal 2007 compared to \$4.1 million in fiscal 2006. The decrease was primarily due to a \$2.1 million impairment of our equity investment in NPC, following a decision to not renew a collaboration agreement. This decrease was partially offset by an increase of \$0.7 million in interest income on our cash and short-term investments, mostly due to higher interest rates, a decrease in interest expense of \$0.2 million related to capital leases, and the absence of \$0.6 million of expenses related to our investment in NPC that we recognized in fiscal 2006 that did not recur in fiscal 2007.

PROVISION FOR INCOME TAXES

Our effective income tax rate was 31.5% in fiscal 2007 compared to 32.1% in fiscal 2006. The decrease in the effective tax rate in fiscal 2007 was primarily due to higher tax-exempt interest income and increased research and experimentation tax credits. We expect our effective tax rate in fiscal 2008 to be approximately 32 percent.

NET INCOME

Net income was \$33.8 million in fiscal 2007, which represented an increase of 2.7%, or \$0.9 million, from fiscal 2006 as a result of the factors discussed above.

YEAR ENDED SEPTEMBER 30, 2006, VERSUS YEAR ENDED SEPTEMBER 30, 2005

REVENUE

Revenue was \$320.8 million in 2006, which represented an 18.6%, or \$50.3 million, increase from 2005. Of this increase, \$48.7 million was due to an increase in sales volume and \$5.1 million was related to our July 2006 acquisition of QED; these increases were partially offset by a net \$3.5 million decrease due to the change in weighted average selling price. The decrease in weighted average selling price primarily resulted from selected price reductions largely offset by a higher-priced product mix. Selling prices were also affected by changes in foreign currency exchange rates. Revenue for fiscal 2006 would have been \$3.7 million higher had the average exchange rates for the Japanese Yen and Euro during the year held constant with the prior year's average rates.

Revenue increased in fiscal 2006 despite our transition to selling directly to customers in Taiwan rather than through a distributor, which caused a short-term interruption in our normal sales pattern during our second quarter of fiscal 2006 between \$10 million and \$11 million. However, after this transition period, we believe we were able to gain a portion of the markup that our distributor previously charged its end customers, which partially offset the adverse revenue impact from the transition.

COST OF GOODS SOLD

Total cost of goods sold was \$171.8 million in 2006, which represented an increase of 21.6%, or \$30.5 million, from 2005. Of this increase, \$25.4 million was due to higher sales volume, \$3.5 million was related to our acquisition of QED and \$1.5 million was due to higher average costs per unit. The average cost per unit increased primarily due to a higher cost product mix, higher fixed costs, including amortization of our CMP technology patents from IBM, and greater logistics costs as a result of our transition to direct sales in Taiwan. These costs were partially offset by higher utilization of our manufacturing capacity due to the higher level of sales.

GROSS PROFIT

Our gross profit as a percentage of revenue was 46.5% in 2006 as compared to 47.8% in 2005. The 130 basis point decrease in gross profit margin resulted primarily from selected price reductions and higher costs including those associated with commercializing our pad product line and the transition of our data storage business to Singapore. These adverse effects were partially offset by higher utilization of our manufacturing capacity due to the higher level of sales.

RESEARCH, DEVELOPMENT AND TECHNICAL

Total research, development and technical expenses were \$48.1 million in 2006, which represented an increase of 11.8% or \$5.1 million, from 2005. The increase was primarily related to \$3.5 million in increased staffing costs, \$1.5 million in increased depreciation and \$0.7 million in impairment expense. The increased staffing costs included \$1.2 million in higher expenses for our annual incentive program related to our research, development and technical staff as well as \$1.0 million in share-based compensation expense. The increased depreciation expense was primarily related to the October 2005 opening of our Asia Pacific technology center in Geino, Japan. The impairment expense was attributable to the decision to no longer use the portion of a building in Aurora, Illinois, that was previously used for research and development activities. These increases were partially offset by \$0.8 million in decreased costs for clean room materials and laboratory supplies.

SELLING AND MARKETING

Selling and marketing expenses were \$21.1 million in 2006, which represented an increase of 24.3%, or \$4.1 million, over 2005. The increase resulted primarily from higher staffing costs of \$3.0 million, including \$1.0 million in share-based compensation expense and \$0.4 million in higher expense for our annual incentive program related to our sales and marketing staff. Another \$0.4 million of the increase was due to increased travel to the Asia Pacific region as we implemented a number of projects in support of our strategic initiative to stay connected with our customers, such as transitioning to direct sales in Taiwan and moving our data storage business to Singapore. Selling and marketing expenses also increased \$0.2 million due to higher office rental fees and \$0.2 million related to increased product sample costs.

GENERAL AND ADMINISTRATIVE

General and administrative expenses were \$34.3 million in 2006, which represented an increase of 35.0%, or \$8.9 million, from 2005. The increase resulted primarily from \$9.5 million in higher staffing costs, including \$8.0 million in share-based compensation expense and \$0.9 million in higher expense for our annual incentive program.

PURCHASED IN-PROCESS RESEARCH AND DEVELOPMENT

Purchased IPR&D expense was \$1.1 million in 2006, resulting from the acquisition of substantially all of the assets and assumption of certain liabilities of QED.

OTHER INCOME, NET

Other income was \$4.1 million in 2006, compared to \$2.7 million in 2005. The increase in other income was primarily due to \$2.0 million greater interest income from higher interest rates and our larger average balance of cash and short-term investments, partially offset by \$0.6 million of expense associated with our investment in NanoProducts Corporation.

PROVISION FOR INCOME TAXES

Our effective income tax rate was 32.1% in 2006 and 30.2% in 2005. The increase in the effective tax rate was primarily due to reduced research and experimentation tax credits. In addition, we recognized reduced extraterritorial income tax deductions related to export sales of our products from North America due to the phase-out of this tax benefit.

NET INCOME

Net income was \$32.9 million in 2006, which represented an increase of 1.5%, or \$0.5 million, from 2005 as a result of the factors discussed above.

LIQUIDITY AND CAPITAL RESOURCES

We had cash flows from operating activities of \$64.6 million in fiscal 2007, \$58.7 million in fiscal 2006 and \$48.0 million in fiscal 2005. Our cash provided by operating activities in fiscal 2007 originated primarily from results of operations adjusted for non-cash items, partially offset by a net increase in working capital of \$1.8 million. The increase in cash provided by operating activities during fiscal 2007 was primarily due to higher depreciation expense and increased share-based compensation expenses. The increase in depreciation expense was primarily due to capital expenditures related to our Asia Pacific technology center, which opened in fiscal 2006.

Fiscal 2007 cash flows used in investing activities were \$62.3 million. We used \$47.0 million for net purchases of short-term investments. Purchases of property, plant and equipment, including the expansion of our pad manufacturing capabilities in the U.S. and Taiwan as well as purchases for QED, were \$10.0 million. We also used \$3.0 million to acquire a license of patents and we paid \$2.5 million for the first of two potential earnout payments to the previous owners of QED, related to its revenue performance during the 12 months following our acquisition. See Note 5 and Note 6 of the Notes to the Consolidated Financial Statements for more information on business combinations and intangible assets. In fiscal 2006, cash flows used in investing activities were \$32.4 million, which included \$22.2 million for purchases of property, plant and equipment, primarily for the construction of our Asia Pacific technology center and for projects in our manufacturing operations. We also completed two acquisitions during fiscal 2006 for a total of \$20.9 million, net of cash acquired. In addition, we used \$5.0 million to acquire patents and associated rights relating to CMP slurry technology. Finally, \$15.7 million was provided by net sales of short-term investments. Fiscal 2005 cash flows used in investing activities were \$35.7 million. Purchases of property, plant and equipment, primarily for the construction of our Asia Pacific technology center and other manufacturing projects, were made with \$21.1 million in cash and \$8.2 million in accrued liabilities. In addition, \$12.6 million was used for net purchases of short-term investments and \$1.9 million was used for the final payment for our acquisition of a minority ownership interest in NanoProducts Corporation. We estimate that our total capital expenditures in fiscal 2008 will be approximately \$20.0 million.

In fiscal 2007, cash flows used in financing activities were \$3.2 million. This resulted from \$10.0 million in purchases of common stock under our share repurchase program and \$1.0 million in principal payments under capital lease obligations, partially offset by \$7.8 million in net proceeds from the issuance of stock, primarily from the exercise of stock options under our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan, as amended and restated September 26, 2006. In fiscal 2006, cash flows used in financing activities were \$15.6 million, primarily as a result of \$16.0 million in repurchases of common stock under our share repurchase program and \$0.9 million in principal payments under capital lease obligations. These outflows were partially offset by \$1.4 million from the issuance of common stock, primarily associated with our Cabot Microelectronics Corporation Employee Stock Purchase Plan. In fiscal 2005, cash flows used in financing activities were \$10.9 million, primarily resulting from \$17.0 million in repurchases of common stock under our share repurchase program and \$0.9 million in principal payments under capital lease obligations, partially offset by \$7.0 million from the issuance of common stock associated with the exercise of stock options under our equity incentive plan and purchases under our employee stock purchase plan.

In the fourth quarter of fiscal 2005, we completed our initial \$25.0 million share repurchase program, which was authorized in July 2004. In October 2005, our Board of Directors authorized another share repurchase program for up to \$40.0 million of our outstanding common stock. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. We view the program as a flexible and effective means to return cash to stockholders. The program became effective on the authorization date and may be suspended or terminated at any time, at the Company's discretion. There was \$14.0 million remaining on this authorization as of September 30, 2007.

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We have an unsecured revolving credit facility of \$50.0 million with an option to increase the facility up to \$80.0 million. This agreement runs through November 2008, but we expect to have a new agreement in place prior to its expiration in fiscal 2009. Interest accrues on any outstanding balance at either the lending institution's base rate or the Eurodollar rate plus an applicable margin. We also pay a non-use fee. Loans under this facility are intended to be used primarily for general corporate purposes, including working capital and capital expenditures. The credit agreement also contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with the covenants.

We believe that cash generated by our operations and available borrowings under our revolving credit facility will be sufficient to fund our operations, expected capital expenditures, including merger and acquisition activities, and share repurchases for the foreseeable future. However, we plan to expand our business and continue to improve our technology, and to do so may require us to raise additional funds in the future through equity or debt financing, strategic relationships or other arrangements.

OFF-BALANCE SHEET ARRANGEMENTS

At September 30, 2007 and 2006, we did not have any unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which might have been established for the purpose of facilitating off-balance sheet arrangements.

TABULAR DISCLOSURE OF CONTRACTUAL OBLIGATIONS

The following summarizes our contractual obligations at September 30, 2007, and the effect such obligations are expected to have on our liquidity and cash flow in future periods.

CONTRACTUAL OBLIGATIONS (In millions)	Total	Less Than 1 Year	1-3 Years	3-5 Years	After 5 Years
Capital lease obligations	\$ 4.7	\$ 1.1	\$ 2.3	\$ 1.3	\$ -
Operating leases	1.7	1.2	0.5	-	-
Purchase obligations	30.6	25.1	3.9	1.6	-
Other long-term liabilities	1.8	-	-	-	1.8
Total contractual obligations	\$ 38.8	\$ 27.4	\$ 6.7	\$ 2.9	\$ 1.8

CAPITAL LEASE OBLIGATIONS

In December 2001, we entered into a fumed alumina supply agreement with Cabot Corporation under which we agreed to pay Cabot Corporation for the expansion of a fumed alumina manufacturing facility in Tuscola, Illinois. The payments for the facility have been treated as a capital lease for accounting purposes and the present value of the minimum quarterly payments resulted in an initial \$9.8 million lease obligation and related leased asset. The initial term of the agreement expired in December 2006, but it was renewed for another five-year term ending in December 2011.

OPERATING LEASES

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable operating leases, most of which expire within ten years of their respective commencement dates and may be renewed by us.

PURCHASE OBLIGATIONS

We have entered into multi-year supply agreements with Cabot Corporation for the purchase of fumed metal oxides. We purchase fumed silica primarily under a fumed silica supply agreement with Cabot Corporation that became effective in January 2004, and was amended in September 2006. The agreement has an initial six-year term that runs through December 2009 and will automatically renew unless either party gives certain notice of non-renewal. We are obligated to purchase fumed silica for at least 90% of our six-month volume forecast for certain of our slurry products, to purchase certain non-material minimum quantities every six months, and to pay for the shortfall if we purchase less than these amounts. We currently anticipate meeting all minimum forecasted purchase volume requirements. Since December 2001, we have purchased fumed alumina primarily under a fumed alumina supply agreement with Cabot Corporation that has an original term ending in December 2006 and was renewed for another five-year term ending in December 2011. Prices charged for fumed alumina from Cabot Corporation are pursuant to the terms of the supply agreement and may fluctuate based upon the actual costs incurred by Cabot Corporation in the manufacture of fumed alumina. Under these agreements, Cabot Corporation continues to be the exclusive supplier of certain quantities and types of fumed silica and fumed alumina for certain products we produced as of the effective dates of these agreements. Subject to certain terms, these agreements prohibit Cabot Corporation from selling fumed silica and fumed alumina to third parties for use in CMP applications, as well as engaging itself in CMP applications. If Cabot Corporation fails to supply us with our requirements for any reason, including if we require product specification changes that Cabot Corporation cannot meet, we have the right to purchase products meeting those specifications from other suppliers. We also may purchase fumed alumina and fumed silica from other suppliers for certain products, including those commercialized after the effective dates of these agreements. Purchase obligations include an aggregate amount of \$10.5 million of contractual commitments related to our Cabot Corporation agreements for fumed silica and fumed alumina.

In addition to the \$19.0 million in cash we paid at closing related to our July 2006 QED acquisition, we paid another \$2.5 million based on the revenue performance of the QED business in the 12 months following its acquisition, and we may be obligated to pay up to an additional \$2.0 million depending upon the revenue performance of the QED business in the second 12 month period following the acquisition. Contractual obligations at September 30, 2007, include \$2.0 million in contingent payments related to this agreement, with the assumption that we will pay the maximum amount.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

EFFECT OF CURRENCY EXCHANGE RATES AND EXCHANGE RATE RISK MANAGEMENT

We conduct business operations outside of the United States through our foreign operations. Some of our foreign operations maintain their accounting records in their local currencies. Consequently, period to period comparability of results of operations is affected by fluctuations in exchange rates. The primary currencies to which we have exposure are the Japanese Yen and, to a lesser extent, the British Pound and the Euro. From time to time we enter into forward contracts in an effort to manage foreign currency exchange exposure. However, we may be unable to hedge these exposures completely. Approximately 13% of our revenue is transacted in currencies other than the U.S. dollar. We do not currently enter into forward exchange contracts or other derivative instruments for speculative or trading purposes.

MARKET RISK AND SENSITIVITY ANALYSIS RELATED TO FOREIGN EXCHANGE RATE RISK

We have performed a sensitivity analysis assuming a hypothetical 10% adverse movement in foreign exchange rates. As of September 30, 2007, the analysis demonstrated that such market movements would not have a material adverse effect on our consolidated financial position, results of operations or cash flows over a one-year period. Actual gains and losses in the future may differ materially from this analysis based on changes in the timing and amount of foreign currency rate movements and our actual exposures.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS AND FINANCIAL STATEMENT SCHEDULE

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All other schedules are omitted, because they are not required, are not applicable, or the information is included in the consolidated financial statements and notes thereto.

