COHERENT INC
Form 10-K
November 25, 2008

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-K

(Mark One)

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

For the Fiscal Year Ended September 27, 2008

or

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

Commission File Number: 001-33962

COHERENT, INC.

Delaware (State or other jurisdiction of incorporation or organization)	**94-1622541** (I.R.S. Employer Identification No.)
5100 Patrick Henry Drive, Santa Clara, California (Address of principal executive offices)	**95054** (Zip Code)

Registrant's telephone number, including area code: **(408) 764-4000**

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.01 par value (including associated Common Stock Purchase Rights)	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 o No ý

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 o No ý

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 ý No o

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. o

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

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

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

As of November 10, 2008, 24,337,561 shares of common stock were outstanding. The aggregate market value of the voting shares (based on the closing price reported on the NASDAQ Global Select Market on March 29, 2008) of Coherent, Inc., held by nonaffiliates was $387,073,039. For purposes of this disclosure, shares of common stock held by persons who own 5% or more of the outstanding common stock and shares of common stock held by each officer and director have been excluded in that such persons may be deemed to be "affiliates" as that term is defined under the Rules and Regulations of the Act. This determination of affiliate status is not necessarily conclusive.

DOCUMENT INCORPORATED BY REFERENCE

Portions of the registrant's Proxy Statement for the registrant's fiscal 2008 Annual Meeting of Stockholders are incorporated by reference into Part III of the Form 10-K to the extent stated herein. The Proxy Statement will be filed within 120 days of the registrant's fiscal year ended September 27, 2008.

This Annual Report contains forward-looking statements. These forward-looking statements include, without limitation, statements regarding our future:

- net sales;
- bookings;
- results of operations;
- gross profits;
- access to new markets;
- research and development projects and expenses;
- selling, general and administrative expenses;
- optimization of financial returns;
- warranty reserves;
- legal proceedings;
- claims against third parties for infringement of our proprietary rights;
- claims by third parties against us for infringement of their proprietary rights;
- liquidity and sufficiency of existing cash, cash equivalents and short-term investments for near-term requirements;
- increased adoption of lasers;
- success or impact of new product offerings;
- future demand for our products and laser technology;
- maintenance of customer relationships and the development of new relationships;
- capital spending as a percentage of net sales;

development and acquisition of new technology and market share;

write-downs for excess or obsolete inventory;

adoption of/use of lasers in the manufacture of solar cells;

development of highly-differentiated products;

operational efficiencies;

competitors and competitive pressures;

capital spending as a percentage of net sales;

growth of applications for our products, new product introductions and increase of market share;

obtaining components and materials in a timely manner;

identifying alternative sources of supply for components;

achieving adequate manufacturing yields;

the impact of recent acquisitions;

leveraging of power and energy management products into our next generation products;

compliance with environmental regulations;

- enhancement of our market position;
- focus on organizational efficiency;
- impact on laser industry;
- participation in the bio-agent detection market;
- leveraging of our technology portfolio and application engineering;
- optimization of our leadership position in existing markets;
- maintenance of collaborative customer and industry relationships;
- enhancement of our market position through our existing technology, as well as developing new technologies;
- emphasis on supply chain management;
- use of financial market instruments;
- simplifications of our foreign legal structure and reduction of our presence in certain countries;
- growth rates in the scientific market;
- footprint consolidation efforts, including the expected savings therefrom and timing thereof; and
- focus on long-term improvement of adjusted earnings before interest, taxes, depreciation and amortization (EBITDA) as a percentage of net sales.

In addition, we include forward-looking statements under the "Our Strategy" and "Future Trends" headings set forth below in "Business" and under the "Bookings" heading set forth below in "Management's Discussion and Analysis of Financial Condition and Results of Operations."

You can identify these and other forward-looking statements by the use of the words such as "may," "will," "could," "would," "should," "expects," "plans," "anticipates," "estimates," "intends," "potential," "projected," "continue," or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements.

Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth below in "Business," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and under the heading "Risk Factors." All forward-looking statements included in this document are based on information available to us on the date hereof. We undertake no obligation to update these forward-looking statements as a result of events or circumstances or to reflect the occurrence of unanticipated events or non-occurrence of anticipated events.

PART I

ITEM 1.   BUSINESS

GENERAL

Business Overview

Our fiscal year ends on the Saturday closest to September 30. Fiscal years 2008, 2007 and 2006 ended on September 27, September 29, and September 30, respectively, and are referred to in this annual report as fiscal 2008, fiscal 2007 and fiscal 2006 for convenience. Fiscal years 2008, 2007 and 2006 all included 52 weeks.

We are one of the world's leading suppliers of photonics-based solutions in a broad range of commercial and scientific research applications. We design, manufacture and market lasers, precision optics and related accessories for a diverse group of customers. Since inception in 1966, we have grown through internal expansion and through strategic acquisitions of complementary businesses, technologies, intellectual property, manufacturing processes and product offerings.

We are organized into two operating segments: Commercial Lasers and Components ("CLC") and Specialty Lasers and Systems ("SLS"). This segmentation reflects the go-to-market strategies for various products and markets. While both segments deliver cost-effective photonics solutions, CLC focuses on higher volume products that are offered in set configurations. The product architectures are designed for easy exchange at the point of use such that substantially all product service and repairs are based upon advanced replacement and depot (i.e., factory) repair. CLC's primary markets include OEM components and instrumentation and materials processing. SLS develops and manufactures configurable, advanced- performance products largely serving the microelectronics and scientific research markets. The size and complexity of many of the SLS products require service to be performed at the customer site by factory-trained field service engineers.

Income (loss) from operations is the measure of profit and loss that our chief operating decision maker ("CODM") uses to assess performance and make decisions. Income (loss) from operations represents the sales less the cost of sales and direct operating expenses incurred within the operating segments as well as allocated expenses such as shared sales and manufacturing costs. We do not allocate to our operating segments certain operating expenses, which we manage separately at the corporate level. These unallocated costs include stock-based compensation and corporate functions (certain advanced research and development, management, finance, legal and human resources) and are included in Corporate and other. Management does not consider unallocated Corporate and other costs in its measurement of segment performance.

We were originally incorporated in California on May 26, 1966 and reincorporated in Delaware on October 1, 1990.