Report of Independent Registered Public Accounting Firm

To the Stockholders and Board of Directors of
Cabot Microelectronics Corporation:

In our opinion, the consolidated financial statements listed in the accompanying index present fairly, in all material respects, the financial position of Cabot Microelectronics Corporation and its subsidiaries at September 30, 2007 and 2006, and the results of their operations and their cash flows for each of the three years in the period ended September 30, 2007 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the accompanying index presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of September 30, 2007, based on criteria established in *Internal Control – Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company’s management is responsible for these financial statements and financial statement schedule, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying report. Our responsibility is to express opinions on these financial statements, on the financial statement schedule, and on the Company’s internal control over financial reporting based on our integrated audits. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of financial statements include examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

As discussed in Notes 2 and 10 to the consolidated financial statements, the Company began recording share-based compensation expense in accordance with Statement of Financial Accounting Standards No. 123(R) “Share-Based Payment” on October 1, 2005.

A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements.

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Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

PricewaterhouseCoopers LLP
Chicago, IL
November 26, 2007

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF INCOME
(In thousands, except per share amounts)

	Year Ended September 30,		
	2007	2006	2005
Revenue	\$ 338,205	\$ 320,795	\$ 270,484
Cost of goods sold	<u>178,224</u>	<u>171,758</u>	<u>141,282</u>
Gross profit	159,981	149,037	129,202
Operating expenses:			
Research, development and technical	49,970	48,070	43,010
Selling and marketing	24,310	21,115	16,989
General and administrative	39,933	34,319	25,427
Purchased in-process research and development	-	1,120	-
Total operating expenses	<u>114,213</u>	<u>104,624</u>	<u>85,426</u>
Operating income	45,768	44,413	43,776
Other income, net	<u>3,606</u>	<u>4,111</u>	<u>2,747</u>
Income before income taxes	49,374	48,524	46,523
Provision for income taxes	<u>15,538</u>	<u>15,576</u>	<u>14,050</u>
Net income	<u>\$ 33,836</u>	<u>\$ 32,948</u>	<u>\$ 32,473</u>
Basic earnings per share	<u>\$ 1.42</u>	<u>\$ 1.36</u>	<u>\$ 1.32</u>
Weighted average basic shares outstanding	<u>23,748</u>	<u>24,228</u>	<u>24,563</u>
Diluted earnings per share	<u>\$ 1.42</u>	<u>\$ 1.36</u>	<u>\$ 1.32</u>
Weighted average diluted shares outstanding	<u>23,754</u>	<u>24,228</u>	<u>24,612</u>

The accompanying notes are an integral part of these consolidated financial statements.

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED BALANCE SHEETS
(In thousands, except share and per share amounts)

	September 30,	
	2007	2006
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 54,557	\$ 54,965
Short-term investments	157,915	110,965
Accounts receivable, less allowance for doubtful accounts of \$635 at September 30, 2007, and \$551 at September 30, 2006	52,302	48,028
Inventories	37,266	40,326
Prepaid expenses and other current assets	5,853	4,785
Deferred income taxes	2,861	2,436
Total current assets	<u>310,754</u>	<u>261,505</u>
Property, plant and equipment, net	118,454	130,176
Goodwill	7,069	4,565
Other intangible assets, net	11,549	11,447
Deferred income taxes	6,686	1,365
Other long-term assets	617	3,075
Total assets	<u>\$ 455,129</u>	<u>\$ 412,133</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 15,859	\$ 15,104
Capital lease obligations	1,066	1,254
Accrued expenses, income taxes payable and other current liabilities	19,638	22,475
Total current liabilities	<u>36,563</u>	<u>38,833</u>
Capital lease obligations	3,608	4,420
Other long-term liabilities	1,754	1,109
Total liabilities	<u>41,925</u>	<u>44,362</u>
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Common stock:		
Authorized: 200,000,000 shares, \$0.001 par value		
Issued: 25,635,730 shares at September 30, 2007, and 25,254,719 shares at September 30, 2006	24	24
Capital in excess of par value of common stock	178,068	157,463
Retained earnings	284,843	251,007
Accumulated other comprehensive income	1,259	272
Treasury stock at cost, 1,627,337 shares at September 30, 2007, and 1,297,167 shares at September 30, 2006	(50,990)	(40,995)
Total stockholders' equity	<u>413,204</u>	<u>367,771</u>
Total liabilities and stockholders' equity	<u>\$ 455,129</u>	<u>\$ 412,133</u>

The accompanying notes are an integral part of these consolidated financial statements.

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	Year Ended September 30,		
	2007	2006	2005
Cash flows from operating activities:			
Net income	\$ 33,836	\$ 32,948	\$ 32,473
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	24,170	21,174	19,072
Purchased in-process research and development	-	1,120	-
Impairment of investment	2,052	-	-
Loss on equity investment	-	566	330
Share-based compensation expense	12,846	10,664	312
Income tax benefit on exercises of stock options	-	-	1,288
Deferred income tax benefit	(5,708)	(5,571)	(2,417)
Non-cash foreign exchange (gain) loss	(539)	2,606	1,079
Loss on disposal of property, plant and equipment	237	1,109	363
Impairment of property, plant and equipment	52	790	657
Other	(482)	(1,081)	299
Changes in operating assets and liabilities:			
Accounts receivable	(3,437)	(8,492)	3,902
Inventories	3,658	(5,635)	(4,760)
Prepaid expenses and other assets	(525)	1,726	(2,824)
Accounts payable	1,170	3,031	(2,703)
Accrued expenses, income taxes payable and other liabilities	(2,696)	3,713	891
Net cash provided by operating activities	<u>64,634</u>	<u>58,668</u>	<u>47,962</u>
Cash flows from investing activities:			
Additions to property, plant and equipment	(10,013)	(22,230)	(21,137)
Proceeds from the sale of property, plant and equipment	172	19	6
Acquisitions of businesses including earnout payment, net of cash acquired	(2,500)	(20,919)	-
Acquisition of patent license	(3,000)	-	-
Purchase of patents	-	(5,000)	-
Purchases of equity investments	-	-	(1,930)
Purchases of short-term investments	(155,175)	(185,655)	(141,570)
Proceeds from the sale of short-term investments	108,225	201,392	128,975
Net cash used in investing activities	<u>(62,291)</u>	<u>(32,393)</u>	<u>(35,656)</u>
Cash flows from financing activities:			
Repurchases of common stock	(9,995)	(15,996)	(16,999)
Net proceeds from issuance of stock	7,759	1,359	6,983
Principal payments under capital lease obligations	(999)	(933)	(869)
Net cash used in financing activities	<u>(3,235)</u>	<u>(15,570)</u>	<u>(10,885)</u>
Effect of exchange rate changes on cash	484	(176)	(293)
Increase (decrease) in cash	(408)	10,529	1,128
Cash and cash equivalents at beginning of year	54,965	44,436	43,308
Cash and cash equivalents at end of year	<u>\$ 54,557</u>	<u>\$ 54,965</u>	<u>\$ 44,436</u>
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 22,657	\$ 21,745	\$ 14,014
Cash paid for interest	\$ 468	\$ 658	\$ 596
Supplemental disclosure of non-cash investing and financing activities:			
Purchases of property, plant and equipment in accrued liabilities and accounts payable at the end of period	\$ 419	\$ 968	\$ 8,204
Issuance of restricted stock	\$ 4,792	\$ 63	\$ 125

The accompanying notes are an integral part of these consolidated financial statements.

CABOT MICROELECTRONICS CORPORATION
CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY
(In thousands)

	Common Stock	Capital In Excess Of Par	Retained Earnings	Accumulated Other Comprehensive Income	Comprehensive Income	Unearned Compensation	Treasury Stock	Total
Balance at September 30, 2004	\$ 25	\$ 136,259	\$ 185,586	\$ 1,905		\$ (153)	\$ (8,000)	\$ 315,622
Exercise of stock options		5,655						5,655
Tax benefit on stock options exercised		1,288						1,288
Amortization of unearned compensation on restricted stock						106		106
Issuance of Cabot Microelectronics restricted stock under deposit share plan		376				(125)		251
Forfeiture of Cabot Microelectronics restricted stock		(5)				5		-
Reverse amortization related to restricted stock forfeited						(4)		(4)
Issuance of Cabot Microelectronics stock under directors' deferred compensation plan		374						374
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,064						1,064
Repurchases of common stock, at cost	(1)						(16,999)	(17,000)
Net income			32,473		\$ 32,473			
Net unrealized gain on derivative instruments				35	35			
Foreign currency translation adjustment				(780)	(780)			
Total comprehensive income					\$ 31,728			31,728
Balance at September 30, 2005	<u>\$ 24</u>	<u>\$ 145,011</u>	<u>\$ 218,059</u>	<u>\$ 1,160</u>		<u>\$ (171)</u>	<u>\$ (24,999)</u>	<u>\$ 339,084</u>
Reclassification of unearned compensation upon adoption of SFAS 123R		(171)				171		-
Reclassification of director's deferred compensation upon adoption of SFAS 123R		600						600
Issuance of Cabot Microelectronics restricted stock under deposit share plan		137						137
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan		1,222						1,222
Share-based compensation expense		10,664						10,664
Repurchases of common stock, at cost							(15,996)	(15,996)
Net income			32,948		\$ 32,948			
Net unrealized gain on derivative instruments				36	36			
Foreign currency translation adjustment				(924)	(924)			
Total comprehensive income					\$ 32,060			32,060
Balance at September 30, 2006	<u>\$ 24</u>	<u>\$ 157,463</u>	<u>\$ 251,007</u>	<u>\$ 272</u>		<u>\$ -</u>	<u>\$ (40,995)</u>	<u>\$ 367,771</u>

Issuance of Cabot Microelectronics restricted stock under deposit share plan	176					176	
Issuance of Cabot Microelectronics stock under Employee Stock Purchase Plan	1,459					1,459	
Share-based compensation expense	12,846					12,846	
Exercise of stock options	6,124					6,124	
Repurchases of common stock, at cost					(9,995)	(9,995)	
Net income	33,836		\$	33,836			
Net unrealized gain on derivative instruments			35	35			
Foreign currency translation adjustment		1,416		1,416			
Total comprehensive income			\$	35,287		35,287	
SFAS 158 transition adjustment		(464)				(464)	
Balance at September 30, 2007	<u>\$ 24</u>	<u>\$ 178,068</u>	<u>\$ 284,843</u>	<u>\$ 1,259</u>	<u>\$ -</u>	<u>\$ (50,990)</u>	<u>\$ 413,204</u>

The accompanying notes are an integral part of these consolidated financial statements.

CABOT MICROELECTRONICS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except share and per share amounts)

1. BACKGROUND AND BASIS OF PRESENTATION

Cabot Microelectronics Corporation ("Cabot Microelectronics", "the Company", "us", "we" or "our") supplies high-performance polishing slurries used in the manufacture of advanced integrated circuit (IC) devices within the semiconductor industry, in a process called chemical mechanical planarization (CMP). CMP polishes surfaces at an atomic level, thereby enabling IC device manufacturers to produce smaller, faster and more complex IC devices with fewer defects. We believe we are the world's leading supplier of CMP slurries for IC devices. We also develop, manufacture and sell CMP slurries for polishing certain components in hard disk drives, specifically rigid disk substrates and magnetic heads, and we believe we are one of the leading suppliers in this area. In addition, we develop, produce and sell CMP polishing pads, which are used in conjunction with slurries in the CMP process. We also pursue a variety of surface modification applications outside of the semiconductor and hard disk drive industries for which our capabilities and knowledge may provide previously unseen surface performance or improved productivity.

The audited consolidated financial statements have been prepared by us pursuant to the rules of the Securities and Exchange Commission (SEC) and accounting principles generally accepted in the United States of America. We operate predominantly in one industry segment - the development, manufacture, and sale of CMP consumables. Certain reclassifications of prior fiscal year amounts have been made to conform to the current period presentation.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

PRINCIPLES OF CONSOLIDATION

The consolidated financial statements include the accounts of Cabot Microelectronics and its subsidiaries. All material intercompany transactions and balances between the companies have been eliminated.

USE OF ESTIMATES

The preparation of financial statements and related disclosures in conformity with accounting principles generally accepted in the United States of America requires management to make judgments, assumptions and estimates that affect the amounts reported in the consolidated financial statements and accompanying notes. The accounting estimates that require management's most difficult and subjective judgments include, but are not limited to, those estimates related to bad debt expense, warranty obligations, inventory valuation, impairment of long-lived assets and investments, business combinations, goodwill, other intangible assets, share-based compensation, income taxes and contingencies. We base our estimates on historical experience, current conditions and on various other assumptions that we believe are reasonable under the circumstances. However, future events are subject to change and estimates and judgments routinely require adjustment. Actual results may differ from these estimates under different assumptions or conditions.

CASH, CASH EQUIVALENTS AND SHORT-TERM INVESTMENTS

We consider investments in all highly liquid financial instruments with original maturities of three months or less to be cash equivalents. Short-term investments include securities generally having maturities of 90 days to one year. As of September 30, 2007, we held \$157,915 of short-term investments which are classified as available-for-sale securities. Our investment in these auction rate securities is recorded at cost, which approximates fair market value due to their variable interest rates, which typically reset every seven to 35 days, and despite the long-term nature of their stated contractual maturities, we have the ability to quickly liquidate these securities.

Notes to Consolidated Financial Statements - Continued

ACCOUNTS RECEIVABLE AND ALLOWANCE FOR DOUBTFUL ACCOUNTS

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. We maintain an allowance for doubtful accounts for estimated losses resulting from the potential inability of our customers to make required payments. Our allowance for doubtful accounts is based on historical collection experience, adjusted for any specific known conditions or circumstances. Uncollectable account balances are charged against the allowance when we believe that it is probable that the receivable will not be recovered.

CONCENTRATION OF CREDIT RISK

Financial instruments that subject us to concentrations of credit risk consist principally of accounts receivable. We perform ongoing credit evaluations of our customers' financial conditions and generally do not require collateral to secure accounts receivable. Our exposure to credit risk associated with nonpayment is affected principally by conditions or occurrences within the semiconductor industry and global economy. We historically have not experienced material losses relating to accounts receivables from individual customers or groups of customers.

The portions of revenue from customers who represented more than 10% of revenue were as follows:

	Year Ended September 30,		
	2007	2006	2005
Taiwan Semiconductor Manufacturing Co. (TSMC)	17%	10%	-
Marketech	7%	19%	35%

In April 2006 we began selling products directly to customers in Taiwan, rather than through Marketech, an independent distributor. We continue to use Marketech as a distributor in China. Prior to April 2006, we sold product to TSMC through Marketech.

TSMC accounted for 14.3% and 11.0% of net accounts receivable at September 30, 2007 and 2006, respectively.

FAIR VALUES OF FINANCIAL INSTRUMENTS

The recorded amounts of cash, short-term investments, accounts receivable and accounts payable approximate their fair values.

INVENTORIES

Inventories are stated at the lower of cost, determined on the first-in, first-out (FIFO) basis, or market. Finished goods and work in process inventories include material, labor and manufacturing overhead costs. We regularly review and write down the value of inventory as required for estimated obsolescence or unmarketability. An inventory reserve is maintained based upon a historical percentage of actual inventories written off applied against inventory value at the end of the period, adjusted for known conditions and circumstances.

Notes to Consolidated Financial Statements - Continued

PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are recorded at cost. Depreciation is based on the following estimated useful lives of the assets using the straight-line method:

Buildings	15-25 years
Machinery and equipment	3-10 years
Furniture and fixtures	5-10 years
Information systems	3-5 years
Assets under capital leases	Term of lease or estimated useful life

Expenditures for repairs and maintenance are charged to expense as incurred. Expenditures for major renewals and betterments are capitalized and depreciated over the remaining useful lives. As assets are retired or sold, the related cost and accumulated depreciation are removed from the accounts and any resulting gain or loss is included in the results of operations. Costs related to internal use software are capitalized in accordance with American Institute of Certified Public Accountants Statement of Position No. 98-1, "Accounting for the Costs of Computer Software Developed or Obtained for Internal Use".

IMPAIRMENT OF LONG-LIVED ASSETS

Reviews are regularly performed to determine whether facts and circumstances exist that indicate the carrying amount of assets may not be recoverable or the useful life is shorter than originally estimated. Asset recoverability assessment begins by comparing the projected undiscounted cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairment, if any, is based on the excess of the carrying amount over the fair value of those assets. If assets are determined to be recoverable, but their useful lives are shorter than originally estimated, the net book value of the asset is depreciated over the newly determined remaining useful life.

GOODWILL AND OTHER INTANGIBLE ASSETS

In accordance with Statement of Financial Accounting Standards (SFAS) No. 141, "Business Combinations" (SFAS 141), and SFAS No. 142, "Goodwill and Other Intangible Assets", intangible assets with finite lives are amortized over their estimated useful lives, which range from two to ten years. Goodwill and indefinite lived intangible assets are tested annually in the fourth fiscal quarter or more frequently if indicators of potential impairment exist, using a fair-value-based approach. We determined that goodwill and other intangible assets were not impaired as of September 30, 2007.

WARRANTY RESERVE

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements. The warranty reserve is based upon a historical product return rate, adjusted for any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold.

FOREIGN CURRENCY TRANSLATION

Certain operating activities in Asia and Europe are denominated in local currency, considered to be the functional currency. Assets and liabilities of these operations are translated using exchange rates in effect at the end of the year, and revenue and costs are translated using weighted average exchange rates for the year. The related translation adjustments are reported in comprehensive income in stockholders' equity.

FOREIGN EXCHANGE MANAGEMENT

We transact business in various foreign currencies, primarily the Japanese Yen, British Pound and the Euro. Our exposure to foreign currency exchange risks has not been significant because a large portion of our sales are denominated in U.S. dollars. Periodically we enter into forward foreign exchange contracts in an effort to mitigate the risks associated with currency fluctuations on certain foreign currency balance sheet exposures. Our foreign exchange contracts do not qualify for hedge accounting under SFAS No. 133, "Accounting for Derivatives Instruments and Hedging Activities", as amended by SFAS No. 149, "Amendment of Statement 133 on Instruments and Hedging Activities", and SFAS No. 52, "Foreign Currency Translation" (SFAS 52); therefore, the gains and losses resulting from the impact of currency exchange rate movements on our forward foreign exchange contracts are recognized as other income or expense in the accompanying consolidated income statements in the period in which the exchange rates change. These gains and losses are intended to partially offset the foreign currency exchange gains and losses on the underlying exposures being hedged. Foreign exchange gains were \$321, \$265 and \$359 for fiscal 2007, 2006 and 2005, respectively.

Notes to Consolidated Financial Statements - Continued

We do not currently use derivative financial instruments for trading or speculative purposes. In addition, all derivatives, whether designated in hedging relationships or not, are required to be recorded on the balance sheet at fair value. At September 30, 2007, we had one forward foreign exchange contract selling Japanese Yen related to an intercompany note with one of our subsidiaries in Japan and for the purpose of hedging the risk associated with a net transactional exposure in Japanese Yen (refer to "Intercompany Loan Accounting" in this section).

INTERCOMPANY LOAN ACCOUNTING

We maintain intercompany loan agreements with our wholly-owned subsidiary, Nihon Cabot Microelectronics K.K. ("the K.K."), under which we provided funds to the K.K. to finance the purchase of certain assets from our former Japanese branch at the time of the establishment of this subsidiary, for the purchase of land adjacent to our Geino, Japan, facility and for the construction of our Asia Pacific technology center, all of which are part of the K.K., as well as for general business purposes. Since settlement of the notes is expected in the foreseeable future, and our subsidiary has been consistently making timely payments on the loans, the loans are considered foreign-currency transactions under SFAS 52. Therefore the associated foreign exchange gains and losses are recognized as other income or expense rather than being deferred in the cumulative translation account in other comprehensive income.

PURCHASE COMMITMENTS

We have entered into unconditional purchase obligations, which include noncancelable purchase commitments and take-or-pay arrangements with suppliers. We review our agreements and make an assessment of the likelihood of a shortfall in purchases and determine if it is necessary to record a liability.

REVENUE RECOGNITION

Revenue from CMP consumable products is recognized when title is transferred to the customer, which usually occurs upon shipment, but depends on the terms and conditions of the particular customer arrangement, provided acceptance and collectability are reasonably assured. Revenue related to inventory held on consignment at a customer site is recognized as the products are consumed by the customer.

Within our Engineered Surface Finishes (ESF) business, sales of equipment are recorded as revenue upon delivery. Amounts allocated to installation and training are deferred until those services are provided.

Revenues are reported net of any value-added tax or other such tax assessed by a governmental authority on our revenue-producing activities.

SHIPPING AND HANDLING

Costs related to shipping and handling are included in cost of goods sold.

RESEARCH, DEVELOPMENT AND TECHNICAL

Research, development and technical costs are expensed as incurred and consist primarily of staffing costs, materials and supplies, depreciation, utilities and other facilities costs.

Notes to Consolidated Financial Statements - *Continued*

INCOME TAXES

Current income taxes are determined based on estimated taxes payable or refundable on tax returns for the current year. Deferred income taxes are determined using enacted tax rates for the effect of temporary differences between the book and tax bases of recorded assets and liabilities. Provisions are made for both U.S. and any foreign deferred income tax liability or benefit.

SHARE-BASED COMPENSATION

Effective October 1, 2005, we adopted SFAS No. 123 (revised 2004), "Share-Based Payment" (SFAS 123R), which requires all share-based payments, including stock option grants, restricted stock and restricted stock unit awards and employee stock purchases, to be recognized in the income statement based on their fair values. We adopted SFAS 123R using the modified prospective transition method; therefore, we have not restated our financial results for prior periods. Under this transition method, share-based compensation expense includes all share-based compensation awards granted prior to, but not yet vested as of September 30, 2005, based on the grant date fair value estimated in accordance with the original provisions of SFAS 123. Share-based compensation expense for all share-based awards granted subsequent to September 30, 2005, was based on the grant date fair value estimated in accordance with the provisions of SFAS 123R.

Under SFAS 123R, we continue to attribute share-based compensation expense using the straight-line approach based on awards ultimately expected to vest, which requires the use of an estimated forfeiture rate. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. We continue to use the Black-Scholes option-pricing model ("Black-Scholes model") to estimate grant date fair value, which requires the input of highly subjective assumptions, including the option's expected term, the price volatility of the underlying stock and risk-free interest rate. A small change in the underlying assumptions can have a relatively large effect on the estimated valuation. Under SFAS 123R, we estimate expected volatility based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. We use the simplified method to calculate the expected term as defined under Staff Accounting Bulletin (SAB) No. 107, "Share-Based Payments" (SAB 107), due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who meet the definition of retirement pursuant to their grants during the contractual term of the grant. This method uses an average of the vesting and contractual terms. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

For additional information regarding our share-based compensation plans, refer to Note 10.

EARNINGS PER SHARE

Basic earnings per share (EPS) is calculated by dividing net income available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted EPS is calculated by using the weighted average number of common shares outstanding during the period increased to include the weighted average dilutive effect of "in-the-money" stock options and unvested restricted stock shares using the treasury stock method.

COMPREHENSIVE INCOME

Comprehensive income primarily differs from net income due to foreign currency translation adjustments and net unrealized gains and losses on derivative instruments.

Notes to Consolidated Financial Statements - Continued**EFFECTS OF RECENT ACCOUNTING PRONOUNCEMENTS**

In February 2007, the FASB issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities – Including an Amendment of FASB Statement No. 115" (SFAS 159). SFAS 159 allows measurement at fair value of eligible financial assets and liabilities that are not otherwise measured at fair value. If the fair value option for an eligible item is elected, unrealized gains and losses for that item shall be reported in current earnings at each subsequent reporting date. This pronouncement is effective for fiscal years beginning after November 15, 2007. We do not expect the adoption of SFAS 159 to have a material impact on our consolidated financial position, results of operations or cash flows.

In September 2006, the FASB issued SFAS No. 157, "Fair Value Measurement" (SFAS 157). SFAS 157 establishes a common definition for fair value in generally accepted accounting principles, establishes a framework for measuring fair value and expands disclosure about such fair value measurements. SFAS 157 is effective for fiscal years beginning after November 15, 2007. We are currently evaluating the impact of adopting SFAS 157 on our consolidated financial position, results of operations or cash flows.

In September 2006, the FASB issued SFAS No. 158, "Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, an amendment of FASB Statements No. 87, 88, 106, and 132(R)" (SFAS 158). SFAS 158 requires an employer that sponsors one or more single-employer defined benefit plans to: a) recognize the overfunded or underfunded status of a benefit plan in its statement of financial position; b) recognize as a component of other comprehensive income, net of tax, any remaining unamortized transition obligation upon adoption as well as the gains or losses and prior service costs or credits that have not yet been recognized as components of net periodic benefit cost; c) measure defined benefit plan assets and obligations as of the date of the employer's fiscal year-end; and d) certain enhanced disclosures in the notes to financial statements. This statement is effective for fiscal years ending after December 15, 2006. The adoption of SFAS 158 had no material impact on our consolidated financial position, results of operations or cash flows.

In July 2006, the FASB issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes – an Interpretation of FASB Statement 109" (FIN 48), which clarifies the accounting for uncertainty in tax positions. This interpretation sets forth a recognition threshold and measurement element for the recognition and measurement of a tax position taken or expected to be taken on a tax return. This interpretation is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the impact of adopting FIN 48 in fiscal 2008 on our consolidated financial position, results of operations or cash flows.

3. INVENTORIES

Inventories consisted of the following:

	September 30,	
	2007	2006
Raw materials	\$ 18,011	\$ 18,623
Work in process	1,735	1,805
Finished goods	17,520	19,898
Total	<u>\$ 37,266</u>	<u>\$ 40,326</u>

Notes to Consolidated Financial Statements - Continued**4. PROPERTY, PLANT AND EQUIPMENT**

Property, plant and equipment consisted of the following:

	September 30,	
	2007	2006
Land	\$ 16,905	\$ 16,675
Buildings	65,110	62,465
Machinery and equipment	119,549	112,117
Furniture and fixtures	5,359	5,146
Information systems	13,817	12,742
Capital leases	9,890	9,890
Construction in progress	2,325	4,809
Total property, plant and equipment	232,955	223,844
Less: accumulated depreciation and amortization of assets under capital leases	(114,501)	(93,668)
Net property, plant and equipment	<u>\$ 118,454</u>	<u>\$ 130,176</u>

Depreciation expense, including amortization of assets recorded under capital leases, was \$21,365, \$20,501 and \$18,817 for the years ended September 30, 2007, 2006 and 2005, respectively.

In fiscal 2006, we recorded \$790 in impairment expense primarily related to the decision to no longer use a portion of a building in Aurora, Illinois, that was previously used for research and development activities. Of this amount, \$133 and \$657 is included in cost of goods sold and research, development and technical expense, respectively. Impairment expense for fiscal 2007 was not material.

5. BUSINESS COMBINATIONS

In accordance with SFAS 141, we account for all business combinations by the purchase method of accounting. Accordingly, the assets and liabilities of the acquired entities are recorded at their estimated fair values at the date of acquisition. Goodwill represents the excess of the purchase price over the fair value of net assets and amounts assigned to identifiable intangible assets. Purchased in-process research and development (IPR&D), for which technological feasibility has not yet been established and no future alternative uses exist, is expensed immediately in accordance with SFAS 141.

In July 2006, we acquired substantially all of the assets and certain associated proprietary technology and intellectual property of QED Technologies, Inc. (QED), and assumed certain of its current liabilities. QED specializes in unique, patented polishing and metrology systems for shaping and polishing high precision optics. At the July 2006 closing of the transaction, we paid \$19,000 in cash plus \$303 of transaction costs from our available cash balance. In fiscal 2007, we paid another \$2,500 related to the revenue performance of the QED business in the 12 months following the acquisition, and we may pay up to an additional \$2,000 depending upon the revenue performance of the QED business in the second 12 month period following the acquisition. The purchase price was allocated to tangible assets, liabilities assumed, identified intangible assets acquired, as well as IPR&D, based on their estimated fair values. The excess of the purchase price over the aggregate fair values was recorded as goodwill.

Notes to Consolidated Financial Statements - Continued

The following table summarizes the QED purchase price allocation updated to reflect the earnout payment made in fiscal 2007 mentioned above which increased goodwill:

	At September 30, 2007
Current assets	\$ 10,610
Long-term assets	2,197
In-process research and development	1,120
Identified intangible assets	6,890
Goodwill	5,000
Total assets acquired	<u>25,817</u>
Total current liabilities assumed	<u>4,010</u>
Net assets acquired	<u>\$ 21,807</u>

Results of QED's operations since July 7, 2006, are included in our consolidated financial statements.

In October 2005, we purchased substantially all of the assets and assumed certain liabilities of Surface Finishes Co., Inc. ("Surface Finishes"), a company that specializes in precision machining techniques at the sub-nanometer level, as well as associated real property from a related trust. The total cash purchase price was approximately \$2,282, of which \$1,450 was allocated to net tangible assets and \$832 was allocated to intangible assets and goodwill based on estimated fair values. The acquisition was accounted for as a purchase transaction with results of operations included in the consolidated financial statements from the date of acquisition.

Pro forma results of operations for Surface Finishes and QED, prior to our acquisitions, have not been presented because the effects of the acquisitions were not material to the Company's results.

Notes to Consolidated Financial Statements - Continued

6. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill was \$7,069 and \$4,565 as of September 30, 2007 and 2006, respectively. The increase in goodwill primarily relates to the \$2,500 we paid in fiscal 2007 based on the revenue performance of QED as explained in Note 5.