Additional information about Coherent, Inc. (referred to herein as the Company, we, our, or Coherent) is available on our web site at *www.coherent.com*. We make available, free of charge on our web site, access to our annual report on Form 10-K, our quarterly reports on Form 10-Q, our current reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as soon as reasonably practicable after we file or furnish them electronically with the Securities and Exchange Commission ("SEC"). Information contained on our web site is not part of this annual report or our other filings with the SEC.

INDUSTRY BACKGROUND

The word "laser" is an acronym for "light amplification by stimulated emission of radiation." A laser emits an intense beam of light with some unique and highly useful properties. Most important, a laser is orders of magnitude brighter than any lamp. This means that the beam can be focused to a very small and intense spot, useful for applications requiring very high power densities including cutting and other materials processing procedures. The laser's high spatial resolution is also useful for microscopic imaging and inspection applications. Laser light can be monochromatic all the beam energy is confined to a narrow wavelength band. Some lasers also produce highly polarized outputs while other lasers have unique phase properties that can be used to create ultrafast output a series of pulses with pulse durations as short as tens of femtoseconds (i.e., $10^{\text{[nc\_cad,220]15}}$ seconds).

There are many types of lasers and one way of classifying them is by the material used to create the lasing action. This can be in the form of a gas, liquid, semiconductor or solid-state crystal. We manufacture all of these types of lasers. Lasers can also be classified by their output wavelength: ultraviolet, visible, infrared or wavelength tunable. We also manufacture all of these laser types. There are also many options in terms of pulsed output versus continuous wave, pulse duration, output power, beam dimensions, etc. In fact, each application has its specific requirements in terms of laser performance. The broad technical depth at Coherent enables us to offer a diverse product line characterized by lasers targeted at growth opportunities and key applications. In all cases, we aim to be the supplier of choice by offering a high-value combination of superior technical performance and high reliability.

Photonics has taken its place alongside electronics as a critical enabling technology for the twenty-first century. Photonics-based solutions are entrenched in broad industries that include industrial automation, textile processing, microelectronics, flat panel displays and medical diagnostics, with adoption continuing in ever more diverse applications. Growth in these applications stems from two sources. First, there are many applications where the laser is displacing conventional technology because it can do the job faster, better or more economically. Second, there are new applications where the laser is the enabling tool that makes the work possible (e.g. the production of sub 50 micron microvias).

Key laser applications include: micro and nanotechnologies; solar cell production; semiconductor inspection; microlithography; measurement, test and repair of electronic circuits; medical and biotechnology; industrial process and quality control; materials processing; imaging and printing; graphic arts display; and, research and development. For example, ultraviolet ("UV") lasers are enabling the trend towards miniaturization, which is a driver of innovation and growth in many markets. The short wavelength of lasers that emit light in the UV spectral region make it possible to produce extremely small structures-with maximum precision consistent with the latest state-of-the-art technology.

OUR STRATEGY

We strive to develop innovative and proprietary products and solutions that meet the needs of our customers and that are based on our core expertise in lasers and optical technologies. In pursuit of our strategy, we intend to:

Leverage our technology portfolio and application engineering to lead the proliferation of photonics into broader markets We will continue to identify opportunities in which our technology portfolio and application engineering can be used to offer innovative solutions and gain access to new markets.

Optimize our leadership position in existing markets There are a number of markets where we have historically been at the forefront of technological development and product deployment and from which we have derived a substantial portion of our revenues. We plan to optimize our financial returns from these markets.

Maintain and develop additional strong collaborative customer and industry relationships We believe that the Coherent brand name and reputation for product quality, technical performance and customer satisfaction will help us to further develop our loyal customer base. We plan to maintain our current customer relationships and develop new ones with customers who are industry leaders and work together with these customers to design and develop innovative product systems and solutions as they develop new technologies.

Develop and acquire new technologies and market share We will continue to enhance our market position through our existing technologies and develop new technologies through our internal research and development efforts, as well as through the acquisition of additional complementary technologies, intellectual property, manufacturing processes and product offerings.

Focus on long-term improvement of adjusted EBITDA expressed as a percentage of net sales We define adjusted EBITDA as earnings before interest, taxes, depreciation, amortization, stock compensation expenses and certain other non-operating income and expense items.

APPLICATIONS

Our products address a broad range of applications that we group into the following markets: Microelectronics, Materials Processing, OEM Components and Instrumentation and Scientific Research and Government Programs. Effective the first quarter of fiscal 2008, we combined the former Graphic Arts and Display market applications into the OEM Components and Instrumentation market applications. Prior period market application information reflects this combination.

Microelectronics

Nowhere is the trend towards miniaturization more prevalent than in the Microelectronics market where portable music, video and wireless communications technology are driving advances in integrated circuits, power management, and displays. In response to market demands and expectations, semiconductor manufacturers are continually seeking to improve their process and design technologies in order to manufacture smaller, more powerful and more reliable devices with a lower cost per function. New laser applications and new laser technologies in existing applications are in high demand to deliver higher resolution and higher precision at lower manufacturing cost.

We support four major markets in the microelectronics industry: (1) semiconductor front-end manufacturing, (2) semiconductor assembly, testing and advanced packaging, (3) flat panel display manufacturing, and (4) solar cell production and other emerging processes.

Microelectronics semiconductor front-end manufacturing

The term "front-end manufacturing" refers to the production of semiconductor devices which occurs prior to packaging.

Photomask manufacturing

Semiconductors are created with a process called microlithography, which relies on a high-resolution photomask most often made of quartz and chrome. The mask, which is conceptually similar to a negative in photography, is used in lithography systems to make numerous copies of the pattern image on semiconductor wafers. Our *Innova® Sabre* ion lasers, *Innova FReD* ion lasers, *NovaTex* excimer lasers, and *Rega* ultrafast lasers are all used in the fabrication, inspection and repair of these masks.

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Semiconductor inspection, metrology, testing and wafer yield management

As semiconductor device geometries decrease in size, devices become increasingly susceptible to smaller defects during each phase of the manufacturing process and these defects can negatively impact yield. One of the semiconductor industry's responses to the increasing vulnerability of semiconductor devices to smaller defects has been to use defect detection and inspection techniques that are closely linked to the manufacturing process. For example, automated laser-based inspection systems are now used to detect and locate defects as small as 0.01 micron, which may not be observable by conventional optical microscopes.