The components of other intangible assets are as follows:

	September 30, 2007		September 30, 2006	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
<u>Other intangible assets subject to amortization:</u>				
Product technology	\$ 5,380	\$ 673	\$ 5,380	\$ 135
Acquired patents and licenses	8,000	2,560	5,000	479
Trade secrets and know-how	2,550	2,550	2,550	2,550
Distribution rights, customer lists and other	1,457	1,245	1,457	1,059
Total other intangible assets subject to amortization	17,387	7,028	14,387	4,223
Total other intangible assets not subject to amortization*	1,190		1,283	
Total other intangible assets	\$ 18,577	\$ 7,028	\$ 15,670	\$ 4,223

* Total other intangible assets not subject to amortization primarily consist of trade names.

Other intangible assets increased in fiscal 2007 due to the acquisition of patent licenses for \$3,000. Additions to other intangible assets in fiscal 2006 were primarily attributable to the acquisitions of substantially all of the assets and certain liabilities of QED and Surface Finishes. In connection with our acquisition of QED, we purchased \$1,120 of IPR&D related to one project. The amount allocated to IPR&D was determined through established valuation techniques in the high-technology industry and was expensed upon acquisition because technological feasibility had not yet been established and no future alternative uses exist. Research and development costs to bring the product to technological feasibility were not material to our results of operations or cash flows.

In June 2006 we purchased nine CMP slurry patents from the International Business Machines Corporation (IBM) for a cost of \$5,000, which is being amortized over approximately 2.7 years.

Amortization expense was \$2,805 and \$673 for fiscal 2007 and 2006, respectively. Estimated future amortization expense for the five succeeding fiscal years is as follows:

Fiscal Year	Estimated amortization expense
2008	\$ 2,838
2009	1,663
2010	854
2011	847
2012	847

Notes to Consolidated Financial Statements - Continued**7. OTHER LONG-TERM ASSETS**

Other long-term assets consisted of the following:

	September 30,	
	2007	2006
Investment in NanoProducts Corporation	\$ -	\$ 2,446
Other long-term assets	617	629
Total	<u>\$ 617</u>	<u>\$ 3,075</u>

In fiscal 2004 and 2005, we invested a total of \$3,750 to acquire a minority equity interest in NanoProducts Corporation (NPC) and entered into a technology collaboration agreement with NPC. In the third quarter of fiscal 2007, the Company chose to not renew the collaboration agreement. Additionally, during the third quarter of fiscal 2007, NPC entered into funding arrangements that we believe significantly reduced the likelihood that we would recover the value of our minority investment. Accordingly, we recorded a \$2,052 impairment of our investment, which reduced the carrying value to zero. This impairment loss is included in other income and expense in the consolidated statement of operations. No write down was recorded in fiscal 2006.

8. ACCRUED EXPENSES, INCOME TAXES PAYABLE AND OTHER CURRENT LIABILITIES

Accrued expenses, income taxes payable and other current liabilities consisted of the following:

	September 30,	
	2007	2006
Accrued compensation	\$ 13,965	\$ 12,948
Goods and services received, not yet invoiced	2,365	3,088
Warranty accrual	527	924
Income taxes payable	-	764
Taxes, other than income taxes	911	2,270
Other	1,870	2,481
Total	<u>\$ 19,638</u>	<u>\$ 22,475</u>

9. REVOLVING CREDIT FACILITY

We have an unsecured revolving credit facility of \$50,000 with an option to increase the facility up to \$80,000. Under this agreement, which terminates in November 2008, interest accrues on any outstanding balance at either the lending institution's base rate or the Eurodollar rate plus an applicable margin. We also pay a non-use fee. Loans under this facility are intended to be used primarily for general corporate purposes, including working capital and capital expenditures. The credit agreement also contains various covenants. No amounts are currently outstanding under this credit facility and we believe we are currently in compliance with its covenants.

Notes to Consolidated Financial Statements - Continued

10. SHARE-BASED COMPENSATION PLANS

EQUITY INCENTIVE PLAN

In March 2004, our stockholders approved our Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan (the "Plan"), as amended and restated September 26, 2006, which is administered by the Compensation Committee of the Board of Directors and is intended to provide enough shares to give us ongoing flexibility to attract, retain and reward our employees, directors, consultants and advisors. The Plan allows for the granting of four types of equity incentive awards: stock options, restricted stock, restricted stock units and substitute awards. Substitute awards are those awards that, in connection with an acquisition, may be granted to employees, directors, consultants or advisors of the acquired company, in substitution for equity incentives held by them in the seller or the acquired company. No substitute awards have been granted to date. The Plan authorizes up to 9,500,000 shares of stock to be granted thereunder, including up to 1,900,000 shares in the aggregate of restricted stock or restricted stock units and up to 1,750,000 incentive stock options (ISO). Shares issued under our share-based compensation plans are issued from new shares.

Non-qualified stock options issued under the Plan are generally time-based and provide for a ten-year term, with options generally vesting equally over a four-year period, with first vesting on the first anniversary of the grant date. Compensation expense related to our stock option awards was \$11,141 and \$9,826 in fiscal 2007 and 2006, respectively. Prior to fiscal 2006 we accounted for share-based compensation under APB 25, which prescribed an intrinsic value method for valuing stock options. In fiscal 2005, no compensation expense was recorded with respect to stock options as all options granted had an exercise price equal to the market value of the underlying common stock on the date of the grant. For additional information on our accounting for share-based compensation, see Note 2 to the consolidated financial statements. Under the Plan, employees and non-employees may also be granted ISOs to purchase common stock at not less than the fair value on the date of the grant, of which none have been granted to date.

Under the Plan, employees and non-employees may be awarded shares of restricted stock or restricted stock units, which generally vest over a four-year period, with first vesting on the anniversary of the grant date. In general, shares of restricted stock and restricted stock units may not be sold, assigned, transferred, pledged, disposed of or otherwise encumbered. Holders of restricted stock, and restricted stock units, if specified in the award agreements, have all the rights of stockholders, including voting and dividend rights, subject to the above restrictions, although the current holders of restricted stock units do not have such rights. Restricted shares under the Plan also may be purchased and placed "on deposit" by executive officers pursuant to the 2001 Deposit Share Plan. Shares purchased under this Deposit Share Plan receive a 50% match in restricted shares ("Award Shares"). These Award Shares vest at the end of a three-year period, and are subject to forfeiture upon early withdrawal of the deposit shares. Compensation expense related to our restricted stock and restricted stock unit awards and restricted shares matched at 50% pursuant to the Deposit Share Plan was \$954, \$127 and \$106 for fiscal 2007, 2006 and 2005, respectively.

Our historical approach to long-term incentives primarily has been the granting of non-qualified stock options. Prior to fiscal 2007, under the Plan, awards and grants made to employees as part of our annual equity incentive award program and to non-employee directors for initial and annual grants as part of our non-employee directors' compensation program consisted solely of non-qualified stock option grants. As permitted by the Plan, in fiscal 2007, the Compensation Committee of our Board of Directors decided to begin to award a blend of non-qualified stock option grants and restricted stock awards (restricted stock units for our non-United States employees) to eligible employees and non-employee directors according to an approximate three-to-one ratio of non-qualified stock options granted to shares of restricted stock or restricted stock units awarded. Our Compensation Committee made these decisions primarily to address the financial impact of the expensing of equity-based compensation now required pursuant to SFAS 123R, as well as to provide a more competitive balance of equity incentives being awarded to our employees and non-employee directors under the 2000 Equity Incentive Plan.

EMPLOYEE STOCK PURCHASE PLAN

In March 2000, Cabot Microelectronics adopted an employee stock purchase plan (ESPP) and authorized up to 475,000 shares of common stock to be purchased under the plan. The ESPP allows all full and certain part-time employees of Cabot Microelectronics and its subsidiaries to purchase shares of our common stock through payroll deductions. Employees can elect to have up to 10% of their annual earnings withheld to purchase our stock, subject to a maximum number of shares that a participant may purchase and a maximum dollar expenditure in any six-month offering period, and certain other criteria. The shares are purchased at a price equal to the lower of 85% of the closing price at the beginning or end of each semi-annual stock purchase period. A total of 54,180, 49,319, and 42,879 shares were issued under the ESPP during fiscal 2007, 2006 and 2005, respectively. Compensation expense related to the ESPP was \$446 and \$344 in fiscal 2007 and 2006, respectively. Prior to fiscal 2006, no compensation expense was recorded under the ESPP, in accordance with APB 25.

Notes to Consolidated Financial Statements - Continued

DIRECTORS' DEFERRED COMPENSATION PLAN

The Directors' Deferred Compensation Plan, as amended and restated September 26, 2006, became effective in March 2001 and applies only to our non-employee directors. The cumulative number of shares deferred under the plan was 35,525 and 26,436 as of September 30, 2007 and 2006, respectively. Compensation expense related to our Directors' Deferred Compensation Plan was \$305, \$367 and \$224 for fiscal 2007, 2006 and 2005, respectively.

ACCOUNTING FOR SHARE-BASED COMPENSATION

In conjunction with the adoption of SFAS 123R, effective October 1, 2005, we applied the provisions of SAB No. 107, "Share-Based Payments" (SAB 107), in developing our methodology to estimate our Black-Scholes model inputs. A number of these inputs are highly subjective, including the price volatility of the underlying stock and the expected term of our stock options. Under SFAS 123R, we estimate the expected volatility of our stock options based on a combination of our stock's historical volatility and the implied volatilities from actively-traded options on our stock. Prior to the adoption of SFAS 123R, we estimated expected volatility based only on our stock's historical volatility in accordance with SFAS 123 for purposes of our pro forma disclosure. We believe that implied volatility is more reflective of market conditions; however, due to the shorter length in term of the actively-traded options on our stock, we believe it to be appropriate to use a blended assumption for our stock options. In addition, we have updated our stock option expected term assumption by adopting SAB 107's simplified method, due to our limited amount of historical option exercise data, and we add a slight premium to this expected term for employees who meet the definition of retirement pursuant to their grants during the contractual term. This method uses an average of the vesting and contractual terms. In addition, another highly subjective assumption is the estimated forfeiture rate, which is necessary because our share-based compensation expense is based only on the awards and grants that are ultimately expected to vest. Our estimated forfeiture rate is primarily based on historical experience, but may be revised in future periods if actual forfeitures differ from the estimate. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant.

The fair value of our share-based awards was estimated using the Black-Scholes model with the following weighted-average assumptions:

	Year Ended September 30,		
	2007	2006	2005
Stock Options			
Weighted-average fair value	\$18.12	\$17.85	\$22.30
Expected term (in years)	6.56	6.25	5.00
Expected volatility	52%	56%	70%
Risk-free rate of return	4.4%	4.5%	3.6%
Dividend yield	-	-	-
ESPP			
Weighted-average fair value	\$8.30	\$7.23	\$7.95
Expected term (in years)	0.50	0.50	0.50
Expected volatility	30%	33%	30%
Risk-free rate of return	5.1%	4.9%	3.25%
Dividend yield	-	-	-

The Black-Scholes model is primarily used in estimating the fair value of short-lived exchange traded options that have no vesting restrictions and are fully transferable. Because employee stock options and employee stock purchases have certain characteristics that are significantly different from traded options, and because changes in the subjective assumptions can materially affect the estimated value, our use of the Black-Scholes model for estimating the fair value of stock options and employee stock purchases may not provide an accurate measure. Although the value of our stock options and employee stock purchases are determined in accordance with SFAS 123R and SAB 107 using an option-pricing model, those values may not be indicative of the fair values observed in a willing buyer/willing seller market transaction.

Notes to Consolidated Financial Statements - Continued

The fair value of our restricted stock and restricted stock unit awards represents the closing price of our common stock on the date of grant. Share-based compensation expense related to restricted stock and restricted stock unit awards is recorded net of expected forfeitures.

PRO FORMA INFORMATION UNDER SFAS 123 FOR PERIODS PRIOR TO FISCAL 2006

The table below reflects net income and earnings per share for fiscal 2005 as if the Company had applied the fair value recognition provision of SFAS 123 to share-based compensation awards:

	Year Ended September 30, 2005
Net income, as reported, prior to adoption of SFAS 123R	\$ 32,473
Add: Share-based compensation expense included in reported net income, net of related tax effects	230
Less: Share-based compensation expense determined under fair value method for all awards, net of related tax effects	<u>(37,262)</u>
Pro forma net income	<u>\$ (4,559)</u>
Earnings (loss) per share:	
Basic – as reported	<u>\$ 1.32</u>
Basic – pro forma	<u>\$ (0.19)</u>
Diluted – as reported	<u>\$ 1.32</u>
Diluted – pro forma	<u>\$ (0.19)</u>

Pro-forma share-based compensation expense in fiscal 2005 includes the effect of accelerating the vesting of approximately 1.3 million options to September 1, 2005, that had option prices greater than \$34.65 as of September 27, 2004. The acceleration enabled us to eliminate the recognition of share-based compensation expense associated with these “out-of-the-money” options in our consolidated financial statements upon the adoption of SFAS 123R in October 2005, contributing to the reduction of share-based compensation expense from fiscal 2005 to fiscal 2006.

SHARE-BASED COMPENSATION EXPENSE

Total share-based compensation expense for the year ended September 30, 2007 and 2006, is as follows:

Income statement classifications:	Year Ended September 30,	
	2007	2006
Cost of goods sold	\$ 775	\$ 648
Research, development and technical	1,131	959
Selling and marketing	1,293	1,037
General and administrative	9,647	8,020
Tax benefit	<u>(4,588)</u>	<u>(3,809)</u>
Total share-based compensation expense, net of tax	<u>\$ 8,258</u>	<u>\$ 6,855</u>

The costs presented in the preceding tables for pro forma and actual share-based compensation expense may not be representative of the total effects on reported income for future years. Factors that may impact future years include, but are not limited to, changes to our historical approaches to long-term incentives such as described above, the timing and number of future grants of share-based awards, the vesting period and contractual term of share-based awards and types of equity awards granted. Further, share-based compensation may be impacted by changes in the fair value of future awards through variables such as fluctuations in and volatility of our stock price, as well as changes in employee exercise behavior and forfeiture rates.

Notes to Consolidated Financial Statements - Continued

STOCK OPTION ACTIVITY

A summary of stock option activity under the Plan as of September 30, 2007, and changes during the fiscal 2007 are presented below:

	Stock Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at September 30, 2006	4,367,659	\$ 44.40		
Granted	440,020	31.98		
Exercised	(189,457)	32.32		
Forfeited or canceled	(283,841)	49.93		
Outstanding at September 30, 2007	<u>4,334,381</u>	<u>\$ 43.31</u>	<u>6.3</u>	<u>\$ 20,400</u>
Exercisable at September 30, 2007	<u>2,714,404</u>	<u>\$ 49.48</u>	<u>5.2</u>	<u>\$ 4,543</u>
Expected to vest at September 30, 2007	<u>1,454,489</u>	<u>\$ 33.00</u>	<u>8.2</u>	<u>\$ 14,176</u>

The aggregate intrinsic value in the table above represents the total pretax intrinsic value (i.e., for all in-the-money stock options, the difference between our closing stock price on the last trading day of fiscal 2007 and the exercise price, multiplied by the number of shares) that would have been received by the option holders had all option holders exercised their options on the last trading day of fiscal 2007. The total intrinsic value of options exercised was \$1,863, \$0 and \$4,462 for fiscal 2007, 2006 and 2005, respectively.