Detecting the presence of defects is only the first step in preventing their recurrence. After detection, defects must be examined in order to identify their size, shape and the process step in which the defect occurred. This examination is called defect classification. Identification of the sources of defects in the lengthy and complex semiconductor manufacturing process has become essential for maintaining high yield production. Semiconductor manufacturing has become an around-the-clock operation and it is important for products used for inspection, measurement and testing to be reliable and to have long lifetimes.

Our *Azure* , *Paladin* , *Vitesse* , *Verdi* , *Sapphire, and Innova iLine* lasers are used to detect and characterize defects in semiconductor chips. Our *Innova iLine* argon laser is used to inspect patterned wafers and our *Vector* laser is used to repair defects that may occur in the photomask or semiconductor device.

The semiconductor fabrication process typically creates numerous patterned layers on each wafer device. Laser-based systems have been developed to measure the characteristics of metal or opaque layers in order to determine the functionality and conformance of these devices. Our *Vitesse* laser generates an ultrafast laser pulse that produces a localized temperature rise in the materials, which generates a sound wave, a portion of which is reflected back to the surface. By measuring the returning echoes with a second laser pulse, the system can detect layer thickness, adhesion and composition.

Microelectronics semiconductor assembly, testing and advanced packaging

Wafer scribing and singulation

After a wafer is patterned, there are then a host of other processes, referred to as back-end processing, which finally result in a packaged encapsulated silicon chip. Ultimately, these chips are then assembled into finished products. The advent of high-speed logic and high-memory content devices has caused chip manufacturers to look for alternative technologies to improve performance and lower process costs. In terms of materials, this search includes new types of wafers based on low-k dielectrics and thinner silicon. Our *Avia* and *Prisma* lasers are providing economic methods of cutting and scribing these wafers while delivering higher yields than traditional mechanical methods. Our *Diamond* carbon dioxide ("CO_2") lasers are used for singulating packages and printed circuit boards into individual components for final assembly.

Microvia drilling

These same trends are also driving integration and miniaturization, blurring the traditional lines between formerly discrete applications such as assembly and PCB fabrication. Lasers are playing several enabling roles in this integration and miniaturization. For instance, lasers are now the only economically practical method for drilling microvias in chip assemblies and in both rigid and flexible printed circuit boards. These microvias are tiny interconnects that are essential for enabling high-density circuitry commonly used in mobile handsets and advanced computing systems. Our *AVIA* and *Diamond* lasers are the lasers of choice in this application. The ability of these lasers to operate at very high repetition rates translates into faster drilling speeds and increased throughput in Microvia processing applications.

Other applications are arising as well. For instance, the high density of the latest circuit boards is reaching the limits of conventional technologies, causing wider adoption of laser direct-write methods. Our *Paladin* laser is used for this application. Our lasers are also being increasingly used to trim (selectively cut) components in order to finely adjust their performance. Our *Vector* and *Prisma* lasers are used for this purpose.

Microelectronics flat panel display manufacturing

The high-volume consumer market is driving the production of flat panel displays ("FPD") in applications such as digital cameras, personal digital assistants ("PDAs"), mobile telephones, car navigation systems, laptop computers and television monitors. There are several types of established and emerging FPDs based on quite different technologies, including plasma ("PDP"), liquid crystal ("LCD") and organic polymers ("OLED"). Lasers have found applications in each of these technologies given that the laser provides higher process speed, better yield, lower cost and/or superior display brightness and resolution.

Excimer Laser Annealing ("ELA") and Sequential Lateral Solidification

Several display types require a high-density pattern of silicon Thin Film Transistors ("TFTs"). If this silicon is polycrystalline, the performance is greatly enhanced. In the past, these polysilicon layers could only be produced on expensive thermal glass at high temperatures. However, excimer-based processes, such as ELA and sequential lateral solidification, have allowed high-volume production of low-temperature polysilicon ("LTPS") on conventional glass substrates. Our excimer lasers provide an invaluable solution for both ELA and sequential lateral solidification because they are the only industrial-grade excimers with the high pulse energy these methods require. The current state-of-the-art product for this application is our *Lambda SX-C* laser.

Our *AVIA* and *Diamond* lasers are also used in other production processes for FPDs. These processes include drilling, cutting, patterning, marking and yield improvement.

Microelectronics solar cell production and other emerging processes

Numerous areas of microelectronics can be grouped as "emerging technologies." Some of these are transitioning to volume production in the present timeframe while others are more forward-looking.

The recent growth and interest in solar cell technology is driving the adoption of laser technology in the manufacturing of solar cells as today's higher fuel costs have led to heightened interest in solar panels. Crystalline solar cell production capacity has been rapidly ramping up in the United States, Germany, Japan, Taiwan & China. Our lasers, such as *Avia*, *Paladin* and *Prisma*, are already being used in the production of solar panels for cell isolation and transparent conductive oxide ("TCO") scribing purposes.

<u>**Materials Processing**</u>

Lasers are widely accepted today as part of many important industrial manufacturing applications including cutting, welding, joining, drilling, perforating, and marking of metals and nonmetals. We supply high-power lasers for metal processing as well as low-to-medium power lasers for nonmetals processing, precision micromachining and laser marking.

Light manufacturing and cutting

This area includes such applications as the cutting and joining of plastics using both our *Diamond* CO_2 lasers and FAP Systems semiconductor lasers; the cutting, perforating and scoring of paper and packaging materials; and various cutting and patterning applications in the textile industry. In the specific area of textiles and clothing, our *Diamond* lasers service older applications, such as cutting complex shapes in leather for footwear, as well as newer applications such as creating detailed fade patterns on designer denims.

At the opposite end of the size and wavelength spectrum, our *AVIA* and *Matrix* ultraviolet lasers are now being used extensively for machining a wide range of materials (and in a wide range of industries) including glass and plastics. These technically important materials are laser processed to produce medical devices, micro-electromechanical systems ("MEMS"), flat panel display, semiconductor manufacturing, and to aid in rapid prototyping for a variety of end markets including automotive manufacturing.