The total cash received from options exercised was \$6,124, \$0 and \$5,655 for fiscal 2007, 2006 and 2005, respectively. The actual tax benefit realized for the tax deductions from options exercised was \$665, \$0 and \$1,651 for fiscal 2007, 2006 and 2005, respectively. The total fair value of stock options vested during fiscal years 2007, 2006 and 2005 was \$10,204, \$6,594 and \$66,365, respectively. As of September 30, 2007, there was \$19,586 of total unrecognized share-based compensation expense related to unvested stock options under the Plan. That cost is expected to be recognized over a weighted-average period of 1.9 years.

RESTRICTED STOCK

A summary of the status of the restricted stock awards and restricted stock unit awards outstanding under the Plan as of September 30, 2007, and changes during fiscal 2007, are presented below:

	Restricted Stock Awards and Units	Weighted Average Grant Date Fair Value
Nonvested at September 30, 2006	6,783	\$ 39.87
Granted	154,353	32.18
Vested	(7,574)	38.69
Forfeited	(2,410)	31.57
Nonvested at September 30, 2007	<u>151,152</u>	<u>\$ 32.21</u>

As of September 30, 2007, there was \$3,174 of total unrecognized share-based compensation expense related to nonvested restricted stock awards and restricted stock units under the Plan. That cost is expected to be recognized over a weighted-average period of 3.2 years. The total fair values of restricted stock awards and restricted stock units vested during fiscal years 2007, 2006 and 2005 were \$293, \$203 and \$589, respectively.

Notes to Consolidated Financial Statements - Continued**11. SAVINGS PLAN**

Effective in May 2000, we adopted the Cabot Microelectronics Corporation 401(k) Plan (the "401(k) Plan"), which is a qualified defined contribution plan, covering all eligible U.S. employees meeting certain minimum age and eligibility requirements, as defined by the 401(k) Plan. Participants may make elective contributions of up to 60% of their eligible compensation. All amounts contributed by participants and earnings on these contributions are fully vested at all times. The 401(k) Plan provides for matching and fixed non-elective contributions by the Company. Under the 401(k) Plan, the Company will match 100% of the first four percent of the participant's eligible compensation and 50% of the next two percent of the participant's eligible compensation that is contributed, subject to limitations required by government regulations. Under the 401(k) Plan, all U.S. employees, even those who do not contribute to the 401(k) Plan, receive a contribution by the Company in an amount equal to four percent of eligible compensation, and thus are participants in the 401(k) Plan. Participants are 100% vested in all Company contributions at all times. The Company's expense for the 401(k) Plan totaled \$3,643, \$3,170 and \$2,907 for the fiscal years ended September 30, 2007, 2006 and 2005, respectively.

12. OTHER INCOME, NET

Other income, net, consisted of the following:

	Year Ended September 30,		
	2007	2006	2005
Interest income	\$ 6,117	\$ 5,394	\$ 3,438
Interest expense	(480)	(690)	(619)
Other expense	(2,031)	(593)	(72)
Total other income, net	<u>\$ 3,606</u>	<u>\$ 4,111</u>	<u>\$ 2,747</u>

Other expense in fiscal 2007 includes \$2,052 for the impairment of our investment in NPC, which is described in Note 7 above.

Notes to Consolidated Financial Statements - *Continued*

13. STOCKHOLDERS' EQUITY

The following is a summary of our capital stock activity over the past three years:

	Number of Shares	
	Common Stock	Treasury Stock
September 30, 2004	24,855,495	241,865
Exercise of stock options	282,764	
Restricted stock under Equity Incentive Plan	2,369	
Restricted stock under Deposit Share Plan, net of forfeitures	9,653	
Common stock under Directors' Deferred Compensation Plan	5,649	
Common stock under ESPP	42,879	
Repurchases of common stock		532,155
September 30, 2005	25,198,809	774,020
Restricted stock under Deposit Share Plan, net of forfeitures	6,591	
Common stock under ESPP	49,319	
Repurchases of common stock		523,147
September 30, 2006	25,254,719	1,297,167
Exercise of stock options	189,457	
Restricted stock under Equity Incentive Plan, net of forfeitures	129,371	
Restricted stock under Deposit Share Plan	8,003	
Common stock under ESPP	54,180	
Repurchases of common stock		330,170
September 30, 2007	25,635,730	1,627,337

COMMON STOCK

Each share of common stock entitles the holder to one vote on all matters submitted to a vote of Cabot Microelectronics' stockholders. Common stockholders are entitled to receive ratably the dividends, if any, as may be declared by the Board of Directors. The number of authorized shares of common stock is 200,000,000 shares.

STOCKHOLDER RIGHTS PLAN

In March 2000 the Board of Directors of Cabot Microelectronics approved a stock rights agreement and declared a dividend distribution of one right to purchase one one-thousandth of a share of Series A Junior Participating Preferred Stock for each outstanding share of common stock to stockholders of record on April 7, 2000. The rights become exercisable based upon certain limited conditions related to acquisitions of stock, tender offers and certain business combination transactions.

SHARE REPURCHASES

In October 2005 we announced that our Board of Directors authorized a share repurchase program for up to \$40,000 of our outstanding common stock. Shares are repurchased from time to time, depending on market conditions, in open market transactions, at management's discretion. We fund share repurchases from our existing cash balance. The program, which became effective on the authorization date, may be suspended or terminated at any time, at the Company's discretion. During fiscal 2007, we repurchased 330,170 shares of common stock at a cost of \$9,995. During fiscal 2006, we repurchased 523,147 shares of common stock at a cost of \$15,996. For additional information on share repurchases, see "Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities".

Notes to Consolidated Financial Statements - Continued

14. INCOME TAXES

Income before income taxes was as follows:

	Year Ended September 30,		
	2007	2006	2005
Domestic	\$ 36,681	\$ 39,759	\$ 42,333
Foreign	12,693	8,765	4,190
Total	<u>\$ 49,374</u>	<u>\$ 48,524</u>	<u>\$ 46,523</u>

Taxes on income consisted of the following:

	Year Ended September 30,		
	2007	2006	2005
U.S. federal and state:			
Current	\$ 17,821	\$ 16,645	\$ 13,220
Deferred	(6,176)	(5,714)	(1,353)
Total	<u>\$ 11,645</u>	<u>\$ 10,931</u>	<u>\$ 11,867</u>
Foreign:			
Current	\$ 4,250	\$ 4,388	\$ 2,529
Deferred	(357)	257	(346)
Total	<u>3,893</u>	<u>4,645</u>	<u>2,183</u>
Total U.S. and foreign	<u>\$ 15,538</u>	<u>\$ 15,576</u>	<u>\$ 14,050</u>

The provision for income taxes at our effective tax rate differed from the provision for income taxes at the statutory rate as follows:

	Year Ended September 30,		
	2007	2006	2005
Federal statutory rate	35.0%	35.0%	35.0%
U.S. benefits from research and experimentation activities	(0.9)	(0.2)	(1.2)
State taxes, net of federal effect	0.6	0.7	0.7
U.S. benefits from foreign sales	-	-	(2.1)
Tax-exempt interest income	(4.1)	(3.7)	(2.4)
Share-based compensation	1.1	-	-
Domestic production deduction	(0.2)	(0.4)	-
Other, net	-	0.7	0.2
Provision for income taxes	<u>31.5%</u>	<u>32.1%</u>	<u>30.2%</u>

Notes to Consolidated Financial Statements - Continued

Significant components of deferred income taxes were as follows:

	September 30,	
	2007	2006
Deferred tax assets:		
Employee benefits	\$ 1,799	\$ 1,410
Inventory	1,298	1,111
Depreciation and amortization	162	305
Product warranty	232	368
Bad debt reserve	226	193
State and local taxes	-	146
Share-based compensation expense	7,080	3,559
Other, net	449	373
Total deferred tax assets	<u>\$ 11,246</u>	<u>\$ 7,465</u>
Deferred tax liabilities:		
Depreciation and amortization	\$ 552	\$ 2,630
Translation adjustment	(209)	72
State and local taxes	-	76
Other, net	1,356	886
Total deferred tax liabilities	<u>\$ 1,699</u>	<u>\$ 3,664</u>

15. COMMITMENTS AND CONTINGENCIES

LEGAL PROCEEDINGS

While we are not involved in any legal proceedings that we currently believe will have a material impact on our consolidated financial position, results of operations or cash flows, we periodically become a party to legal proceedings in the ordinary course of business. For example, in January 2007, we filed a legal action against DuPont Air Products NanoMaterials LLC (DA Nano), a competitor of ours, in the United States District Court for the District of Arizona, charging that DA Nano's manufacturing and marketing of certain CMP slurries infringe five CMP slurry patents that we own. The affected DA Nano products include those used for tungsten CMP. We filed our infringement complaint as a counterclaim in response to an action filed by DA Nano in the same court in December 2006 that seeks declaratory relief and alleges non-infringement, invalidity and unenforceability regarding some of the patents at issue in our complaint against DA Nano. DA Nano filed its complaint following our refusal of its request that we license to it our patents raised in its complaint. DA Nano's complaint does not allege any infringement by our products of intellectual property owned by DA Nano. While the outcome of this and any legal matter cannot be predicted with certainty, we believe that our claims and defenses in the pending action are meritorious, and we intend to pursue and defend them vigorously.

PRODUCT WARRANTIES

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold. Our warranty reserve requirements changed during fiscal 2007 as follows:

Balance as of September 30, 2006	\$ 924
Additions charged to expense	92
Deductions	(489)
Balance as of September 30, 2007	<u>\$ 527</u>

Notes to Consolidated Financial Statements - Continued**INDEMNIFICATION**

In the normal course of business, we are a party to a variety of agreements pursuant to which we may be obligated to indemnify the other party with respect to certain matters. Generally, these obligations arise in the context of agreements entered into by us, under which we customarily agree to hold the other party harmless against losses arising from items such as a breach of certain representations and covenants including title to assets sold, certain intellectual property rights and certain environmental matters. These terms are common in the industries in which we conduct business. In each of these circumstances, payment by us is subject to certain monetary and other limitations and is conditioned on the other party making an adverse claim pursuant to the procedures specified in the particular agreement, which typically allow us to challenge the other party's claims.

We evaluate estimated losses for such indemnifications under SFAS No. 5, "Accounting for Contingencies" as interpreted by FIN No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others". We consider such factors as the degree of probability of an unfavorable outcome and the ability to make a reasonable estimate of the amount of loss. To date, we have not experienced material costs as a result of such obligations and as of September 30, 2007, have not recorded any liabilities related to such indemnifications in our financial statements as we do not believe the likelihood of a material obligation is probable.

LEASE COMMITMENTS

We lease certain vehicles, warehouse facilities, office space, machinery and equipment under cancelable and noncancelable leases, most of which expire within five years from now and may be renewed by us. Rent expense under such arrangements during fiscal 2007, 2006 and 2005 totaled \$1,612, \$1,221 and \$637, respectively.

In December 2001 we entered into a fumed alumina supply agreement with Cabot Corporation under which we agreed to pay Cabot Corporation for the expansion of a fumed alumina manufacturing facility in Tuscola, Illinois. The payments for the facility have been treated as a capital lease for accounting purposes and the present value of the minimum quarterly payments resulted in an initial \$9,776 lease obligation and related leased asset. The initial term of the agreement expired in December 2006, but it was renewed for another five-year term ending in December 2011.

Future minimum rental commitments under noncancelable leases as of September 30, 2007 are as follows:

<u>Fiscal Year</u>	<u>Operating</u>	<u>Capital</u>
2008	\$ 1,190	\$ 1,365
2009	419	1,344
2010	96	1,344
2011	35	1,344
2012	18	-
Thereafter	-	-
	<u>\$ 1,758</u>	<u>5,397</u>
Amount related to interest		(723)
Capital lease obligation		<u>\$ 4,674</u>

PURCHASE OBLIGATIONS

Purchase obligations include our take-or-pay arrangements with suppliers, and purchase orders and other obligations entered into in the normal course of business regarding the purchase of goods and services.

We operate under a fumed silica supply agreement with Cabot Corporation under which we are obligated to purchase fumed silica for at least 90% of our six-month volume forecast for certain of our slurry products, and to purchase certain non-material minimum quantities every six months. We are required to pay for the shortfall if we purchase less than these amounts. This agreement has an initial six-year term, which expires in December 2009 and will automatically renew unless either party gives certain notice of non-renewal. We currently anticipate meeting minimum forecasted purchase volume requirements. We also operate under a fumed alumina supply agreement with Cabot Corporation which runs through December 2011. Purchase obligations include \$10,537 of contractual commitments for fumed silica and fumed alumina under these contracts.

Notes to Consolidated Financial Statements - *Continued*

16. EARNINGS PER SHARE

SFAS No. 128, "Earnings per Share", requires companies to provide a reconciliation of the numerator and denominator of the basic and diluted earnings per share computations. Basic and diluted earnings per share were calculated as follows:

	Year Ended September 30,		
	2007	2006	2005
Numerator:			
Earnings available to common shares	\$ 33,836	\$ 32,948	\$ 32,473
Denominator:			
Weighted average common shares (denominator for basic calculation)	23,748,158	24,228,118	24,562,581
Weighted average effect of dilutive securities:			
Share-based compensation	6,044	268	49,881
Diluted weighted average common shares (denominator for diluted calculation)	23,754,202	24,228,386	24,612,462
Earnings per share:			
Basic	\$ 1.42	\$ 1.36	\$ 1.32
Diluted	\$ 1.42	\$ 1.36	\$ 1.32

For the twelve months ended September 30, 2007, 2006, and 2005, approximately 3.0 million, 4.2 million and 3.8 million shares, respectively, attributable to outstanding stock options were excluded from the calculation of diluted earnings per share because their inclusion would have been antidilutive.

17. FINANCIAL INFORMATION BY INDUSTRY SEGMENT AND GEOGRAPHIC AREA

We operate predominantly in one industry segment – the development, manufacture, and sale of CMP consumables.

Revenues are attributed to the United States and foreign regions based upon the customer location and not the geographic location from which our products were shipped. Financial information by geographic area was as follows:

	Year Ended September 30,		
	2007	2006	2005
Revenue:			
United States	\$ 70,110	\$ 65,951	\$ 60,089
Asia	239,254	226,520	186,054
Europe	28,841	28,324	24,341
Total	\$ 338,205	\$ 320,795	\$ 270,484
Property, plant and equipment, net:			
United States	\$ 75,618	\$ 82,855	\$ 87,378
Asia	41,786	45,609	46,385
Europe	1,050	1,712	2,021
Total	\$ 118,454	\$ 130,176	\$ 135,784

Revenue from Taiwan and Japan each accounted for more than ten percent of our total revenue. Our revenue from customers in Taiwan totaled \$97,583, \$87,834 and \$77,373 for fiscal 2007, 2006 and 2005, respectively. Our revenue from customers in Japan totaled \$44,535, \$43,627 and \$38,605 for fiscal 2007, 2006 and 2005, respectively.