Laser marking and coding

Laser marking and coding are generally considered part of the precision materials processing applications market for which we remain a leading supplier. One such area where applications are growing rapidly is the displacement of ink-jet coding due to both aesthetic and environmental pressures. The optimum choice of laser depends on the material being marked, whether it is a surface mark (engraved) or a sub-surface mark, and the specific economics of the application. We provide lasers for all-important marking applications. In fiscal 2007, we released *Matrix* , a new product line of reliable, compact and low-cost diode pumped solid state lasers. These lasers provide lower cost of ownership for marking in high volume manufacturing.

Heavy manufacturing

In April 2007, we acquired Nuvonyx, Inc., a technology leader in high-power laser diode components, arrays, and industrial laser systems for materials processing and defense applications. Nuvonyx produces high power arrays with powers in excess of 50 Kilowatts through its proprietary cooling and stacking technologies. The industrial laser systems are used for cladding and hardening of metals, joining materials, and other materials processing applications. Other near-term applications include welding of plastics and direct metal welding. In fiscal 2007, we released *HighLight* , a new line of direct diode systems for metal processing.

Excimer-based processes

The unique properties of excimer lasers have enabled a diverse range of material transformation applications. Examples include drilling and ablating materials to create stents and disposable drug delivery catheters for the medical marketplace. Frequently, our excimer lasers are also used to mark these same products. Other materials processing applications for our excimer lasers include stripping thin wires in disk drives, cleaning bare semiconductor wafers and writing fiber Bragg gratings for optical telecommunications and sensing purposes.

OEM Components and Instrumentation

Instrumentation is one of our more mature commercial applications. Representative applications within this market include flow cytometry, confocal microscopy, high-throughput screening for pharmaceutical discovery, genomic and proteomic analyses, Raman spectroscopy forensics, veterinary science and bio-threat detection. Specifically, our *Sapphire* , *Compass* and *CUBE* lasers are used in several bio-instrumentation applications including confocal microscopy, DNA sequencing, flow cytometry and drug discovery. In the medical area, our High Power OPS lasers are enabling a new range of wavelengths for treatment of a number of retinal conditions and our Excimer lasers are the standard used by the majority of companies practicing vision correction. We also support the laser-based instrumentation market with a range of laser-related components, including diode lasers for optical pumping. Some of our OEM component business includes sales to other, less integrated laser manufacturers participating in OEM markets such as materials processing, scientific, and medical.

Flow cytometry

Flow cytometry is a laser-based micro-fluorescence technique for analyzing single cells or populations of cells in a heterogeneous mixture, including blood samples. Its numerous applications include cell biology, immunology, reproductive biology, oncology and infectious disease such as Acquired Immune Deficiency Syndrome ("AIDS"). The recent design trend in flow cytometry is toward more compact, powerful and reliable instruments. As a result, our *Sapphire*, *Compass* and *CUBE* lasers are among the leading solid-state solutions in the current generation of cutting-edge instrumentation.

DNA sequencing

Laser-based instrumentation revolutionized DNA sequencing, providing automation and data acquisition rates that would be impossible by any other method. This technology played a key role in the human genome project. This area continues to be a dynamic area as researchers track and analyze specific genes responsible for various diseases. Our *Sapphire*, *Compass* and *CUBE* lasers were developed to address the needs of this market.

Drug Discovery Genomics and Proteomics

High-speed automation is also essential to the growth of genomics and proteomics, which now enable drug discovery to proceed at very high throughput rates. Over a million compounds can now be screened in weeks instead of years. A challenge to manufacturers of analytical devices is to produce instruments of increasing complexity and capability, while at the same time minimizing their size. This is particularly important where several instruments may be deployed in a single location for parallel processing. Our *Sapphire*, *Compass* and *CUBE* lasers are used in instrument techniques such as micro-array scanning, lab-on-a-chip and fluorescence correlation spectroscopy.

Bio-agent detection

A number of laser-based techniques for point source and standoff detection of pathogens or other bio-toxins are being explored in the government and private sectors. Systems of this type could be deployed to guard military facilities, major sporting events or other large gatherings of citizens, as well as vital infrastructure components, such as subways, airports or industrial hubs. Based on initial trial and evaluation, we are well positioned to address such applications.

Forensics

Lasers have been used in criminal forensics for a number of decades. Applications include latent fingerprint detection and trace evidence illumination and identification. In the past, laser usage was often limited to forensics labs due to the physical size and complexities of the lasers. Portable models seldom generated enough output for use in high ambient light conditions or for large-scale sweeps of the crime scene. However, now due to recent advances in optical output versus physical size, forensic scientists have the capability to bring an unprecedented level of latent fingerprint and trace evidence detection directly to the crime scene. Our compact solid-state *Tracer* laser system, based on optically pumped semiconductor ("OPS") technology, directly addresses the needs of large-scale criminal investigation organizations by providing a superior combination of high brightness and portability to bear on the most difficult forensic analysis.

Medical OEM

We sell a variety of components and lasers to medical laser companies in end-user applications such as ophthalmology, aesthetic, surgical, therapeutic and dentistry. *Innova* ion laser tubes and our *GEM* series CO_2 lasers are widely used in ophthalmic, aesthetic and surgical markets. Additionally, our

Compass and *Sapphire* series of lasers are used in the retinal scanning market in diagnostic imaging systems as well as new ground breaking in-vivo imaging applications.

Our fiscal 2005 acquisition of TuiLaser, a recognized leader of high-reliability excimer lasers for Lasik and PRK refractive surgery methods with the *ExiStar* excimer laser platform has given us a leading position in this important excimer application market.

The unique ability of our OPS laser technology to match a wavelength to an application has led to the development of a high-power yellow (577nm) laser for use in the treatment of Age Related Macular Degeneration. The 577nm wavelength was designed to match the peak in absorption of oxygenated hemoglobin thereby allowing treatment to occur at a lower power level, and thus reducing stress and heat-load placed on the eye with traditional green (530nm) based solid state lasers. This technology is finding traction with both Medical OEM's and Ophthalmologists.

Graphic Arts and Display

Historically, the printing industry has depended upon silver-halide films and chemicals to engrave printing plates. This chemical engraving process requires several time-consuming steps. In recent years, we have worked closely with professionals in the printing industry to design semiconductor and diode-pumped lasers for alternative "computer-to-plate" processes. As a result, our *Compass* lasers and some of our *high-power* semiconductor lasers are now widely used for computer-to-plate printing, an environmentally friendly process that saves production time by writing directly to plates. These applications benefit from the high slope efficiency and high-temperature performance that characterize our semiconductor lasers.