More than ten percent of our net property, plant and equipment is located in Japan, having a net book value of \$37,850, \$40,298 and \$44,333 at September 30, 2007, 2006 and 2005, respectively.

SELECTED QUARTERLY OPERATING RESULTS

The following table presents our unaudited financial information for the eight quarters ended September 30, 2007. This unaudited financial information has been prepared in accordance with accounting principles generally accepted in the United States of America, applied on a basis consistent with the annual audited financial statements and in the opinion of management, include all necessary adjustments, which consist only of normal recurring adjustments necessary to present fairly the financial results for the periods. The results for any quarter are not necessarily indicative of results for any future period.

CABOT MICROELECTRONICS CORPORATION
SELECTED QUARTERLY OPERATING RESULTS
(Unaudited and in thousands, except per share amounts)

	Sept. 30, 2007	June 30, 2007	March 31, 2007	Dec. 31, 2006	Sept. 30, 2006	June 30, 2006	March 31, 2006	Dec. 31, 2005
Revenue	\$ 90,379	\$ 89,023	\$ 76,987	\$ 81,816	\$ 86,982	\$ 84,936	\$ 67,389	\$ 81,488
Cost of goods sold	45,983	46,552	43,188	42,501	48,328	44,524	35,855	43,051
Gross profit	44,396	42,471	33,799	39,315	38,654	40,412	31,534	38,437
Operating expenses:								
Research, development and technical	12,209	12,033	13,481	12,247	13,030	12,060	11,321	11,659
Selling and marketing	6,518	6,469	5,847	5,476	5,528	5,486	5,075	5,026
General and administrative	11,584	9,387	9,537	9,425	8,556	9,105	8,244	8,414
Purchased in-process research and development	-	-	-	-	1,120	-	-	-
Total operating expenses	30,311	27,889	28,865	27,148	28,234	26,651	24,640	25,099
Operating income	14,085	14,582	4,934	12,167	10,420	13,761	6,894	13,338
Other income (expense), net	1,320	(148)	1,260	1,174	1,541	764	1,090	716
Income before income taxes	15,405	14,434	6,194	13,341	11,961	14,525	7,984	14,054
Provision for income taxes	5,246	4,373	1,703	4,216	3,803	4,743	2,547	4,483
Net income	\$ 10,159	\$ 10,061	\$ 4,491	\$ 9,125	\$ 8,158	\$ 9,782	\$ 5,437	\$ 9,571
Basic earnings per share	\$ 0.43	\$ 0.43	\$ 0.19	\$ 0.38	\$ 0.34	\$ 0.40	\$ 0.22	\$ 0.39
Weighted average basic shares outstanding	23,783	23,662	23,708	23,839	24,087	24,205	24,233	24,363
Diluted earnings per share	\$ 0.43	\$ 0.42	\$ 0.19	\$ 0.38	\$ 0.34	\$ 0.40	\$ 0.22	\$ 0.39
Weighted average diluted shares outstanding	23,847	23,687	23,718	23,841	24,087	24,205	24,233	24,363

SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS

The following table sets forth activities in our allowance for doubtful accounts:

Allowance For Doubtful Accounts	Balance At Beginning of Year	Additions (Deductions)Charged To Expenses	Deductions	Balance At End Of Year
Year ended:				
September 30, 2007	\$ 551	\$ 87	\$ (3)	\$ 635
September 30, 2006	470	92	(11)	551
September 30, 2005	598	(65)	(63)	470

We maintain a warranty reserve that reflects management's best estimate of the cost to replace product that does not meet customers' specifications and performance requirements, and costs related to such replacement. The warranty reserve is based upon a historical product replacement rate, adjusted for any specific known conditions or circumstances. Adjustments to the warranty reserve are recorded in cost of goods sold. Charges to expenses and deductions, shown below, represent the net change required to maintain an appropriate reserve.

Warranty Reserves	Balance At Beginning of Year	Additions Charged To Expenses	Additions Due To Acquisitions	Deductions	Balance At End Of Year
Year ended:					
September 30, 2007	\$ 924	\$ 92	\$ -	\$ (489)	\$ 527
September 30, 2006	1,426	415	32	(949)	924
September 30, 2005	952	687	-	(213)	1,426

MANAGEMENT RESPONSIBILITY

The accompanying consolidated financial statements were prepared by the Company in conformity with accounting principles generally accepted in the United States of America. The Company's management is responsible for the integrity of these statements and of the underlying data, estimates and judgments.

The Company's management establishes and maintains a system of internal accounting controls designed to provide reasonable assurance that its assets are safeguarded from loss or unauthorized use, transactions are properly authorized and recorded, and that financial records can be relied upon for the preparation of the consolidated financial statements. This system includes written policies and procedures, a code of business conduct and an organizational structure that provides for appropriate division of responsibility and the training of personnel. This system is monitored and evaluated on an ongoing basis by management in conjunction with its internal audit function.

The Company's management assesses the effectiveness of its internal control over financial reporting on an annual basis. In making this assessment, management uses the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control – Integrated Framework*. Management acknowledges, however, that all internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance with respect to financial statement preparation and presentation. In addition, the Company's independent registered public accounting firm evaluates the Company's internal control over financial reporting and performs such tests and other procedures as it deems necessary to reach and express an opinion on the fairness of the financial statements.

In addition, the Audit Committee of the Board of Directors provides general oversight responsibility for the financial statements. Composed entirely of Directors who are independent and not employees of the Company, the Committee meets periodically with the Company's management, internal auditors and the independent registered public accounting firm to review the quality of financial reporting and internal controls, as well as results of the auditing efforts. The internal auditors and independent registered public accounting firm have full and direct access to the Audit Committee, with and without management present.

/s/ William P. Noglows

William P. Noglows
Chief Executive Officer

/s/ William S. Johnson

William S. Johnson
Chief Financial Officer

/s/ Thomas S. Roman

Thomas S. Roman
Principal Accounting Officer

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A. CONTROLS AND PROCEDURES

EVALUATION OF DISCLOSURE CONTROLS AND PROCEDURES

Our management, with the participation of our Chief Executive Officer (CEO) and Chief Financial Officer (CFO), has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934, as amended (“the Exchange Act”)), as of September 30, 2007. Based on that evaluation, our CEO and CFO have concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information required to be disclosed in our Exchange Act reports is recorded, processed, summarized and reported within the time periods specified by the SEC, and that material information relating to the Company is made known to senior management, including the CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

While we believe the present design of our disclosure controls and procedures is effective enough to make known to our senior management in a timely fashion all material information concerning our business, we intend to continue to improve the design and effectiveness of our disclosure controls and procedures to the extent necessary in the future to provide our senior management with timely access to such material information, and to correct any deficiencies that we may discover in the future, as appropriate.

MANAGEMENT’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Internal control over financial reporting is defined in Rule 13a-15(f) or Rule 15d-15(f) promulgated under the Securities Exchange Act of 1934 as a process designed by, or under the supervision of, the Company’s CEO and CFO to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles in the United States of America. Internal control over financial reporting includes policies and procedures that: pertain to the maintenance of records that in reasonable detail accurately and fairly reflect our transactions and dispositions of the Company’s assets; provide reasonable assurance that transactions are recorded as necessary for preparation of our financial statements in accordance with generally accepted accounting principles; provide reasonable assurance that receipts and expenditures of Company assets are made in accordance with management authorization; and provide reasonable assurance that unauthorized acquisition, use or disposition of Company assets that could have a material effect on our financial statements would be prevented or detected on a timely basis. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management evaluated the effectiveness of our internal control over financial reporting based on the framework in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation, our management concluded that the Company’s internal control over financial reporting was effective as of September 30, 2007. The effectiveness of the Company’s internal control over financial reporting as of September 30, 2007 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their attestation report which appears under Item 8 of this Annual Report on Form 10-K.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

INHERENT LIMITATIONS ON EFFECTIVENESS OF CONTROLS

Because of inherent limitations, our disclosure controls or our internal control over financial reporting may not prevent all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the Company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required by Item 10 of Form 10-K with respect to identification of directors, the existence of a separately-designated standing audit committee, identification of members of such committee and identification of an audit committee financial expert is incorporated by reference from the information contained in the sections captioned "Election of Directors" and "Board Structure and Compensation" in our definitive Proxy Statement for the Annual Meeting of Stockholders to be held March 4, 2008 (the "Proxy Statement"). In addition, for information with respect to the executive officers of our Company, see "Executive Officers" at the end of Part I of this Form 10-K and the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement. Information required by Item 405 of Regulation S-K is incorporated by reference from the information contained in the section captioned "Section 16(a) Beneficial Ownership Reporting Compliance" in the Proxy Statement.

We have adopted a code of business conduct for all of our employees and directors, including our principal executive officer, other executive officers, principal financial officer and senior financial personnel. A copy of our code of business conduct is available free of charge on our Company website at www.cabotcmp.com. We intend to post on our website any material changes to, or waivers from our code of business conduct, if any, within two days of any such event.

ITEM 11. EXECUTIVE COMPENSATION

The information required by Item 11 of Form 10-K is incorporated by reference from the information contained in the section captioned "Executive Compensation" in the Proxy Statement.

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

EQUITY COMPENSATION PLAN INFORMATION

Shown below is information as of September 30, 2007, with respect to the shares of common stock that may be issued under Cabot Microelectronics' existing equity compensation plans.

Plan category	(a) Number of securities to be issued upon exercise of outstanding options, warrants and rights	(b) Weighted-average exercise price of outstanding options, warrants and rights	(c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))
Equity compensation plans approved by security holders	4,384,476(1)	\$ 43.31(1)	3,581,110(2)
Equity compensation plans not approved by security holders	-	-	-
Total	4,384,476(1)	\$ 43.31(1)	3,581,110(2)

(1) Column (a) includes 35,525 shares that non-employee directors, who defer their compensation under our Directors' Deferred Compensation Plan, have the right to acquire pursuant thereto, and 14,570 shares that non-U.S. employees have the right to acquire upon the vesting of the equivalent restricted stock units that they have been awarded under our equity incentive plan. Column (b) excludes both of these from the weighted average exercise price.

(2) Column (c) includes 157,712 shares available for future issuance under our Employee Stock Purchase Plan.

The other information required by Item 12 of Form 10-K is incorporated by reference from the information contained in the section captioned "Stock Ownership" in the Proxy Statement.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS AND DIRECTOR INDEPENDENCE

The information required by Item 13 of Form 10-K is incorporated by reference from the information contained in the section captioned "Certain Relationships and Related Transactions" in the Proxy Statement.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The information required by Item 14 of Form 10-K is incorporated by reference from the information contained in the section captioned "Fees of Independent Auditors and Audit Committee Report" in the Proxy Statement.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following Financial Statements and Financial Statement Schedule are included in Item 8 herein:

1. Financial Statements:

Report of Independent Registered Public Accounting Firm
Consolidated Statements of Income for the years ended September 30, 2007, 2006 and 2005
Consolidated Balance Sheets at September 30, 2007 and 2006
Consolidated Statements of Cash Flows for the years ended September 30, 2007, 2006 and 2005
Consolidated Statements of Changes in Stockholders' Equity for the years ended September 30, 2007, 2006 and 2005
Notes to the Consolidated Financial Statements

2. Financial Statement Schedule: Schedule II – Valuation and Qualifying Accounts

3. Exhibits - The following exhibits are filed as part of, or incorporated by reference into, this Report on Form 10-K:

<u>Exhibit Number</u>	<u>Description</u>
3.2 (18)	Amended and Restated By-Laws of Cabot Microelectronics Corporation.
3.3 (1)	Form of Amended and Restated Certificate of Incorporation of Cabot Microelectronics Corporation.
3.4 (2)	Form of Certificate of Designation, Preferences and Rights of Series A Junior Participating Preferred Stock.
4.1 (2)	Form of Cabot Microelectronics Corporation Common Stock Certificate.
4.2 (3)	Rights Agreement.
4.3 (4)	Amendment to Rights Agreement.
10.1 (16)	Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan, as amended and restated September 26, 2006.*
10.2 (12)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (directors).*
10.4 (16)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Non-Qualified Stock Option Grant Agreement (U.S. employees (including executive officers)).*
10.5 (16)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Restricted Stock Award Agreement (employees (including executive officers)).*
10.6 (18)	Form of Second Amended and Restated Cabot Microelectronics Corporation 2000 Equity Incentive Plan Restricted Stock Award Agreement for Directors.*
10.15	Cabot Microelectronics Corporation Employee Stock Purchase Plan, as Amended and Restated September 17, 2007.*
10.22 (8)	Cabot Microelectronics Corporation 401(k) Plan, as amended.*
10.23 (5)	Form of Change in Control Severance Protection Agreement.**
10.28 (16)	Directors' Deferred Compensation Plan, as amended September 26, 2006.*
10.29 (9)	Amended and Restated Credit Agreement dated November 24, 2003 among Cabot Microelectronics Corporation, Various Financial Institutions and LaSalle Bank National Association, as Administrative Agent, and National City Bank of Michigan/Illinois, as Syndication Agent.
10.30 (6)	Form of Deposit Share Agreement.***
10.31 (6)	Amendment No. 1 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
10.32 (6)	Fumed Alumina Supply Agreement.+
10.33 (7)	Adoption Agreement, as amended, of Cabot Microelectronics Corporation Supplemental Employee Retirement Plan.*
10.34 (14)	Code of Business Conduct.
10.36 (9)	Directors' Cash Compensation Umbrella Program.*

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10.37 (10)	Employment and Transition Agreement dated November 3, 2003.*
10.38 (10)	Employment Offer Letter dated November 2, 2003.*
10.39 (10)	Employment Offer Letter dated November 17, 2003.*
10.40 (11)	Amendment No. 2 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.
10.41 (11)	Amendment No. 3 to Fumed Metal Oxide Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.
10.42 (11)	Fumed Silica Supply Agreement.+
10.43 (11)	General Release, Waiver and Covenant Not to Sue.*
10.44 (13)	Amendment as of January 17, 2005 to Four Grant Agreements for Non-Qualified Stock Option Awards with Grant Dates of March 13, 2001, March 12, 2002, March 11, 2003 and March 9, 2004, respectively.*
10.45 (13)	Amendment as of January 29, 2005 to Three Grant Agreements for Non-Qualified Stock Option Awards with Grant Dates of March 13, 2001, March 12, 2002 and March 11, 2003, respectively.*
10.46 (17)	Non-Employee Directors' Compensation Summary as of March, 2007.*
10.47 (15)	Asset Purchase Agreement by and among Cabot Microelectronic Corporation, QED Technologies International, Inc., QED Technologies, Inc., Don Golini and Lowell Mintz dated June 15, 2006.
10.48 (15)	Technology Asset Purchase Agreement dated June 15, 2006 by and among Cabot Microelectronics Corporation, QED Technologies International, Inc., and Byelocorp Scientific, Inc.
10.49 (16)	Amendment No. 1 to Fumed Silica Supply Agreement, between Cabot Microelectronics Corporation and Cabot Corporation.+
21.1	Subsidiaries of Cabot Microelectronics Corporation.
23.1	Consent of Independent Registered Public Accounting Firm.
24.1	Power of Attorney.
31.1	Certification of Chief Executive Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Chief Financial Officer as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

(1) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on March 27, 2000.

(2) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 3, 2000.

(3) Filed as an exhibit to, and incorporated by reference from the Registrant's Registration Statement on Form S-1 (No. 333-95093) filed with the Commission on April 4, 2000.

(4) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 8-K (No. 000-30205) filed with the Commission on October 6, 2000.

(5) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 28, 2000.

(6) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 12, 2002.

(7) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 13, 2002.

(8) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 12, 2003.

- (9) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 10, 2003.
- (10) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on February 12, 2004.
- (11) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 7, 2004.
- (12) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 8, 2004.
- (13) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 9, 2005.
- (14) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on December 7, 2005.
- (15) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on August 9, 2006.
- (16) Filed as an exhibit to, and incorporated by reference from the Registrant's Annual Report on Form 10-K (No. 000-30205) filed with the Commission on November 29, 2006.
- (17) Filed as an exhibit to, and incorporated by reference from the Registrant's Current Report on Form 8-K (No. 000-30205) filed with the Commission on March 8, 2007.
- (18) Filed as an exhibit to, and incorporated by reference from the Registrant's Quarterly Report on Form 10-Q (No. 000-30205) filed with the Commission on May 9, 2007.

* Management contract, or compensatory plan or arrangement.

** Substantially similar change in control severance protection agreements have been entered into with William P. Noglows, H. Carol Bernstein, Jean Pol Delrue, William S. Johnson, Daniel J. Pike, Thomas S. Roman, Stephen R. Smith, Clifford L. Spiro, Adam F. Weisman and Daniel S. Wobby, with differences only in the amount of payments and benefits to be received by such persons.

*** Substantially similar deposit share agreements have been entered into with William P. Noglows, H. Carol Bernstein, William S. Johnson, Jean Pol Delrue, Daniel J. Pike, Thomas S. Roman, Stephen R. Smith, Clifford L. Spiro, Adam F. Weisman and Daniel S. Wobby with differences only in the amount of initial deposit made and deposit shares purchased by such persons.

+ This Exhibit has been filed separately with the Commission pursuant to the grant of a confidential treatment request. The confidential portions of this Exhibit have been omitted and are marked by an asterisk.

SIGNATURES

Pursuant to the requirements of section 13 or 15(d) 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:

CABOT MICROELECTRONICS CORPORATION

Date: November 27, 2007 /s/ WILLIAM P. NOGLOWS
William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Principal Executive Officer]

Date: November 27, 2007 /s/ WILLIAM S. JOHNSON
William S. Johnson
Vice President and Chief Financial Officer
[Principal Financial Officer]

Date: November 27, 2007 /s/ THOMAS S. ROMAN
Thomas S. Roman
Corporate Controller
[Principal Accounting Officer]

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated:

Date: November 27, 2007 /s/ WILLIAM P. NOGLOWS
William P. Noglows
Chairman of the Board, President and Chief Executive Officer
[Director]

Date: November 27, 2007 /s/ ROBERT J. BIRGENEAU*
Robert J. Birgeneau
[Director]

Date: November 27, 2007 /s/ JOHN P. FRAZEE, JR.*
John P. Frazee, Jr.
[Director]

Date: November 27, 2007 /s/ H. LAURANCE FULLER*
H. Laurance Fuller
[Director]

Date: November 27, 2007 /s/ EDWARD J. MOONEY*
Edward J. Mooney
[Director]

Date: November 27, 2007 /s/ STEVEN V. WILKINSON*
Steven V. Wilkinson
[Director]

Date: November 27, 2007 /s/ BAILING XIA*
Bailing Xia
[Director]

Date: November 27, 2007 /s/ ALBERT Y. C. YU*
Albert Y. C. Yu
[Director]

* by H. Carol Bemstein as Attorney-in-fact pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934.

**Cabot Microelectronics Corporation
Employee Stock Purchase Plan,
as Amended and Restated September 17, 2007**

ARTICLE I
INTRODUCTION

- 1.01 Purpose. The purpose of the Cabot Microelectronics Corporation Employee Stock Purchase Plan (the “Plan”) is to provide employees of Cabot Microelectronics Corporation (the “Company”) and its Designated Subsidiary Corporations with an opportunity to purchase Common Stock of the Company through accumulated payroll deductions.
- 1.02 Rules of Interpretation. It is the intention of the Company to have the Plan qualify as an “employee stock purchase plan” under Section 423 of the Internal Revenue Code of 1986, as amended (the “Code”), and the provisions of the Plan, accordingly, shall be construed so as to extend and limit participation in a manner consistent with the requirements of that section of the Code; provided, however, that the Committee shall have the discretion to cause the options granted in one or more Offering Periods under the Plan to be options to which Section 423 of the Code does not apply.

ARTICLE II
DEFINITIONS

- 2.01 “Board” shall mean the Board of Directors of the Company.
- 2.02 “Change in Capitalization” shall mean any increase or reduction in the number of shares of Common Stock, or any change (including, but not limited to, in the case of a spin-off, dividend or other distribution in respect of shares of Common Stock, a change in value) in the shares of Common Stock or exchange of shares of Common Stock for a different number or kind of shares, other equity interests or other property of the Company or another entity, by reason of a reclassification, recapitalization, merger, consolidation, reorganization, spin-off, split-up, issuance of warrants or rights or debentures, stock dividend, stock split or reverse stock split, cash dividend, property dividend, combination or exchange of shares, repurchase of shares, change in corporate structure or otherwise.
- 2.03 “Change in Control” shall be as defined in Appendix A.
- 2.04 “Code” shall mean the Internal Revenue Code of 1986, as amended.
- 2.05 “Common Stock” shall mean the Common Stock of the Company.
- 2.06 “Company” shall mean Cabot Microelectronics Corporation, a Delaware corporation.
- 2.07 “Compensation” shall mean the gross cash compensation (including base salary, shift premium, overtime earnings and cash bonuses exclusive of relocation and sign-on bonuses) paid by the Company or a Designated Subsidiary Corporation in accordance with the terms of employment, but excluding all bonus payments, expense allowances and compensation paid in a form other than cash.
- 2.08 “Committee” shall mean the committee described in Article XI.

- 2.09 “Designated Subsidiary Corporation” shall mean any Subsidiary of the Company which has been designated by the Committee from time to time in its sole discretion as eligible to participate in the Plan.
- 2.10 “Employee” shall mean any individual who is a common law employee of the Company or a Designated Subsidiary Corporation for tax purposes whose customary employment with the Company is at least twenty (20) hours per week and more than five (5) months in any calendar year.
- 2.11 “Enrollment Date” shall mean the first day of each Offering Period.
- 2.12 “Exercise Date” shall mean the last day of each Offering Period.
- 2.13 “Fair Market Value” shall mean, as of any date, the value of a share of Common Stock determined as follows:
- 2.13.1 If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for a share of Common Stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the date of such determination, as reported in *The Wall Street Journal* or such other source as the Committee deems reliable, or;
- 2.13.2 If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean of the closing bid and asked prices for a share of the Common Stock on the date of such determination, as reported in *The Wall Street Journal* or such other source as the Committee deems reliable, or;
- 2.13.3 In the absence of an established market for the Common Stock, the Fair Market Value of a share thereof shall be determined in good faith by the Committee.
- 2.13.4 Notwithstanding the above, in the case of the first day of the initial Offering Period, Fair Market Value shall mean the public offering price in the Initial Public Offering.
- 2.14 “Initial Public Offering” shall mean the first public offering of the Common Stock pursuant to the Securities Act of 1933, as amended.
- 2.15 “Offering Period” shall mean a period of approximately six (6) months commencing on the first Trading Day on or after January 1st and terminating on the last Trading Day in the period ending the following June 30th, or commencing on the first Trading Day on or after July 1st and terminating on the last Trading Day in the period ending the following December 31st, provided, however, that the first Offering Period under the Plan shall commence on the first date on which quotations are available for the Common Stock on any established stock exchange or a national market system and shall end on a Trading Day selected by the Committee consistent with Section 423 of the Code. The duration of Offering Periods may be changed pursuant to Sections 13.05 and 13.06.
- 2.16 “Plan Representative” shall mean any person designated from time to time by the Committee to receive certain notices and take certain other administrative actions relating to participation in the Plan.

- 2.17 “Plan” shall mean the Cabot Microelectronics Corporation Employee Stock Purchase Plan.
- 2.18 “Purchase Price” shall mean an amount set by the Committee, but not less than the lesser of 85% of the Fair Market Value of a share of Common Stock on the Enrollment Date or on the Exercise Date, whichever is lower; provided, however, that the Purchase Price may be adjusted by the Board pursuant to Section 13.06.
- 2.19 “Subsidiary” shall mean a corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.
- 2.20 “Trading Day” shall mean a day on which national stock exchanges and the Nasdaq System are open for trading.

ARTICLE III
ELIGIBILITY AND PARTICIPATION

- 3.01 Eligibility. Each Employee on an Enrollment Date of an Offering Period shall be eligible to participate in such Offering Period. Persons who are not Employees shall not be eligible to participate in such Offering Period. Employees of Cabot Corporation and its subsidiaries, other than the Company and its Designated Subsidiary Corporations, are not eligible to participate in the Plan.
- 3.02 Restrictions on Participation. Notwithstanding any provision of the Plan to the contrary, no Employee shall be granted an option to purchase shares of Common Stock under the Plan:
- 3.02.1 If, immediately after the grant, such Employee would own stock and/or hold outstanding options to purchase stock possessing 5% or more of the total combined voting power or value of all classes of stock of the Company (for purposes of this paragraph, the rules of Section 424(d) of the Code shall apply in determining stock ownership of any Employee); or
- 3.02.2 If such Employee’s rights to purchase stock under all employee stock purchase plans of the Company accrue at a rate which exceeds \$25,000 of Fair Market Value of the stock (determined at the time such option is granted) for each calendar year in which such option is outstanding at any time.
- 3.03 Commencement of Participation. An Employee may become a participant by completing an authorization for payroll deductions on the form provided by the Company and filing the completed form with the Plan Representative on or before the filing date set therefor by the Committee, which date shall be prior to the next Enrollment Date. Payroll deductions for a participant shall commence on the next following Enrollment Date after the Employee’s authorization for payroll deductions becomes effective and shall continue until termination of the Plan, the participant’s earlier termination of participation in the Plan, or the participant’s change in payroll deductions pursuant to Section 5.03. Each participant in the Plan shall be deemed to continue participation until termination of the Plan or such participant’s earlier termination of participation in the Plan pursuant to Article VIII below.

ARTICLE IV
STOCK SUBJECT TO THE PLAN AND OFFERINGS

- 4.01 Stock Subject to the Plan. Subject to the provisions of Section 13.03 of the Plan, the Board shall reserve for issuance under the Plan an aggregate four hundred seventy-five thousand (475,000) shares of the Company's Common Stock, which shares shall be authorized but unissued shares of Common Stock, treasury shares, or shares of Common Stock purchased by the Company or the Plan on an established stock exchange or a national market system.
- 4.02 Offerings. The Plan will be implemented by two annual offerings of the Company's Common Stock each calendar year. Each offering will be outstanding during the applicable Offering Period.

ARTICLE V
PAYROLL DEDUCTIONS

- 5.01 Amount of Deduction. The form described in Section 3.03 will permit a participant to elect payroll deductions of any whole percentage from one percent (1%) through ten percent (10%) of such participant's Compensation for each pay period during an Offering Period.
- 5.02 Participant's Account. All payroll deductions made for a participant shall be credited to an account established for such participant under the Plan. A participant may not make any separate cash payment into such account.
- 5.03 Changes in Payroll Deductions. A participant may reduce or increase future payroll deductions (within the limits described in Section 5.01) by filing with the Plan Representative a form provided by the Company for such purpose. The effective date of any increase or reduction in future payroll deductions will be the next following payroll period succeeding processing of the change form.

ARTICLE VI
GRANTING OF OPTION

- 6.01 Number of Option Shares. On an Enrollment Date each participant shall be deemed to have been granted an option to purchase a number of shares of Common Stock determined by dividing the participant's accumulated payroll deductions on the Exercise Date by the lower of (i) 85% of the Fair Market Value of a share of Common Stock on the Enrollment Date or (ii) 85% of the Fair Market Value of a share of Common Stock on the Exercise Date; subject, however, to any applicable limitations contained in this Plan. In addition, the maximum number of shares a participant may purchase with respect to any Offering Period is that number of shares determined by dividing \$12,500 by the Fair Market Value of a share of Common Stock on the Enrollment Date; provided, however, the maximum number of shares a participant may purchase with respect to the first Offering Period is that number of shares determined by dividing \$25,000 by the Fair Market Value of a share of Common Stock on the Enrollment Date.

ARTICLE VII
EXERCISE OF OPTION

- 7.01 Automatic Exercise. Subject to the next following sentence, each Plan participant's option for the purchase of stock with payroll deductions made during any Offering Period will be exercised automatically on the applicable Exercise Date for the purchase of the number of full and deemed fractional shares of Common Stock which the accumulated payroll deductions in the participant's account at the time will purchase at the Purchase Price (but not in excess of the maximum number of shares determined pursuant to Section 6.01). The Committee shall have the discretion to reduce the number of shares of Common Stock to be purchased by participants with respect to an Offering Period and to allocate such reduced number of shares of Common Stock among participants in such Offering Period, so long as such reduction and allocation is done in a manner consistent with Section 423 of the Code. Any payroll deductions not applied to the purchase of shares of Common Stock by reason of the limitations of or reduction pursuant to this Section 7.01 shall be promptly refunded to participants after the Exercise Date of the Offering Period to which such reduction applies.

- 7.02 Withdrawal of Account. No participant in the Plan shall be entitled to withdraw any amount from the accumulated payroll deductions in his or her account; provided, however, that a participant's accumulated payroll deductions shall be refunded to the participant as and to the extent specified in Section 8.01 below upon termination of such participant's participation in the Plan.
- 7.03 Fractional Shares. Fractional shares of Common Stock will not be issued under the Plan. Any deemed fractional share of Common Stock purchased by a Participant pursuant to Section 7.01 hereof will be combined with any deemed fractional shares purchased by the Participant in subsequent Offering Periods and whole shares of Common Stock then issued therefor. The Fair Market Value of all deemed fractional shares shall be paid in cash.
- 7.04 Exercise of Options. During a participant's lifetime, options held by such participant shall be exercisable only by such participant.
- 7.05 Delivery of Stock. As promptly as practicable after each Exercise Date, the Company will deliver to each participant the shares of Common Stock purchased upon exercise of such participant's option. The Company may deliver such shares in certificated or book entry form, at the Company's sole election.