There are numerous other applications in the graphic arts and display markets where our lasers are now playing key roles. For instance, in the area of printing, our *Diamond* K and G series lasers are used in the engraving of Anilox rollers for flexo-plate and screen-printing and our *CUBE* violet lasers are used in the imaging of offset plates for computer-to-plate printing.

In another component of this market, our *Innova* ion lasers are used to write data on master disks that are used to mass-produce compact discs and digital videodiscs for consumer use.

<u>Scientific Research and Government Programs</u>

We are widely recognized as a technology innovator and the scientific market has historically provided an ideal "test market" for our leading-edge innovations. These have included ultrafast lasers, diode-pumped solid-state lasers, continuous-wave ("CW") systems, excimer lasers and water-cooled gas lasers. Many of the innovations and products pioneered in the scientific marketplace have gone onto become commercial successes for both our OEM customers and us.

Our installed base of scientific lasers includes tens of thousands of lasers. Not surprisingly, these lasers are used in a wide range of applications spanning virtually every branch of science and engineering. These applications include biology (multiphoton and confocal microscopy), physics (atomic and molecular spectroscopy, atom cooling, non-linear optics, X-ray generation, solid-state and semiconductor studies), chemistry (quantum control, time-resolved and Raman spectroscopy) and engineering (material processing, remote sensing and metrology).

Multi-Photon Excitation ("MPE") microscopy

MPE microscopy is an imaging method used mainly by biologists to create optical microscopy images of cells and sub-cellular structures and processes. Importantly, MPE can image live samples without damaging these samples, thus enabling the interplay of physiology and structure to be studied at the cellular level. Related to confocal microscopy, MPE can only be performed using the unique properties of an ultrafast laser. Because many MPE researchers have limited laser expertise, we now support this market with our *Chameleon* tunable ultrafast laser, which is a hands-free easy to use closed-box laser.

Ultrafast research

Ultrafast lasers generate pulses as short as few tens of femtoseconds (10[nc_cad,220]15 seconds). These types of lasers allow chemical reactions and other processes to be studied at high temporal resolution. Because of this very short pulse duration, ultrafast lasers also deliver very high peak power, which can be used to generate many exotic effects. Some of these effects are now finding their way into mainstream applications. An example of this is the use of ultrafast pulses for cold micromachining. Our *Mira* titanium: sapphire (Ti:S) modelocked laser, *RegA* Ti:S high-repetition rate regenerative amplifier, and *Mira-OPO* synchronously pumped optical parametric oscillator are all examples of ultrafast laser systems used for research applications. Our *Legend* Ti:S regenerative amplifier, *Libra* integrated amplifier and *Hidra* multipass amplifier, are other examples of ultrafast lasers that support these leading-edge applications by producing Gigawatt-level peak powers.

Optical pumping

Several of the lasers that we supply to the research market require optical pumping. That is to say, they require another laser as their power source, as opposed to power from an electrical outlet. Examples include our *Mira* , *RegA* , *Legend* and *MBR* lasers. Our diode-pumped *Verdi* and *Evolution* lasers have established themselves as benchmarks in reliability as the pump source for these lasers. Some of our customers are also performing research on new types of lasers and new laser materials. These investigational laser setups often require optical pumping at green wavelengths and the *Verdi* is one of the leading pump sources here as well.

Spectroscopy

Spectroscopy is a scientific field in which processes or materials are studied as a function of wavelength. Many types of spectroscopy require a tunable laser source. Our *MBR* CW tunable laser provides unsurpassed resolution and stability for high-resolution spectroscopy applications, while our *Mira* , *Mira-OPO* and *Chameleon* lasers are among the leading sources for spectroscopy in the ultrafast domain.

Infrared and far-infrared research

We also support a wide range of research applications in the infrared ("IR") and far-infrared ("FIR") domains with both standard and custom waveguide CO_2 lasers and far-infrared lasers. Research applications for these products include sensing, communications, military programs and terahertz ("THz") generation. An example of a standard FIR product is our *SIFIR-50*, a THz laser system.

FUTURE TRENDS

Microelectronics

After several years of process development, lasers are now used in mass production applications because these laser-based fabrication and testing methods are faster, deliver superior end products, increase yields, and /or cut production costs. Moreover, we anticipate this trend to continue, driven primarily by the increasing sophistication of consumer electronic goods and their convergence via the internet, resulting in increasing demand for more bandwidth and memory. Although this market is cyclical in nature, and will be affected by the current economic climate, we believe that the future will see an increased adoption of solid-state, CO_2 and excimer lasers, as all these lasers enable both next-generation performance improvements and reduced process costs. In particular, we expect future demands in the advanced packaging market to steadily shift towards the use of ultraviolet laser-based tools, as these are the only commercial technologies capable of providing the high spatial resolution critical for next-generation chip-scale and wafer-level packages. Lasers have emerged as an essential technology in the manufacturing of solar cells. We expect that this trend will continue over the next few years as solar cell manufacturing capacity increases.

Materials processing

The market for low to medium power lasers used in industrial material processing is uncertain in the immediate future; however they represent a cost-effective manufacturing solution for cutting, joining, marking and engraving of non-metal materials. These include marking/coding, flat bed cutting, engraving, as well as the production of capital equipment for apparel and leather goods manufacturing. Several factors are enabling us to gain market share in the materials process market. First, we have developed an expanded portfolio of lasers with a broad spectrum of wavelengths, enabling optimum marking solutions for virtually every metal and non-metal material type. At the same time, the reliability of these products has been achieved at even higher levels, lowering the cost of ownership.

The acquisition of Nuvonyx in April 2007 provided us an entry into the high-power materials processing market. Combined with our capability in laser diode bars, this acquisition represents both a vertically integrated and more cost effective approach than many applications currently served by fiber lasers.

OEM components and instrumentation

The instrumentation market is seeing a gradual migration from the use of mature laser technologies, such as water-cooled ion lasers, to new technologies, primarily based on solid-state and semiconductors. Using our unique portfolio of solid-state and semiconductor lasers, and our patented OPS technology, we are able to both assist and stimulate this transition as well as to be the technology of choice for developing applications such as security and clinical diagnostics. These applications are likely to require an increased number of lasers; however, the majority of these activities are still in the research and development stage and we expect only moderate impacts on the laser industry in fiscal 2009, with increases expected in future years. Nevertheless, we anticipate greater future opportunities in microscopy, flow cytometry, lab-on-a-chip, in-vivo medical imaging and DNA sequencing based on our product enhancements and evolving market developments. Our newer laser technologies are the basis of a number of clinical procedures. The area of Photocoagulation where the OPS yellow lasers are being used as the wavelength is particularly suitable for the treatment of blood vessels. In Aesthetic laser surgery, we are an OEM supplier of CO_2 lasers to the major manufacturers of Aesthetic equipment used in the latest procedures for skin enhancement

Scientific research and government programs

The scientific market has been relatively stable in the present unpredictable economic environment. We expect modest growth rates in the scientific research market for fiscal 2009, with applications in ultrashort pulses and in bio-research being the drivers of this anticipated expansion. We anticipate an increasingly competitive market in which we expect to both retain and improve our market share through new product development and maintain our service commitment to this area.

PRODUCTS

We design, manufacture and market lasers, precision optics and related accessories for a diverse group of customers. The following table shows selected products together with their applications, the markets they serve and the technologies upon which they are based.

Market Application	Application	Products	Technology
Microelectronics	Photomask manufacturing	SabreFreD Innova NovaTex RegA	Frequency doubled Ion Excimer Ultrafast
	Semiconductor inspection and metrology	Vitesse Compass Series Paladin Verdi AZURE, Indigo Sapphire Innova iLine	Ultrafast DPSS DPSS DPSS DPSS OPS Ion
	Trimming and repair	Vector	DPSS
	Advanced packaging and interconnects	Avia Diamond FAP family Paladin Vector Prisma	DPSS CO_2 Semiconductor DPSS DPSS DPSS
	Flat panel display (TFT annealing)	LSX-C Avia Diamond	Excimer DPSS CO_2
	Solar Cells	Avia Prisma Paladin	DPSS DPSS DPSS
Materials processing	Marking, engraving, cutting and drilling	FAP family Diamond Prisma, Matrix Excistar Avia	Semiconductor CO_2 DPSS Excimer DPSS
	Cladding, heat treating and welding	HighLight	Semiconductor
	Rapid prototyping	Avia, Matrix	DPSS
OEM components and instrumentation	Confocal microscopy	Sapphire Compass CUBE	OPS DPSS Laser Diode Module
	Flow cytometry/cell sorting	Innova family Compass Sapphire CUBE	Ion DPSS OPS Laser Diode Module

Market Application	Application	Products	Technology
	DNA sequencing	Compass	DPSS
		Sapphire	OPS
		CUBE	Laser Diode Module
	Drug discovery	Innova family	Ion
		Compass	DPSS
		Sapphire	OPS
		CUBE	Laser Diode Module
	Bio-agent detection	Compass, Avia	DPSS
		CUBE	Laser Diode Module
	Forensics	TracER	OPS
	Laser Doppler velocimetry	Verdi	DPSS
		Innova family	Ion
	Medical (OEM)	Existar,COMPexPro	Excimer
		Diode bars	Semiconductor
		Compass	DPSS
		Sapphire	OPS
		Gem	CO_2
		Innova family	Ion
	Graphic Arts	Single emitter diodes	Semiconductor
		Fiber coupled diodes	Semiconductor
		Diode bars	Semiconductor
		Compass series	DPSS
		CUBE	Laser Diode Module
		Diamond K & G series	CO_2
	Display	High Power OPS	HOPS
		Innova family	Ion
Scientific research and government programs	Multi-photon excitation microscopy	Mira, Chameleon	Ultrafast
	Optical pumping for Ultrafast and CW Tunable lasers	Verdi, Evolution	DPSS
	Pollution analysis	COMPexPro	Excimer
	Interferometry and holography	Verdi	DPSS
		Innova family	Ion
	Spectroscopy	Chameleon	Ultrafast
		Indigo	DPSS
		Mira, RegA, OPO	Ultrafast
		Legend, OPO	Ultrafast
		MBR, MBD	CW Tunable
		Innova family	Ion

Ablation and pulse laser deposition	Excistar, Xantos COMPexPro	Excimer Excimer
Photochemistry	Legend, Libra	Ultrafast

Market Application	Application	Products	Technology
	Material processing research	Libra	Ultrafast
		COMPexPro	Excimer
	Laser diagnostics and measurement	Modemaster	Diagnostics
		Fieldmaster	Diagnostics
		Labmaster	Diagnostics

In addition to products we provide, we invest routinely in the core technologies needed to create substantial differentiation for our products in the marketplace. Our semiconductor and crystal facilities all maintain an external customer base providing value-added solutions. We direct significant engineering efforts to producing unique solutions targeted for internal consumption. These investments, once integrated into our broader product portfolio provide our customers with uniquely differentiated solutions and the opportunity to substantially enhance the performance, reliability and capability of the products we offer.

Semiconductor lasers

Semiconductor lasers use the same principles as more conventional types of lasers but miniaturize the entire assembly into a monolithic structure using semiconductor wafer fabrication processes. The advantages of this type of laser include smaller size, longer life, enhanced reliability and greater efficiency. We manufacture a wide range of semiconductor laser products with wavelengths ranging from 650nm to 1000nm and output powers ranging from less than 1 W for individual emitters to 80 W for bars, to several hundred watts for stacked bars. These products are available in various forms of complexity including the following: bar diodes on heat sinks, fiber-coupled single emitters and bars, stacked bars and fully integrated modules and microprocessor-controlled units that contain power supplies and active coolers. Our infrared semiconductor lasers, which are manufactured from proprietary materials grown in our facility in Tampere, Finland, differ from most other lasers in that they contain no aluminum in the active region. This provides our lasers with longer lifetimes and the ability to operate at broader temperature ranges.

Our semiconductor lasers are also used in machine-processing applications such as soldering connections on printed circuit boards and welding flat panel displays and in medical applications for the treatment of the wet "classical" form of age-related macular degeneration and hair removal. They are also used as the pump laser in DPSS laser systems that are manufactured by us and several of our competitors.