ARTICLE VIII
WITHDRAWAL

- 8.01 In General. A participant may stop participating in the Plan at any time by giving written notice to the Plan Representative. Upon processing of any such written notice, no further payroll deductions will be made from the participant's Compensation during such Offering Period or thereafter, unless and until such participant elects to resume participation in the Plan by providing written notice to the Plan Representative pursuant to Section 3.03 above. Such participant's payroll deductions accumulated prior to processing of such notice shall be applied toward purchasing full and deemed fractional shares of Common Stock in the then-current Offering Period as provided in Section 7.01 above unless the participant requests in writing to have the accumulated payroll deductions and cash in lieu of deemed fractional shares returned to him or her.
- 8.02 Effect on Subsequent Participation. A participant's withdrawal from any Offering Period will not have any effect upon such participant's eligibility to participate in any succeeding Offering Period or in any similar plan which may hereafter be adopted by the Company and for which such participant is otherwise eligible.
- 8.03 Termination of Employment. Upon termination of a participant's employment with the Company or any Designated Subsidiary Corporation (as the case may be) for any reason, including retirement but excluding death, the participant's payroll deductions accumulated prior to such termination, if any, shall be applied toward purchasing full and deemed fractional shares of Common Stock in the then-current Offering Period so long as the Exercise Date with respect to such Offering Period occurs on or within three months following such termination; provided, however, that (1) the participant may request in writing to have the accumulated payroll deductions and cash in lieu of deemed fractional shares returned to him or her, and (2) upon termination of a participant's employment with the Company or any Designated Subsidiary Corporation (as the case may be) as a result of the participant's death, the participant's payroll deductions accumulated prior to such termination and cash in lieu of deemed fractional shares shall be paid to his or her estate.

ARTICLE IX
INTEREST

9.01 Payment of Interest. No interest will be paid or allowed on any money paid into the Plan or credited to the account of or distributed to any participant.

ARTICLE X
STOCK

10.01 Participant's Interest in Option Stock. No participant will have any interest in shares of Common Stock covered by any option held by such participant until such option has been exercised as provided in Section 7.01 above.

10.02 Registration of Stock. Shares of Common Stock purchased by a participant under the Plan will be recorded in the name of the participant, or, if the participant so directs by written notice to the Plan Representative prior to the applicable Exercise Date, in the names of the participant and the participant's spouse as joint tenants with rights of survivorship or as tenants by the entirety, to the extent permitted by applicable law.

10.03 Restrictions on Exercise. The Board may, in its discretion, require as conditions to the exercise of any option that the shares of Common Stock reserved for issuance upon the exercise of such option shall have been duly listed, upon official notice of issuance, upon a stock exchange or market, and that either:

10.03.1 a registration statement under the Securities Act of 1933, as amended, with respect to said shares shall be effective, or

10.03.2 the participant shall have represented at the time of purchase, in form and substance satisfactory to the Company, that it is his or her intention to purchase the shares for investment and not for resale or distribution.

ARTICLE XI
ADMINISTRATION

11.01 Appointment of Committee. The Plan shall be administered by the Board or a Committee of members of the Board appointed by the Board. The Board or its Committee shall have full and exclusive discretionary authority to construe, interpret and apply the terms of the Plan, to determine eligibility and to adjudicate all disputed claims filed under the Plan. Every finding, decision and determination made by the Board or its Committee shall, to the full extent permitted by law, be final and binding upon all parties.

11.02 Authority of Committee. Subject to the express provisions of the Plan, the Committee shall have plenary authority in its discretion to interpret and construe any and all provisions of the Plan, to adopt rules and regulations for administering the Plan, and to make all other determinations deemed necessary or advisable for administering the Plan. The Committee's determination of the foregoing matters shall be conclusive. Except as otherwise prohibited by applicable law, the Committee may delegate some or all of its authority specified herein to the Plan Representative.

11.03 Rules Governing the Administration of the Committee. The Board may from time to time appoint members of the Committee in substitution for or in addition to members previously appointed and may fill vacancies, however caused, in the Committee. The Committee may select one of its members as its chairman, shall hold its meetings at such times and places as it shall deem advisable, and may hold telephonic meetings. All determinations of the Committee shall be made by a majority of its members. A decision or determination reduced to writing and signed by a majority of the members of the Committee shall be as fully effective as if it had been made by a majority vote at a meeting duly called and held. The Committee may appoint a secretary and shall make such rules and regulations for the conduct of its business as it shall deem advisable.

11.04 Rules and Procedures Applicable to Offering Periods. The Committee shall have the authority and discretion to adopt rules and procedures applicable to one or more Offering Periods under the Plan. Any such rules and procedures shall be established by the Committee and communicated to participants in advance of any Offering Period to which they apply. Such rules and procedures may, in the discretion of the Committee, cause the options granted under any such Offering Period to be options to which Section 423 of the Code does not apply.

ARTICLE XII FOREIGN JURISDICTIONS

Notwithstanding any other provision in this Plan, the Committee may adopt rules or procedures relating to the operation and administration of the Plan to accommodate the specific requirements of local laws and procedures. Without limiting the generality of the foregoing sentence, the Committee is specifically authorized to adopt rules and procedures regarding handling of payroll deductions, payment of interest, conversion of local currency, payroll tax, withholding procedures and handling of stock certificates which vary in accordance with the requirements of such local law and procedures. To the extent that any such rules or procedures are adopted with respect to options granted in an Offering Period to which Section 423 of the Code is intended to apply, the Committee shall cause such rules and procedures to be consistent with Section 423 of the Code.

ARTICLE XIII MISCELLANEOUS

13.01 Transferability. Neither payroll deductions credited to any participant's account nor any option or other rights with regard to the exercise of an option to receive Common Stock under the Plan may be assigned, transferred, pledged, or otherwise disposed of in any way by the participant other than by will or the laws of descent and distribution. Any such attempted assignment, transfer, pledge or other disposition shall be without effect except that the Company may, in its discretion, treat such act as an election to withdraw from participation in the Plan in accordance with Section 8.01.

13.02 Use of Funds. All payroll deductions received or held by the Company under the Plan may be used by the Company for any corporate purpose. The Company shall not segregate such payroll deductions.

13.03 Adjustment Upon Changes in Capitalization; Change in Control.

13.03.1 Changes in Capitalization. Subject to any required action by the stockholders of the Company, the Reserves, the maximum number of shares each participant may purchase per Offering Period (pursuant to Section 6.01), as well as the Purchase Price and the number of shares of Common Stock covered by each option under the Plan which has not yet been exercised shall be proportionately adjusted for any Change in Capitalization. Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class shall affect, and no adjustment by reason thereof shall be made with respect to, the number or Purchase Price of shares of Common Stock subject to an option.

13.03.2 Change in Control. In the event of a Change in Control, the Offering Period during which the Change in Control would otherwise occur shall be accelerated and shall end on the last payroll date immediately preceding the Change in Control.

13.04 Amendment or Termination. The Board shall have complete power and authority to terminate or amend the Plan; provided, however, that the Board shall not, without the approval of the shareholders of the Company, alter (i) the aggregate number of shares of Common Stock which may be issued under the Plan (except pursuant to Section 13.03 above), or (ii) the class of Employees eligible to receive options under the Plan, other than to designate Subsidiaries as Designated Subsidiary Corporations; and provided further, however, that, subject to Section 13.05 no termination, modification, or amendment of the Plan may, without the consent of an Employee then having an option under the Plan to purchase shares of Common Stock, adversely affect the rights of such Employee under such option. In addition, and notwithstanding anything contained in this Plan to the contrary, to the extent necessary under Section 423 of the Internal Revenue Code (or any successor rule or provision or any applicable law or regulation), the Company shall obtain stockholder approval in such a manner and to such a degree as so required.

13.05 The Committee shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Board (or its committee) determines in its sole discretion advisable which are consistent with the Plan, in each case so long as any such action is consistent with Section 423 of the Code. None of the foregoing actions shall be considered to have adversely affected any right of any participant.

13.06 In the event that the Committee determines that the ongoing operation of the Plan may result in unfavorable financial accounting consequences, the Committee may, in its discretion and, to the extent necessary or desirable, modify or amend the Plan to reduce or eliminate such accounting consequence including, but not limited to:

13.06.1 changing the Purchase Price for any Offering Period including an Offering Period underway at the time of the change in Purchase Price;

13.06.2 shortening any Offering Period so that the Offering Period ends on a new Exercise Date, including an Offering Period underway at the time of such action; and

13.06.3 allocating shares of Common Stock to participants pursuant to Section 7.01 hereof.

None of the foregoing actions shall be considered to have adversely affected any right of any participant.

- 13.07 Notices. All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company by the Plan Representative.
- 13.08 Conditions Upon Issuance of Shares. Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, the rules and regulations promulgated thereunder, and the requirements of any stock exchange upon which the shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance. As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the shares are being purchased only for investment and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.
- 13.09 Effective Date. The Plan shall become effective as of its adoption by the Board, subject to approval by the holders of a majority of the shares of Common Stock, and shall continue in effect until the shares of Common Stock reserved for issuance under the Plan have been depleted, unless sooner terminated under Section 13.04 hereof. If the Plan is not so approved, the Plan shall not become effective.
- 13.10 No Employment Rights. The Plan does not, directly or indirectly, create in any person any right with respect to employment or continuation of employment by the Company or any Subsidiary, and it shall not be deemed to interfere in any way with the Company's or any Subsidiary's right to terminate, or otherwise modify, any Employee's employment at any time.
- 13.11 Effect of Plan. The provisions of the Plan shall, in accordance with its terms, be binding upon, and inure to the benefit of, all successors of each Employee participating in the Plan, including, without limitation, such Employee's estate and the executors, administrators or trustees thereof, heirs and legatees, and any receiver, trustee in bankruptcy or representative of creditors of such Employee.
- 13.12 Governing Law. The law of the State of Delaware will govern all matters relating to this Plan except to the extent superseded by the federal laws of the United States.

APPENDIX A

A "Change in Control" shall be deemed to have occurred if, following the "Distribution" (as defined in the Master Separation Agreement, dated March 27, 2000, to which the Company and Cabot Corporation are parties):

(a) any "person" as such term is used in Sections 13(d) and 14(d) of the 1934 Act (other than (i) the Company, (ii) any subsidiary of the Company, (iii) any trustee or other fiduciary holding securities under an employee benefit plan of the Company or of any subsidiary of the Company, or (iv) any company owned, directly or indirectly, by the stockholders of the Company in substantially the same proportions as their ownership of stock of the Company), is or becomes the "beneficial owner" (as defined in Section 13(d) of the 1934 Act), together with all Affiliates and Associates (as such terms are used in Rule 12b-2 of the General Rules and Regulations under the 1934 Act) of such person, directly or indirectly, of securities of the Company representing 30% or more of the combined voting power of the Company's then outstanding securities; or

(b) the stockholders of the Company approve a merger or consolidation of the Company with any other company, other than (i) a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity), in combination with the ownership of any trustee or other fiduciary holding securities under an employee benefit plan of the Company or any subsidiary of the Company, at least 60% of the combined voting power of the voting securities of the Company or such surviving entity outstanding immediately after such merger or consolidation or (ii) a merger or consolidation effected to implement a recapitalization of the Company (or similar transaction) after which no "person" (with the method of determining "beneficial ownership" used in clause (a) of this definition) owns more than 30% of the combined voting power of the securities of the Company or the surviving entity of such merger or consolidation; or

(c) during any period of two consecutive years (not including any period prior to the execution of the Plan), individuals who at the beginning of such period constitute the Board, and any new director (other than a director designated by a person who has conducted or threatened a proxy contest, or has entered into an agreement with the Company to effect a transaction described in clause (a), (b) or (d) of this definition) whose election by the Board or nomination for election by the Company's stockholders was approved by a vote of at least two-thirds (2/3) of the directors then still in office who either were directors at the beginning of the period or whose election or nomination for election was previously so approved cease for any reason to constitute at least a majority thereof; or

(d) the stockholders of the Company approve a plan of complete liquidation of the Company or an agreement for the sale or disposition by the Company of all or substantially all of the Company's assets.

EXHIBIT 21.1

SUBSIDIARIES OF CABOT MICROELECTRONICS CORPORATION

Cabot Microelectronics Global Corporation (Delaware, U.S.)
Cabot Microelectronics Polishing Corporation (Delaware, U.S.)
QED Technologies International, Inc. (Delaware, U.S.)
Cabot Microelectronics Japan KK (Japan)
Nihon Cabot Microelectronics KK (Japan)
Cabot Microelectronics Singapore Pte. Ltd. (Singapore)

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No.'s 333-34272, 333-34270, 333-82680 and 333-123692) of Cabot Microelectronics Corporation of our report dated November 26, 2007, relating to the financial statements, financial statement schedule, and the effectiveness of internal control over financial reporting , which appears in this Form 10-K.

/s/ PRICEWATERHOUSECOOPERS LLP

Chicago, Illinois
November 26, 2007

EXHIBIT 24.1

POWER OF ATTORNEY

Know all persons by these presents, that each person whose signature appears below constitutes and appoints H. Carol Bernstein, his attorney-in-fact, with the power of substitution, for him in any and all capacities, to sign the annual report on Form 10-K for the fiscal year ended September 30, 2007 and any amendments to this Report on Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that said attorney-in-fact, or her substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this Report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

<u>SIGNATURE</u>	<u>TITLE</u>	<u>DATE</u>
/s/ William P. Noglows ----- William P. Noglows	Chairman of the Board, President and Chief Executive Officer	November 27, 2007
/s/ Robert J. Birgeneau ----- Robert J. Birgeneau	Director	November 27, 2007
/s/ John P. Frazee, Jr. ----- John P. Frazee, Jr.	Director	November 27, 2007
/s/ H. Laurance Fuller ----- H. Laurance Fuller	Director	November 27, 2007
/s/ Edward J. Mooney ----- Edward J. Mooney	Director	November 27, 2007
/s/ Steven V. Wilkinson ----- Steven V. Wilkinson	Director	November 27, 2007
/s/ Bailing Xia ----- Bailing Xia	Director	November 27, 2007
/s/ Albert Y. C. Yu ----- Albert Y. C. Yu	Director	November 27, 2007

Exhibit 31.1

CERTIFICATION

I, William P. Noglows, Chief Executive Officer of Cabot Microelectronics Corporation, certify that:

1. I have reviewed this annual report on Form 10-K of Cabot Microelectronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 27, 2007
William P. Noglows
Chief Executive Officer

/s/ WILLIAM P. NOGLOWS

Exhibit 31.2

CERTIFICATION

I, William S. Johnson, Chief Financial Officer of Cabot Microelectronics Corporation, certify that:

1. I have reviewed this annual report on Form 10-K of Cabot Microelectronics Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's fourth fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors:
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: November 27, 2007
William S. Johnson
Chief Financial Officer

/s/ WILLIAM S. JOHNSON

Exhibit 32.1

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Cabot Microelectronics Corporation (the "Company") on Form 10-K for the fiscal year ended September 30, 2007, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

- (1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: November 27, 2007
William P. Noglows
Chief Executive Officer

/s/ WILLIAM P. NOGLOWS

Date: November 27, 2007
William S. Johnson
Chief Financial Officer

/s/ WILLIAM S. JOHNSON