Optically Pumped Semiconductor Lasers (OPS)

Our OPS laser platform is based on a semiconductor chip that is energized or pumped by a semiconductor laser rather than by electricity. This enables the development and production of a new and versatile class of semiconductor lasers. A wide range of wavelengths can be achieved by varying the materials used in this device and doubling the frequency of the laser beam. The OPS is a compact, rugged, high power, single-mode laser. Our frequency doubled blue OPS lasers are all solid-state, continuous-wave devices that are particularly well suited to a wide range of applications including the bio-instrumentation and graphic art markets. In 2008, the range of applications has been extended to retinal photocoagulation where we have developed a laser which will operate in the yellow, particularly suitable for some therapies and also to such areas as entertainment lighting and forensic detection. We also introduced an ultraviolet version of the OPS platform called the Genesis , which was developed for the bio-instrumentation market. Future versions of the Genesis will scale in power and operate at other wavelengths to support customers in the instrumentation, microelectronics and scientific markets.

Fiber lasers

In 2008 we launched the first of our products which are based on Fiber laser technology, the Talisker. This is an industrial ultrafast laser system which incorporates fiber laser technologies as a key part of the laser design. The Talisker is a new laser platform based on a Fiber oscillator and Crystal amplifier and illustrative of our strategy of developing and incorporating fiber lasers where they can generate unique and cost effective performance. We expect the Talisker platform will lead to a series of new ultrafast lasers for a number of commercial markets including microelectronics and medical.

Diode-pumped solid-state lasers

DPSS lasers use semiconductor lasers to pump a crystal to produce a laser beam. By changing the energy, optical components and the types of crystals used in the laser, different wavelengths and types of laser light can be produced.

The efficiency, reliability, longevity and relatively low cost of DPSS lasers make them ideally suited for a wide range of OEM and end-user applications, particularly those requiring 24-hour operations. Our DPSS systems are compact and self-contained sealed units. Unlike conventional tools and other lasers, our DPSS lasers require minimal maintenance since they do not have internal controls or components that require adjusting and cleaning to maintain consistency. They are also less affected by environmental changes in temperature and humidity, which can alter alignment and inhibit performance in many systems.

We manufacture a variety of types of DPSS lasers for different applications including semiconductor inspection; advanced packaging and interconnects; repair, test and measurement; computer-to-plate printing; writing data to master disks; entertainment; photo finishing: marking, welding, engraving, cutting and drilling; drug discovery; forensics; laser Doppler velocimetry; bio-agent detection; medical; rapid prototyping; DNA sequencing; flow cytometry; laser pumping and spectroscopy.

SALES AND MARKETING

We market our products domestically through a direct sales force. Our foreign sales are made principally to customers in Europe, Japan and other Asia-Pacific countries. We sell internationally through direct sales personnel located in Japan, South Korea, the United Kingdom, Germany, Italy, Austria, France, Belgium, the Netherlands and the People's Republic of China, as well as through independent representatives in other parts of the world. Foreign sales accounted for 68% of our total net sales in fiscal 2008, fiscal 2007 and fiscal 2006. Sales made to independent representatives and distributors are generally priced in U.S. dollars. A large portion of foreign sales that we make directly to customers are priced in local currencies and are therefore subject to currency exchange fluctuations. Foreign sales are also subject to other normal risks of foreign operations such as protective tariffs, export and import controls and political instability. Our products are broadly distributed and no one customer accounted for more than 10% of total net sales during fiscal 2008, 2007 or 2006.

We maintain a customer support and field service staff in major markets within the United States, Europe, Japan and other Asia-Pacific countries. This organization works closely with customers, customer groups and independent representatives in servicing equipment, training customers to use our products and exploring additional applications of our technologies.

We typically provide parts and service warranties on our lasers, laser-based systems, optical and laser components and related accessories and services. Warranties on some of our products and services may be shorter or longer than one year. The weighted average warranty period covered is nearly 15 months. Warranty reserves, as reflected on our consolidated balance sheets, have generally been sufficient to cover product warranty repair and replacement costs.

RESEARCH AND DEVELOPMENT

We are committed to the development of new products, as well as the improvement and refinement of existing products, including better cost-of-ownership. Our development efforts are focused on designing and developing products, services and solutions that anticipate customers' changing needs and emerging technological trends. Our efforts are also focused on identifying the areas where we believe we can make valuable contributions. Research and development expenditures for fiscal 2008 were $74.3 million, or 12.4% of net sales compared to $74.6 million, or 12.4% of net sales for fiscal 2007, and $73.1 million, or 12.5% of net sales for fiscal 2006. We work closely with customers, both individually and through our sponsored seminars, to develop products to meet customer application and performance needs. In addition, we are working with leading research and educational institutions to develop new photonics-based solutions.

MANUFACTURING

Strategies

One of our core manufacturing strategies is to tightly control our supply of key parts, components, assemblies and outsourcing partners. We believe this is essential to maintain high quality products and enable rapid development and deployment of new products and technologies.

Committed to quality and customer satisfaction, we design and produce many of our own components and sub-assemblies in order to retain quality control. We provide customers with 24-hour technical expertise and quality that is ISO certified at our principal manufacturing sites. In June 2003, we transferred our printed circuit board manufacturing activities in Auburn, California, to a global electronics contract manufacturer in Asia. We also completed the restructuring of our CO_2 operations, resulting in the consolidation of all CO_2 manufacturing operations at our Bloomfield, Connecticut location. In fiscal 2004, Lambda Physik consolidated the manufacturing operations of its German subsidiary into its Göttingen facility. In February 2007, we completed the transfer of production of laser power supplies from Auburn, California to a global electronics contract manufacturer with operations in North America, Asia and Europe. In January 2008 we announced the outsourcing of one of our laser product lines to a contract manufacturer located in Asia and in April 2008, we announced the outsourcing of our laser optics manufacturing to an optics manufacturer located in North America. This outsourcing is expected to be completed by the end of the second quarter of fiscal 2009. The supply from these strategic contract manufacturers is covered by long term supply agreement contracts. During fiscal 2008, we consolidated our German DPSS manufacturing into our Lübeck, Germany site. The transfer was completed in the fourth quarter of fiscal 2008. On October 13, 2008, we announced the consolidation of the remainder of our Munich facility into our Göttingen site. The transfer is scheduled for completion by the end of our third quarter of fiscal 2009.

We have designed and implemented proprietary manufacturing tools, equipment and techniques in an effort to provide products that differentiate us from our competitors. These proprietary manufacturing techniques are utilized in a number of our product lines including both ion and CO_2 laser production, optics fabrication, optics coating and assembly operations, as well as the wafer growth for our semiconductor laser product family.

Raw materials or sub-components required in the manufacturing process are generally available from several sources. However, we currently purchase several key components and materials, including exotic materials and crystals, used in the manufacture of our products from sole source or limited source suppliers. We rely on our own production and design capability to manufacture and specify certain strategic components, crystals, optics and optical systems, semiconductor lasers, lasers and laser-based systems.

"100%" NOSHADE COLOR=GRAY ALIGN=LEFT>

Education - 5.1%

California State University, RB, Systemwide, Series A (FSA), 5.00%, 11/01/39	
	4,860
	4,813,733
University of California, RB, Series L, 5.00%, 5/15/40	
	7,398
	7,509,346
University of California, RB, Series O, 5.75%, 5/15/34	
	11,190

12,374,909

24,697,988

Transportation - 7.2%

City of Long Beach, California, RB, Series A, AMT, 5.38%, 5/15/24

	15,150
	15,337,708
San Francisco Bay Area Transit Financing Authority, Refunding RB, Series A (MBIA), 5.00%, 7/01/30	
	19,630
	20,095,427

35,433,135

Utilities - 15.5%

Anaheim Public Financing Authority, California, RB, Electric System
Distribution Facilities, Series A (FSA), 5.00%, 10/01/31

3,568

3,603,695

Los Angeles Department of Water & Power, RB, Power System,
Sub-Series A-1 (FSA), 5.00%, 7/01/31

5,007

		5,148,977
Los Angeles Department of Water & Power, Refunding RB, Power System, Sub-Series A-2 (MBIA), 5.00%, 7/01/27	16,000	16,332,000
Metropolitan Water District of Southern California, RB, Series A, 5.00%, 7/01/37	15,000	15,373,350
Rancho Water District Financing Authority, California, Refunding RB, Series A (FSA), 5.00%, 8/01/34		

9,277

9,440,637

San Diego County Water Authority, COP, Refunding,
Series 2008-A (FSA), 5.00%, 5/01/33

8,510

8,527,531

San Diego County Water Authority, COP, Series A (FSA),
5.00%, 5/01/30

7,350

7,427,396

San Diego County Water Authority, COP, Series A (FSA),
5.00%, 5/01/31

10,000

10,066,900

75,920,486

Total Municipal Bonds Transferred to Tender Option Bond Trusts - 38.5%	188,231,036
Total Long-Term Investments (Cost - $733,482,926) - 150.6%	736,910,556

Short-Term Securities

	Shares	
CMA California Municipal Money Fund, 0.04% (d)(e)		2,742,880
		2,742,880

Total Short-Term Securities (Cost - $2,742,880) - 0.6%	2,742,880

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BlackRock MuniYield California Insured Fund, Inc. (MCA)

Schedule of Investments October 31, 2009 (Unaudited) **(Percentages shown are based on Net Assets)**

	Value
Total Investments (Cost - $736,225,806*) - 151.2%	$ 739,653,436
Other Assets Less Liabilities - 2.9%	14,397,781
Liability for Trust Certificates, Including Interest Expense and Fees Payable - (20.1)%	(98,390,642)
Preferred Shares, at Redemption Value - (34.0)%	(166,551,511)
Net Assets Applicable to Common Shares - 100.0%	$ 489,109,064

* The cost and unrealized appreciation (depreciation) of investments as of October 31, 2009, as computed for federal income tax purposes, were as follows:

Aggregate cost	$ 637,813,712
Gross unrealized appreciation	$ 15,449,168
Gross unrealized depreciation	(11,884,913)
Net unrealized appreciation	$ 3,564,255

(a) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.

(b) US government securities, held in escrow, are used to pay interest on this security as well as to retire the bond in full at the date indicated, typically at a premium to par.

(c) Securities represent bonds transferred to a tender option bond trust in exchange for which the Fund acquired residual interest certificates. These securities serve as collateral in a financing transaction.

(d) Investments in companies considered to be an affiliate of the Fund, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

Affiliate	Net Activity	Income
CMA California Municipal Money Fund	$ (19,199,064)	$ 1,182

(e) Represents the current yield as of report date.

Fair Value Measurements - Various inputs are used in determining the fair value of investments, which are as follows:

Level 1 - price quotations in active markets/exchanges for identical assets and liabilities

Level 2 - other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 - unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund s own assumptions used in determining the fair value of investments)

The inputs or methodology used for valuing securities are not necessarily an indication of the risk associated with investing in those securities. For information about the Fund s policy regarding valuation of investments and other significant accounting policies, please refer to the Fund s most recent financial statements as contained in its annual report.

BlackRock MuniYield California Insured Fund, Inc. (MCA)

Schedule of Investments October 31, 2009 (Unaudited)

The following tables summarize the inputs used as of October 31, 2009 in determining the fair valuation of the Fund s investments:

Valuation Inputs	Investments in Securities
	Assets
Level 1 - Short-Term Securities	$ 2,742,880
Level 2 - Long-Term Investments[1]	736,910,556
Level 3	
Total	$ 739,653,436

[1] See above Schedule of Investments for values in each sector.

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Item 2 Controls and Procedures

2(a) The registrant s principal executive and principal financial officers or persons performing similar functions have concluded that the registrant s disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the 1940 Act)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13(a)-15(b) under the Securities Exchange Act of 1934, as amended.

2(b) There were no changes in the registrant s internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act) that occurred during the registrant s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant s internal control over financial reporting.

Item 3 Exhibits

Certifications Attached hereto

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock MuniYield California Insured Fund, Inc.

By: /s/ Anne F. Ackerley

Anne F. Ackerley
Chief Executive Officer of
BlackRock MuniYield California Insured Fund, Inc.

Date: December 18, 2009

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By: /s/ Anne F. Ackerley

Anne F. Ackerley
Chief Executive Officer (principal executive officer) of
BlackRock MuniYield California Insured Fund, Inc.

Date: December 18, 2009

By: /s/ Neal J. Andrews

Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock MuniYield California Insured Fund, Inc.

Date: December 18, 2009